

# Needs Assessment on Research Capability of Secondary School Teachers: Basis for an Extension Program

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## Abstract

This study assessed the demands on secondary school teachers' research abilities and served as the basis for an extension program of secondary teachers in Dumingag, Zamboanga del Sur for academic year 2021–2022. Focus Group Discussions (FGD) and questionnaire-checklist were used in the descriptive survey method. The findings show that more teacher participants need extra training in research education due to their low levels of research literacy. The reading and writing levels of the teacher participants were, however, assessed differently by school administrators and teachers, as seen by the grand averages of 2.49 and 2.84. Additionally, the teacher participants faced the following major problems: a lack of time for conducting research, a lack of writing research skills, difficulty in organizing one's thoughts, a lack of reading materials as references, a lack of knowledge for statistical data treatment, and a lack of funds to hire a statistician for statistical data. Based on the results, the following needs and services were also determined by the participants: research methods and design; essential research writing skills; how to format a research paper; and where to get resources. The needs assessments of the teacher participants with regard to research competence also showed a sizable discrepancy.

*Keywords:* research capability, needs assessment, extension program, research methodology

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## 1. Introduction

In order to develop knowledge and find novel approaches to raising the standard of life for people, research requires critical attention in order to meet the challenge of globalization. As a result, conducting high-caliber research is encouraged for all teachers and staff. They "enjoy the prestige of scholastic superiority and academic maturity" when they produce high-quality papers, according to CHED (2002a).

The Higher Educational Institutions (HEIs) faculty members are very much aware on the four core functions, namely research, instruction, extension, and production. Each faculty member should have engaged in research aside from instruction. Research consciousness is recognized as an essential factor in effecting innovations. Any changes in the structure of education, school programs, projects and activities, and in approaches and technique shall be first subjected to research because only research can provide factual bases of their effectiveness or ineffectiveness. In other words, all educational activities for total development are based on research.

On the other hand, the Department of Education spearheaded in the full implementation of the K to 12 Basic Curriculum which primarily aim to provide sufficient time for the mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, middle-level skills development, employment, and entrepreneurship. One of the salient features of this curriculum, is learner-centered, inclusive and research-based. In this curriculum, all senior high school students, regardless of their track, need to undergo quantitative research writing. This is one of the mandates of this curriculum to highly engaged students with relevant, responsive researches.

Research is generally known as a tool for solving man's various problems and in making life more meaningful and comfortable (Faltado, et al., 2016). Moreover, the purpose of research is to serve man and the goal of research is good. Hence, due o research man becomes progressive because man is utilizing the products of research. Research serves as

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solution to societal problems that are apparent from community and level up to different government and non-government agencies. Thus, most government and non-government agencies are developing research agenda in order to find solutions to prevailing problems observed in the society (Juan, Mariño and Wilfredo, 2016). This is the most reason why many are ignited to do research and continue to do researches even after retirement.

However, writing a research paper is considered a great challenge to teachers due to insufficient research writing background and limited resources. A lot of teachers find it very difficult on what to write, how to begin doing research, what to include in every sub-part of the research paper. The formulation of research instrument, doing statistical treatments, and interpreting findings are considered an additional burden to teacher's major functions. In fact, many teachers are hesitant to teach research subjects because of so much challenges they met, and others are reluctant to do research due to lack of time and financial constraints.

Hence, the researcher was motivated to assess the needs on the research capability among secondary school teachers as a basis for capability building through extension program. According to Andres (1991), diagnostic evaluation helps to diagnose difficulties and weaknesses of educational programs, provides basis for making decisions on needed improvements, and assists in setting up priorities for such improvements.

### *1.1. Objective of the Study*

The study's findings will form the basis of an extension program that will be offered by the School of Graduate Studies (SGS) for the academic year 2022–2023. Its goal is to evaluate the research capability needs of secondary school teachers. It specifically attempted to address the following goals: identify the participants' reading and writing standards as determined by teachers and school administrators; discover the common issues participants face when teaching research and research writing; ascertain the needs and services participants' desire; find out whether there is a significant difference in the needs of research capability of secondary school teachers.

## **2. Research Methods**

### *2.1. Research Design*

In order to collect the essential data and information for completing the goal of this investigation, the researcher used the descriptive comparative design and Focus Group Discussion (FGD). This was employed in the study to learn more about the phenomena's current state and to characterize "what exists" in terms of the circumstances or variables in a given setting. The study concentrated on the evaluation of research capability needs. According to Coats (2005), the survey approach is utilized to describe the current state of the faculty's research skills at the junior and senior high schools.

### *2.2. Research Setting*

During the academic year 2020–2021, this study was carried out in the three (3) public senior high schools in the municipality of Dumingag, Division of Zamboanga del Sur. One school is in barangay Dapiwak where habal-habal and Badja are the most practical modes of transportation to get to the school site. Two schools are situated in the lowland area where transportation is accessible and available in the municipality.

### *2.3. Participants of the Study*

Participants in this study were 178 secondary school teachers who were involved in the research survey/interview and four school administrators. Some of the participants were interested in trying to succeed at research writing.

### *2.4. Research Instrumentation*

Three components make up the study's instrument, which was modified from a reliable source. The participants' reading and writing proficiency was evaluated using data from Vanessa Clinton's (2014) Needs Assessment Survey. In order to get information from the participants, particularly regarding the frequent issues faced by the teachers, the researcher constructed a semi-structured interview guide. Two open-ended questions make up the needs and services that the participants want: Which research capability training workshops they would like to attend and/or prioritize, and which

specific knowledge and abilities they would like to have easy access to. Moreover, by giving the questionnaire to graduate school professors who were regarded as experts in educational administration, the questionnaire's validity was established. The Cronbach alpha coefficient was used to conduct an internal reliability test on the same set of questionnaires.

### *2.5. Data Collection*

The Superintendent of the Zamboanga del Sur Division granted the researcher's request for authorization to carry out the study. The researcher personally gave a copy of the authorized communication to the district supervisor once it had been approved. The researcher then forwarded copies of the approved request for the actual distribution of the instrument to the school principals or administrators. And personally, administered and carried out the survey with the intended respondents in order to assist the quick distribution and retrieval of the questionnaire-checklist. Additionally, the researcher performed informal Group Discussion (FGD) interviews using a semi-structured questionnaire with the target participants on the scheduled time and location.

### *2.6. Ethical Considerations*

The informed consent letter, which highlighted that their participation was voluntary and that participants had the freedom to discontinue their involvement whenever they want and without any legal obligation, ensured that the study closely adhered to ethical principles. The study also respected the responses of the participants and the institutions they represented while maintaining their confidentiality and dignity.

### *2.7. Data Analysis*

Descriptive and inferential statistics were applied to the data analysis. Frequency counts and percentages were used to determine the participants' reactions to the reading and writing standards as well as the common issues they encountered. The F-test was performed to determine whether there was a significant difference between the secondary school teachers' needs assessments when they were grouped by location. All tests of inference were analyzed using SPSS.

## **3. Results and Discussion**

### *3.1. Participants' Reading and Writing Standards*

As clearly manifested, the school administrators disagreed on the reading and writing standards, and reading resources of the teacher-participants; while writing resources, assessments on reading and writing, technology and community are agreed by them that these indicators are regularly monitored and evaluated by themselves.

Based on Table 1, the grand mean of 2.49 signifies that the reading and writing standards of the teacher-participants are not confirmed by the school administrators that teachers have adequate access to the district and state writing/reading standards; training in understanding and using the state /district reading and writing; and access to all tools and resources needed to implement our reading curriculum. Assessment is used in educational settings for a variety of purposes, such as keeping track of learning, diagnosing reading and writing difficulties, determining eligibility for programs, evaluating programs, evaluating teaching, and reporting to others, (NTCE, Standards for the Assessment of Reading and Writing, Revised Edition, 2009). In addition, NTCE believe that the commonly expressed need for "higher standards" is better expressed as the need for higher quality instruction, for without it, higher standards simply means denying greater numbers of students' access to programs and opportunities. The central function of assessment, therefore, is not to prove whether teaching or learning has taken place, but to improve the quality of teaching and learning and thereby to increase the likelihood that all members of the society will acquire a full and critical literacy.

### *3.2. Common Problems Encountered by the Teacher-participants*

The common problems encountered by the teacher-participants were identified based on the focused group discussions organized by the researcher. From the activity, several common problems emerged, like: lack of time to do research work, lack of background knowledge in research writing, difficulty in organizing one's ideas, scarcity of reading materials to be used as reference, lack of knowledge in the statistical treatment of data, and lack of money to hire statistician for the statistical analysis. As most teachers noted, research work for them demand more time most

especially because their skills are inadequate such that they required additional time in conceptualizing research problems and furthering into the different processes of research undertaking. With the current amount of workload accorded to teachers and the expectations of their school heads, having to do research would be last activity they have wanted to do. With the lack of background knowledge, difficulty in organizing ideas and even inadequate skills in data analyses, most of the teachers expressed their needs of equipping themselves with some research skills and tools. Juan and Wilfredo (2016) claimed that research serves as a solution to societal problems that are apparent from community and level up to different government and non-government agencies. Thus, various agencies are developing research agenda in order to find solutions to prevailing problems observed in the society.

**Table 1.** Participants' Reading and Writing Standards

Items	Administrators		Teachers	
	WAM	AE	WAM	AE
<b>A. Reading Standards</b>				
1. I have adequate access to the district and state reading standards	2.00	D	2.86	A
2. I have adequate training in understanding and using the state /district reading standards	2.00	D	2.86	A
3. I feel confident interpreting and implementing the state/ district reading standards	2.00	D	2.87	A
<b>Overall mean</b>	<b>2.00</b>	<b>D</b>	<b>2.86</b>	<b>A</b>
<b>B. Writing Standards</b>				
1. I have adequate access to the district and state writing standards	2.00	D	2.88	A
2. I have adequate training in understanding and using the state/district writing standards.	2.00	D	2.88	A
3. I feel confident interpreting and implementing the state/district writing standards	2.00	D	2.85	A
<b>Overall mean</b>	<b>2.00</b>	<b>D</b>	<b>2.87</b>	<b>A</b>
<b>C. Reading Resources</b>				
1. I have access to all tools and resources needed to implement our reading curriculum.	2.00	D	2.76	A
2. My classroom library has an adequate amount of books for varying level.	2.50	A	2.55	A
3. My classroom library meets the needs and interest of all my students.	2.50	A	2.58	A
4. I have access to an adequate amount of books for my guided reading instructions.	2.50	A	2.60	A
<b>Overall mean</b>	<b>2.38</b>	<b>D</b>	<b>2.62</b>	<b>A</b>
<b>D. Writing Resources</b>				
1. I have access to all tools and resources needed to implement our writing curriculum.	2.50	A	2.62	A
2. All of my students have writer's notebooks.	2.50	A	2.78	A
<b>Overall mean</b>	<b>2.50</b>	<b>A</b>	<b>2.70</b>	<b>A</b>
<b>E. Reading Assessment</b>				
1. I have adequate training and understanding in using the school/district reading assessments.	3.00	A	2.85	A
2. I feel we assess our students enough in reading.	3.00	A	2.92	A
3. I feel we need to assess our students more in reading.	3.00	A	3.08	A
4. I feel we should assess our students less in reading.	1.50	D	2.68	A
5. I am able to use the information from the assessments to inform my reading instruction.	3.00	A	2.96	A
6. (Grade VII to X only) I have adequate knowledge of how my students performed on the previous years end of grade test in reading.	3.00	A	3.01	A
<b>Overall mean</b>	<b>2.75</b>	<b>A</b>	<b>2.92</b>	<b>A</b>

Items	Administrators		Teachers	
	WAM	AE	WAM	AE
<b>F. Writing Assessment</b>				
1. I have adequate training and understanding in using the school/district writing rubrics	2.50	A	2.83	A
2. The school/district writing rubrics adequately and fairly grade my students writing	2.50	A	2.83	A
3. My team and I have adequate time to collaboratively assess writing	2.50	A	2.82	A
4. I feel we assess our students enough in writing.	2.50	A	2.87	A
5. I feel we need to assess our students more in writing.	1.00	SD	3.06	A
6. I feel we need to assess our students less in writing.	2.00	D	2.68	A
7. I am able to use the information from assessments to inform my writing instructions.	2.50	A	2.92	A
8. (Grade XI and XII only) I have adequate knowledge of how my students performed on the previous years end of grade test in writing.	3.00	A	2.91	A
<b>Overall mean</b>	<b>2.31</b>	<b>A</b>	<b>2.87</b>	<b>A</b>
<b>G. Technology</b>				
1. I received adequate training in the use of technology resources found in my classroom (Smart board, computer, camera, etc.)	3.00	A	2.81	A
2. I feel confident integrating technology into my reading instruction and assessments.	3.00	A	3.10	A
3. I feel confident integrating technology into my writing instruction and assessments	3.00	A	3.09	A
4. I have adequate access to technology.	3.50	SA	2.79	A
5. I have sufficient support in the implementation of technology into my instruction.	3.00	A	2.78	A
<b>Overall mean</b>	<b>3.10</b>	<b>A</b>	<b>2.92</b>	<b>A</b>
<b>H. Community</b>				
1. There is consistency in reading instruction and assessment in my grade level.	3.00	A	2.78	A
2. There is consistency in reading instruction and assessment throughout our school.	3.00	A	2.83	A
3. There is consistency in writing instruction and assessment in my grade level.	3.00	A	2.83	A
4. There is consistency in writing instruction and assessment throughout our school.	3.00	A	2.88	A
5. There is consistency in vocabulary instruction and assessment in my grade level.	3.00	A	2.85	A
6. There is consistency in vocabulary instruction and assessment throughout our school.	3.00	A	2.87	A
7. My team has sufficient planning time.	2.50	A	2.83	A
8. My team works well collaboratively.	2.50	A	2.95	A
<b>Overall mean</b>	<b>2.88</b>	<b>A</b>	<b>2.85</b>	<b>A</b>
<b>Grand mean</b>	<b>2.49</b>	<b>D</b>	<b>2.84</b>	<b>A</b>

Legend: 3.50-4.00 Strongly Agree (SA); 2.50-3.49 Agree (A); 1.50-2.49 Disagree (D); 1.00-1.49 Strongly Disagree (SD)

#### 4. Conclusion

The reading and writing standards of the teacher-participants have adequate access to the district writing/reading standards; training in understanding and using the district reading and writing; and access to all tools and resources needed to implement the reading curriculum. The teacher-participants have varied problems related to research

capability and tools and they need professional enhancement for them to capacitated before engaging into research writing.

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