

A Meta Synthesis of the Philippines' K-12 Program

Ednalyn P. Vilorio, Ed.D

ednalynvilorio8@gmail.com

Department of Education, Pajo, Lapu-Lapu City 6015, Philippines

Abstract

This study collects and reviews selected literature using qualitative methods and means to derive a generated theory arising from the collected data. We reviewed a total of eight studies narrowed down from three thousand and seventy, based on their relevance, methods, participants, and tracts of interviews. The analyzed data were then coded and tabulated to show a narrative presentation of the data. The findings show that the collected literature to be homogenous enough to represent the entirety of the studies in relation to the topic. Themes on evaluation and teamwork were developed from the reviewed studies and a model of evaluation for K-12 program was devised. This study recommends close monitoring of the graduates of secondary education as well as documentation of their plans, replication of this study is also encouraged to enhance the literature on K-12.

Keywords: meta-syntheses ; K-12, program

1. Introduction

In every academic institution, the learner is regarded as the apple of the eye in all the teaching-learning process. In broader sense, the students play a focal point in the success of the learner as well as the institution. In Section 1 of Article IX of 1987 Constitution of the Republic of the Philippines it is clearly stated that “the State shall protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all”.

Accordingly, the students' performance encompasses an important role in producing best quality graduates who will become great leaders and manpower for the country thus responsible for the country's economic and social development. Academic achievement is one of the major factors considered by employers in hiring workers especially for the fresh graduates. Hence, students must put the greatest effort in their study to obtain good grades and to prepare themselves for future opportunities in their career at the same time.

Nomenclature	
A	definition of terms
t (t-statistic):	A value used to assess if the sample mean and population mean differ significantly.
df (Degrees of freedom):	The usual way to compute it for a one-sample t-test is as $n-1$.
n (Sample size):	There were a total of observations included in the sample.
t (t-statistic):	A value used to assess if the sample mean and population mean differ significantly.

Δ or d (Mean difference): The difference between the sample mean and the anticipated population mean is $\bar{x} - \mu_0$.

1.1. Structure

With the addition of 2 years for the secondary education, it left a 2-year period of non-graduate affecting Higher Educational Institutions and leaving a blank slate. This study seeks to explore the qualitative papers made within 2017-2019. The “K-12 program” is a comprehensive reform of the Philippines’ basic education. Through this reform, the Philippines is making efforts to catch up with global standards. Before the transition to the K-12 educational curriculum, the basic education in the Philippines consists of ten (10) years of study: six (6) years in elementary education and four (4) years in secondary education. The low enrollment in Higher Educational Institution was addressed by the use of funding schemes to mitigate expected low enrollment turnout.

1.2. Tables

Table 1. Characteristics of studies reviewed

Author	Result	Column A (<i>sample size</i>)	Column B (<i>review score</i>)
Tupas, et al. (2019) Qualitative	Scientific concepts found in play activities	8	6
Trance & Trance (2019) Qualitative	Teachers need a positive outlook “Big change” due to K-12	108	8
Edrave et al. (2018) Qualitative	Problems of teachers under K-12: lack of preparation, too much load, lack of integration	NA	8
Macasawang et al. (2019) Mixed	Book review on K-12 source discovered inconsistencies with writing activities for leaders	1book	8
Pasia (2019) Case Study	Turnover rates affects K-12 implementation leadership impacts implementation of K-12	NA	7
Besa, Erquiza, Parcon (2019) Mixed	Teacher made test were found to be NOT ALIGNED with the K-12 target objectives for testing	50 test papers evaluated	6
Randiamode (2018) Mixed	Corruption was identified in procuring resource materials	NA	5
Torrentira (2019) Qualitative	Collaboration, partnership or team work is essential to the success of the K-12.	NA	6

Table 2. One sample T-test and effect size computation

One-Sample Test								
Test Value = 0								
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		Decision	Interpretation
					Lower	Upper		
Sample Size	1.160	1	.453	58.00	-577.31	693.310		
Cohen's D	2.320						>2.0	Review studies is homogenous
Effect size r	0.757						>0.7	Large Effect size

1.3. Narrowing down the literature inclusion

Boolean operators used in table 1 shows the process of narrowing down the related literature using the identified keywords, keywords are then delimited by adding descriptive and survey using a negative sign to exclude these in the result and ranged from the year 2017-2018. These 2-year is the crucial element of the study in question. Table 1 above show the Search Engine Optimization strategies employed to refine and narrow down the research results from 3,070 studies to the final seven studies identified for meta-analysis review. To understand the table better it must be read together with the Boolean operators as found in Figure 1.

SEO Strategies.

1. Search ebschost
2. Search Google Scholar
3. Department of Education
4. -descriptive
5. K-12
6. Philippines
7. Qualitative studies
8. 2017.2018

1.4. Theory building with qualitative meta-synthesis approach

The qualitative meta-synthesis with theory building shall be used in this study. Whereas quantitative research has had a well-developed tradition of methods used to generate aggregate findings, qualitative research lacks sophistication in the techniques available to synthesize findings, as they are often elementary in nature

(Dixon-Woods & Fitzpatrick, 2001). Meta-synthesis can be used to address research concerns normally associated with other quantitative studies such as the limited practical connections made with prior literature or the isolated nature of the research design.

The technique allows for a more informed presentation of qualitative research findings in a convenient practical format suited for any discipline. There are three specific objectives identified by Morse (1997) when conducting a qualitative meta-synthesis: theory building, theory explication, and theory development. During the theory building stage of meta-synthesis, aggregate results from various qualitative studies serve to extend the current level of knowledge on the phenomena of interest far beyond the contributions possible with the findings from one sample. With theory explication, abstract concepts from one study are supported by synthesizing the results of findings from other qualitative studies examining the same phenomena. Finally, in theory development, a more illuminating and holistic view of the phenomena results from the synthesis of qualitative findings from numerous studies. The methods used are framing the research questions in a more fluid manner, searching for the related studies for inclusion or exclusions, rating each study, Synthesizing the report (Wash and Downe, 2005).

1.5. Studies by meta-synthesis

It must be noted that most of these literatures so reviewed can be summarized in the following themes:

Theme No.1 – Evaluating the elements of K-12

Teachers and books are also resources that needs further evaluation, teachers ought to be prepared as exhibited by the reference:

“Teachers need to time to be prepared” (Trance & trance, 2019)

“The test papers were not properly prepared ahead of the semester” (Besa et al., 2019)

Theme No.2 – Team work is essential

“Partnership & collaboration is an essential element of researcher that applies to the K-12 (Torrentira, 2019)”

“Teachers that quit at the middle of the semester possess a difficult problem” (Pasia, 2019)

1.6. Data analysis

A one sample-test was done using a one sample t-test on the review scores after getting the t and the df scores we computed for Cohen’s D for size effect using the following explanation (McLeod, 2019; Wilcox, 2019). Statistical conclusion shows that the collected sample size may be homogenous enough to represent the totality of the literatures reviewed.

1.7. Model generation

The model in figure no.3 is developed as a result of the exhaustive readings of the selected literature. The result of the K-12 is still in its early stages since the first batch of graduates was last 2018. The graduate may have entered tertiary education or employment but sadly such information was not within the sphere of this

study. The model shows that three elements are essential for evaluation of the program: researchers, questions on effectivity and the graduates themselves. Graduates and employment effect needs constant documentation for it to be monitored.

1.8. Conclusion

The collected literature in this study were found to be homogenous enough with a size effect that may represent all studies (Haouala et al., 2018) within the subject however it must be noted that evaluation of the K-12 program is still limited in research publication due to the lack of documentation on where the initial batch of graduates are now.

1.9. Recommendations

The researcher humble recommends the following actions:

1. Secondary School are to regularly conduct exit interviews to ascertain and provide post-graduate support to their students.
2. Regular documentation of the exit interviews
3. Check with Higher Education Institutions on the progress of their graduates.
4. Further replication of this study is crucial to the developed of the K-12 program of the Department of Education.

2. Author Artwork

The qualitative meta-synthesis with theory building shall be used in this study. Whereas quantitative research has had a well-developed tradition of methods used to generate aggregate findings, qualitative research lacks sophistication in the techniques available to synthesize findings, as they are often elementary in nature (Dixon-Woods & Fitzpatrick, 2001). Meta-synthesis can be used to address research concerns normally associated with other quantitative studies such as the limited practical connections made with prior literature or the isolated nature of the research design.

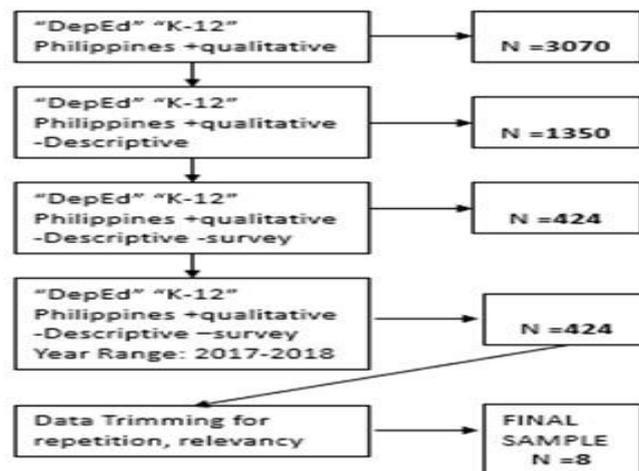


Fig. 1. (a) Narrowing down the literature for inclusion

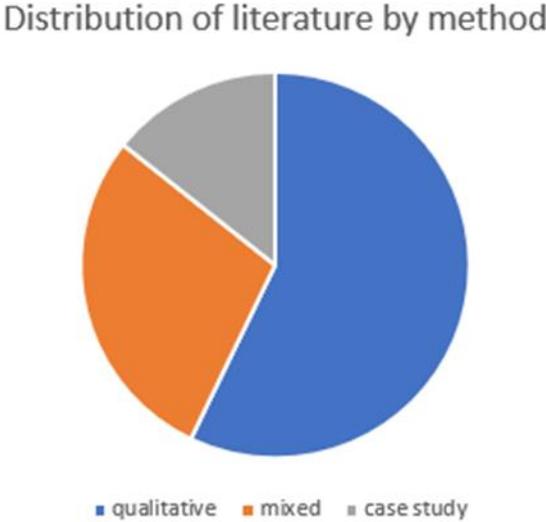


Fig. 2. (b) Description of studies reviewed

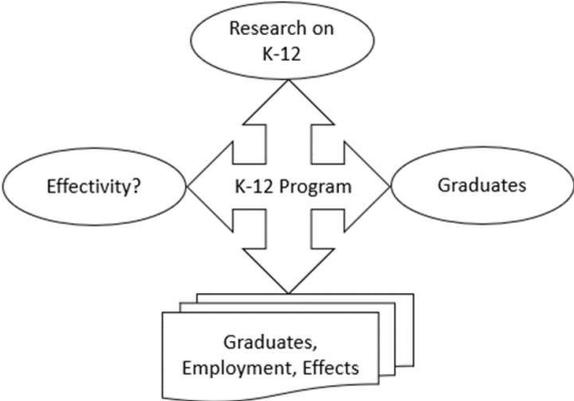


Fig. 3. (c) K-12 Model of evaluation

Acknowledgements

Throughout the course of the study, I would want to express my gratitude to Dr. Faith G. Bullo, Dr. Joseph Elly Cantutay, and Dr. Earl Adrian Cejas for providing me with helpful feedback and direction. Particular gratitude is extended to Michael Vilorio for his support in the collection of data.

In the end, I would like to express my gratitude to my family and friends for the constant support and encouragement they displayed during the course of this study.

References

- Alos, S. B., Caranto, L. C., & David, J. J. T. (2015). Factors affecting the academic performance of the student nurses of BSU. *International Journal of Nursing Science*, 5(2), 60-65.
- Dixon-Woods, M., & Fitzpatrick, R. (2001). Qualitative research in systematic reviews: has established a place for itself.
- Haouala, S., Segurado, J., & LLorca, J. (2018). An analysis of the influence of grain size on the strength of FCC polycrystals by means of computational homogenization. *Acta Materialia*, 148, 72-85.
- Newton, J. (n.d.). Qualitative meta-synthesis. *Deakin University Australia*. Retrieved from https://www.deakin.edu.au/data/assets/pdf_file/0019/681022/4-Josh_meta-analysis.pdf
- McLeod, S. A. (2019). What does effect size tell you. *Simply psychology*.
- Sifuna, D. N. (2013). Fifty years of collaboration and partnership in teacher education and perennial decline in the quality of primary education: Where is the problem?
- Walsh, D., & Downe, S. (2005). Meta-synthesis method for qualitative research: a literature review. *Journal of advanced nursing*, 50(2), 204-211.
- Wilcox, R. (2019). A robust nonparametric measure of effect size based on an analog of Cohen's d, plus inferences about the median of the typical difference. *Journal of Modern Applied Statistical Methods*, 17(2), 1.
- Zimmer, L. (2006). Qualitative meta-synthesis: a question of dialoguing with texts. *Journal of advanced nursing*, 53(3), 311-318.