

Curriculum Mapping Practices of Teachers as Determinants of their Collective Efficacy in Public Elementary Schools

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Abstract:- This study aimed to explore how teachers' curriculum mapping practices relate to their collective efficacy in public elementary schools within Tugbok District, Davao City. The study used the non-experimental quantitative research design utilizing correlational method. The respondents of this study composed of 107 teachers using a universal sampling. The statistical tools used were Mean, Pearson Product Moment Coefficient Correlation or Pearson r and Regression Analysis. The findings revealed that the teachers achieved a high level on curriculum mapping practices. Meanwhile teachers established a high level in collective efficacy in public elementary schools. There was a significant relationship between curriculum mapping practices of teachers and their collective efficacy in public elementary schools. The domains of curriculum mapping practices of teachers were significantly influenced to their collective efficacy in public elementary schools. It is articulated in this study that collective efficacy of teachers in public elementary schools should be raised in a very high level. It was concluded that the high level of curriculum mapping practices of teachers would also increase to their collective efficacy in public elementary schools.

Keywords:- Curriculum Mapping Practices, Collective Efficacy, Teachers in Public Elementary Schools, Philippines

I. INTRODUCTION

Strong collective teacher efficacy motivates educators to use their existing skills more effectively and to share their knowledge with colleagues. It is the belief among teachers that their combined efforts will positively impact students. This sense of collective efficacy emerges when teachers, based on their shared successes, believe that their teamwork can improve student learning. Building a culture of collective efficacy requires deliberate and intentional effort.

Internationally, collective teachers' efficacy in education systems promotes effective delivery of education services. Moreover, collective performance defines the elements that learning environment can put into effect in order to produce the desired learning results that includes academic performance, learning environment and efficiency. Learning environments are crucial societal elements, attracting significant interest from various groups. Currently, the school system consists of complex and interrelated relationships among different groups and individuals. This

diverse involvement can complicate collective efficacy and rule patterns. However, engaging stakeholders in school decision-making can enhance collective efficacy in education. Key factors for high performance include clear standards, access to information, incentives, and accountability. (Glickman,2017).

In the Philippines, the most challenging work of a school leader is how to make a sound collective performance whether academic or non- academic. The way the school head manages the school can affect the whole organization. It is believed that the performance of the school is being influenced by stakeholders' decisions. The stakeholders' decision-making influence will pave the way to the collective efficacy and will direct to the welfare of the learners, teachers, parents and the community as a whole (Alam, 2019).

In the District of Tugbok, Division of Davao City, there have been issues about the collective efficacy of teachers. One of the reasons why the school heads will be transferred from one school to another is the collective efficacy. How the principal runs the school will have an impact to its collective performance. She added that, where the principal goes, the school follows, with this school heads must have strong stakeholders' decision-making Influence to persuade managers to act in a way that will improve their circumstances, leading to enhance the educational institution performance as a whole (Guillena, 2020).

Based on this premise, the researcher undertook the study to examine whether the collective efficacy of teachers in public elementary schools in Tugbok District, Davao City, is influenced by their curriculum mapping practices. To date, no such study has been carried out in Tugbok District schools.

II. METHOD

This chapter outlines the research design, participant details, instruments used, data collection methods, and data analysis procedures. It also discusses the sources of information and the treatment of data related to how curriculum mapping practices of teachers influence their collective efficacy in public elementary schools.

A. Research Design

The study used the non-experimental quantitative design utilizing correlation method. This method was used when the objectives described the status of the situation as it existed at the time of the study to explore the causes of

particular phenomena. In correlation research, it involves collecting data in order to determine whether the degree of a relationship exists between two or more quantifiable variables (Travers, 2006).

Quantitative research design seeks to determine the extent to which people think, act, or feel in certain ways. This method uses large sample sizes and focuses on the quantity of responses, unlike qualitative research, which aims for deeper, more emotional insights. In quantitative research, each participant answers the same set of questions, allowing for consistent and fair analysis of the data. The results are presented numerically and analyzed using statistical methods. Surveys can be adjusted to include different follow-up questions based on respondents' answers, such as asking different questions to those who are satisfied or dissatisfied with a service.

This descriptive survey dealt on quantitative data about the said phenomenon. The quantitative aspect is an appropriate schedule for gathering the data that would be designed for the target respondent to answer the questions. The process of gathering the data was based through the use of questionnaires. The focus of the study was to determine the relationship between Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools of Tugbok District, Davao City.

B. Research Respondents

The study was conducted in Tugbok District. Included in this study was Mintal Elementary School of Tugbok District. There were 107 teachers who were involved as respondents of the study, who rated the Curriculum Mapping Practices of Teachers as determinants of their Collective Efficacy in Public Elementary Schools. This was conducted during the school year 2022-2023. A universal sampling was employed in the selection of the respondents. Teachers with at least three years in service and above were chosen as the respondents.

C. Research Instrument

The study used the researcher- made test and was validated by three experts. They are all Doctors of Educational Management. After the validation, the researcher administered the test for pilot testing in Baguio Central Elementary School, Baguio District, Division of Davao City. The results of the Cronbach alpha established a reliability of 0.83 which means reliable since it is within the range between 0.70 to 1.00.

This research included the construction and validation of the questionnaire. It is made up of two parts. Part 1 dealt with the Curriculum Mapping Practices of Teachers with the following indicators: program goal; course objectives; instructional support materials; formative course assessment; summative course assessment; and instructional plans.

Five-point Likert Scale was used for the Curriculum Mapping Practices of Teachers. Each item was assigned certain weights and equivalent statements were as follow.

Range of Means	Level	Description
4.20-5.00	Very High	This means that the Curriculum Mapping Practices of Teachers are always manifested.
3.40-4.19	High	This means that the Curriculum Mapping Practices of Teachers are oftentimes manifested.
2.60-3.39	Moderate	This means that the Curriculum Mapping Practices of Teachers are sometimes manifested.
1.80-2.59	Low	This means that the Curriculum Mapping Practices of Teachers are rarely manifested
1.00-1.79	Very Low	This means that the Curriculum Mapping Practices of Teachers are not/never manifested.

Part 11 is the researcher –made test of Collective Efficacy of Teachers in Public Elementary Schools in terms of self-efficacy, cohesion, and performance.

To determine the level of Collective Efficacy of Teachers, the Five-point Likert Scale was used. Each item was assigned certain weights and equivalent statements were as follow.

Range of Means	Level	Description
4.20-5.00	Very High	This means that the Collective Efficacy of Teachers are always manifested.
3.40-4.19	High	This means that the Collective Efficacy of Teachers are oftentimes manifested.
2.60-3.39	Moderate	This means that the Collective Efficacy of Teachers are sometimes manifested.
1.80-2.59	Low	This means that the Collective Efficacy of Teachers are rarely manifested.
1.00-1.79	Very Low	This means that the Collective Efficacy of Teachers are not/ never manifested.

D. Research Procedure

The data were collected using these procedures: The researcher obtained approval from the dean of the graduate school and secured a letter of permission to conduct the study on how curriculum mapping practices influence teachers' collective efficacy in public elementary schools. Upon approval, the researcher prepared the letter addressed to the

Schools Division Superintendent, District Supervisor and Principals.

The researcher adjusted the questionnaire for each variable, which was then reviewed by the adviser for validation. After the adviser approved the final version and necessary revisions, the questionnaire was printed in sufficient, clear copies to ensure smooth administration. The

researcher then distributed the questionnaires personally to the respondents via online platforms, telephone, or video calls, reaching out to the schools involved in the study. After obtaining approval from the school administrator, the teachers were gathered and briefed on the study's purpose. They were asked to complete the questionnaire honestly to ensure valid and reliable data. All questionnaires were collected, and the results were compiled and organized before being analyzed statistically. The data were analyzed and interpreted according to the study's objectives.

E. Data Analysis and Tools

➤ *The Following Statistical Tools were Used in the Study:*

- **Mean:** This was employed to determine the level of Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools.
- **Pearson Product Moment Coefficient of Correlation (r):** This was used to determine the relationship between the Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools.
- **Regression Analysis:** This was used to determine the significant influence of Curriculum Mapping Practices of Teachers on their Collective Efficacy in Public Elementary Schools.

III. RESULTS

Introduced in this chapter are the results and discussions on the findings based on the survey questionnaire gathered from the respondent’s study which is the level of Curriculum

Mapping Practices of Teachers as determinants of their Collective Efficacy in Public Elementary Schools of Tugbok District, Davao City. They are analyzed, interpreted and discussed thoroughly.

A. Summary of Curriculum Mapping Practices of Teachers

Flaunted in Table 1 is the Summary on the level of Curriculum Mapping Practices of Teachers in terms of program goal (4.14), course objectives (4.25), instructional support materials (4.15), formative course assessment (3.59), summative course assessment (4.13), and instructional plans (3.54).

The overall mean rating of Curriculum Mapping Practices of Teachers in terms of program goal, course objectives, instructional support materials, formative course assessment, summative course assessment, and instructional plans is 4.18 or high. This means that the level of Curriculum Mapping Practices in terms of program goal, course objectives, instructional support materials, formative course assessment, summative course assessment, and instructional plans is oftentimes observed by the teachers. This implies that teachers are able to identify the program goals that specifically relate to the course that one is mapping; write objectives which are measurable by some sort of assessment; allow learners to have practical experiences which help them to develop skills and concepts and to work in a variety of ways; identify and plans activities or assignments that will allow both students and teacher to informally assess their achievements of the course objectives; evaluate over all progress of the students; and help students and teachers understands the goal of an instructional module.

Table 1: Summary of Curriculum Mapping Practices of Teachers

No.	Statements	Mean X	Descriptive Equivalent
1.	Program Goal	4.14	High
2.	Course Objectives	4.25	High
3.	instructional support materials	4.15	High
4.	formative course assessment	3.59	High
5.	summative course assessment	4.13	High
6.	instructional plans	3.54	High
Overall Mean		3.96	High

The finding corresponds to the standpoint of Masunaga (2017), who accentuated that Curriculum Mapping is a method to align instruction with desired goals and program outcomes. It can also be used to explore what is taught and how. Curriculum mapping is important because it allows teachers and administrators to focus on balance between the content across curricula.

This is supported by the view of Budan (2019), who said that curriculum mapping allows individuals to look into each classroom and see what children learn, and helps them gather data on redundancies or gaps in the course content. Further, Curriculum mapping also helps teachers and administrators assess the structure of the course, and the time-scale plan of when specific lessons or concepts are taught.

B. Summary on the Level of Collective Teachers Efficacy

Flaunted in Table 2 is the summary on the level of Collective Teachers Efficacy in terms of self-efficacy, cohesion, and collective performance. The mean ratings of these indicators are as follow: self-efficacy (3.74), cohesion (3.84), and collective performance (3.85).

The overall mean rating of Collective Teachers Efficacy in terms of self-efficacy, cohesion, and collective performance is 3.81 or high. This means that the level of Collective Efficacy in terms of self-efficacy, cohesion, and collective performance is oftentimes observed by the teachers. This implies that teachers are able to view challenging problems as tasks to be mastered; show cooperation between members and team members; and produce output greater than the sum of all of its parts.

Table 2: Summary of Collective Teachers Efficacy

No.	Statements	Mean X	Descriptive Equivalent
1	self-efficacy	3.74	High
2	cohesion	3.84	High
3	collective performance	3.85	High
Overall Mean			High

The finding corresponds to the standpoint of Gibson et al. (2018), who averred that collective efficacy denotes a shared belief among school staff that they can positively influence student achievement despite external challenges. It is demonstrated when teachers view themselves as a cohesive team dedicated to student success. When educators trust in their collective capacity to enhance student outcomes, it leads to higher levels of achievement.

This is supported by the view of George and Feltz (2017), who opined that collective efficacy is the belief that a group can effectively organize and carry out actions needed to achieve specific goals. It centers on the team's overall capabilities. Additionally, Collective Teacher Efficacy refers to the community's ability to influence the behaviors of individuals and groups, which is crucial for achieving desired outcomes.

C. Significance on the Relationship Between the Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools

Presented in Table 3 is the significant relationship between the Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools with an overall computed r-value of .816 and a high degree of correlation. Since the p-value of 0.00 is less than the 0.05 level of significance, this indicates the null hypothesis is rejected, and it could be stated therefore that there is a significant relationship between Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools. This implies that teachers who have a high level on Curriculum Mapping Practices would also increase their Collective Efficacy in Public Elementary Schools.

Table 3: Significance on the Relationship Between the Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools

Variables	X	Y	r- Value	Degree of Correlation	p-value		Decision (Ho)
					computed	@a=0.05	
Curriculum Mapping Practices of Teachers	3.96	0.816	High	0.014	Significance		Rejected
Collective Efficacy of Teachers	3.81						

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

All computed r-values are higher than the critical value of 0.045 at .05 alpha

The null hypothesis is rejected.

The finding matches up the statement of Perlin (2016), who opined that if teachers and administrators focus on helping faculty understand where learning gaps occur so they can adjust their methods this might develop improve the effectiveness of the group. A curriculum map provides signposts for educators and faculty to help them determine how effective their courses were at meeting specific learning objectives.

The result is also in line with the statement of Plaza et al. (2017), who opined that curriculum mapping is one of the hallmarks to foster collective efficacy. The Curriculum Mapping process assists faculty and program chairs in understanding how a particular course contributes to the overall educational experience of students and helps set expectations for student development as they progress through subsequent courses.

D. The Domains of Curriculum Mapping Practices of Teachers which significantly Influence to their Collective Efficacy in Public Elementary Schools

Presented in the table 4 is the significance influence of Curriculum Mapping Practices of Teachers to their Collective Efficacy in Public Elementary Schools with an overall computed F-value of 31.45 with a computed p-value of .001 at alpha 0.05 level of significance in this study. Since the overall computed is less than the 0.05 level of significance, the null hypothesis is rejected. It could be stated therefore, that the domains of Curriculum Mapping Practices of Teachers such as program goal (p=.003), course objectives (p=.002), instructional support materials (p=.007), formative course assessment (p=.003), summative course assessment (p=.007), and instructional plans (p=.003), significantly influence to their Collective Efficacy in Public Elementary Schools. This indicates that the Curriculum Mapping Practices of Teachers have a great impact on their Collective Efficacy in Public Elementary Schools.

The result is similar to the view of Spencer et al. (2018), who underscored that individuals who want to have the shared belief that the organization’s staff can have a positive impact on individuals’ achievement despite other influences in their lives that challenge their success then they will allow faculty and program chairs to evaluate a course's learning

outcomes, content, and relevance, and how that data relates to students' needs. Curriculum maps increase collaboration between faculty and staff within a department, which can help educators make the most efficient use of their and their students' time.

Table 4: The Domains of Curriculum Mapping Practices of Teachers Which Significantly Influence to their Collective Efficacy in Public Elementary Schools

Model	Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
Regression	15.78	3			
Residual	17.27	104	4.123	31.15	.001
Total	32.05	107	0.145		
Coefficients	Unstandardized Coefficients		Standardized t Coefficients		Sig
	B	Std. Error	Beta		
Program Goal	0.279	0.121	0.233	2.584	0.003
Course Objectives	0.278	0.119	0.232	2.583	0.002
Instructional Support Materials	0.289	0.121	0.261	2.579	0.007
Formative Course Assessment	0.279	0.121	0.233	2.584	0.003
Summative Course Assessment	0.289	0.121	0.261	2.579	0.007
Instructional Plans	0.279	0.121	0.233	2.584	0.003

The finding is aligned with the standpoint of Webb (2020), who posited that curriculum mapping is inherently collaborative, since various courses, often taught by different faculty members, build on one another and relate to each other, faculty members can work together to create relevant curriculum maps across a program, this will influence to develop the collective belief that they can successfully work together to accomplish valued goals.

Likewise, there is a significant influence of the domains of the Curriculum Mapping Practices of Teachers to their Collective Efficacy in Public Elementary Schools. This indicates that the Curriculum Mapping Practices of Teachers have a great impact on their Collective Efficacy in Public Elementary Schools.

IV. CONCLUSIONS

➤ *Based on the Overall Findings of this Research, the Following Conclusions are Drawn:*

The teachers from a school of Tugbok District, Davao City achieved a high level on Curriculum Mapping Practices from the six indicators. It means that the Curriculum Mapping Practices are oftentimes manifested by the teachers.

In Collective Efficacy of Teachers in Public Elementary Schools obtained a high level from the three indicators. It means that the Collective Efficacy is oftentimes observed by teachers.

There is a significant relationship between Curriculum Mapping Practices of Teachers and their Collective Efficacy in Public Elementary Schools. This implies that teachers who have a high level on Curriculum Mapping Practices would also increase their Collective Efficacy in Public Elementary Schools.

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