

# Research Competency of Senior High School Teachers in Sorsogon City

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**Abstract** - This study is aimed to determine the level of research-competency of senior high school teachers teaching research subjects along competencies; profiles of the senior high school research teachers in terms of educational qualification, seminars and trainings attended relevant to Research, Publications in Research Journals, achievements and awards received relevant to Research, work experience relevant to research, and determine the research competency level of teachers when group according to their profiles. This utilized a descriptive method and has 100 senior high school teacher-researchers as respondents. This study found that teachers perceived their research competency level of moderate at 2.61 as the overall weighted competency score, 44.33 % or 43 teachers have attended national seminars or training in research and development, while the lowest percentage of 7.22 % or 12 have only attended local seminars, and majority of the respondents or 68 % have no work experience relevant to research. This concluded that the research teachers of the seniors have moderate competency in research, majority of the research teachers were pursuing advanced education courses, majority attending seminars, some conducting action research, but few have work experiences in research, few achievements and awards relevant to research, and no research publications, and research competency level of the teachers is seemingly affected by the educational attainment, the seminars attended by the faculty, and the research work experience of the teachers.

**Keywords:** descriptive research, public school, research competency

## INTRODUCTION

The Department of Education (DepEd) implemented the Enhanced Basic Education Curriculum in 2013 which led to the creation of the senior high school program. The main feature is the additional two years in the secondary level comprising the senior high school program as set by R.A. 10533. The primary goal of the program is to prepare secondary students to master the prerequisite skills needed in professional courses for those who will prefer academic tracks and equip with employment and industrial skills needed for those who will prefer technical- vocational and other tracks [1]. Braza [2] mentioned that the new curriculum was the response of the government to the call of the educators for the standardization of the country's educational system to comply with international standards.

One of the subjects in the senior high school (SHS) program is research. In the academic strands, research is a separate subject to have more avenues for the development of the research skills integrated in language subjects such as Filipino and English.

This is supported as reflected in DepEd Order No. 43, S. 2013 [3] by strengthening its rationale on the inclusion of research in SHS programs and to produce graduates who are research-literates.

Moreover, DepEd schools have the goals to retool teachers to become research-equipped for the subject they will be handling since there are teachers teaching subjects that are not their specialization is also a common practice in some schools. Guerrero [4] found out in her study that non-relevance of specialization of the subject teachers to the subject they are teaching has a significant impact on the academic performance of the students. Also, Segueria [5] recommended in his study about factors affecting performance of public school teachers the exposure of teachers to a series of seminar and training programs relevant to their field of specialization. This recommendation is due to his findings that a high number of public school teachers do not have access to training needed for their professional growth, thus affecting their performance in work. It can also be noted that the Department of Education recognized educational qualifications and work experiences of teachers as

primary factors that have direct impact on the learning of the students [7].

This research was conducted for the researchers who have participated in both international fora of research and publications to share their gained experiences from these platforms to these groups of SHS teachers who are experiencing difficulty or feeling deficient, feeling not equipped with the research skills needed in their work or field of research. Also, to let them work with one another and offer a working research partnership with those much interested in writing research.

### OBJECTIVES OF THE STUDY

The main purpose of this study is to determine the research-competency of the Senior High School Teachers in Sorsogon City. Specifically, to: (1) Determine the level of research-competency of senior high school teachers teaching research subjects along identified competencies; (2) Identify the profiles of the senior high school research teachers in terms of: a. Educational Qualification, b. Seminars and Trainings Attended Relevant to Research, c. Publications in Research Journals, d. Achievements and Awards Received Relevant to Research, e. Work Experience Relevant to Research; (3) Determine the research competency level of teachers when group according to their profiles.

### METHODS

This study utilized the descriptive method of research since it determined the research-competency, profiles of senior high school teachers, and the research-competency level of the teachers when group according to profiles in Sorsogon City in teaching research subjects. This is also designed to use triangulation as a supplementary method with the unstructured interview and focused-group discussion. This designed to conduct a series of training-workshops in research writing for senior high school teachers to address their difficulties in research.

Purposive sampling was used in the identification of the respondents of this study. It is used as a sampling technique in which researchers rely on their own judgment when choosing members of the population to participate in the study (6). It is used to answer the research questions or achieve objectives.

A survey-questionnaire which underwent a content-validation process was the instrument used

in this research study. It contained three (3) parts. The 1st part is the level of research competency of the SHS teachers, the 2nd, is the profile of the teachers based on the variables, third, is the research competency level of teachers when group according to their profiles.

The respondents were the 100 senior high school teacher-researchers who are currently-working in the Senior Highschool, DepEd in Sorsogon City. Those teachers who are teaching junior highschool are excluded in this study.

Also, there were statistical tools such as frequency count, mean and rank used in the collection and interpretation of data. The data on the level of research competency was determined through the scale of 5,4,3,2 &1 (very high, high moderate, moderate, low & very low, for the 2nd part, is the professional and educational profile and the 3rd part is open ended questionnaire.

### RESULTS AND DISCUSSION

This part presented the results and discussion on the research competency of the senior high school research teachers of Sorsogon City. The presentation is aided with tables and interpretation and analysis as follows: (1) level of research competency of the senior high school teachers, (2) profile of the teachers based on the variables, (3) research competency level of teachers when group according to their profiles, and (4) intervention program.

**Table 1. Level of Research Competency of the Teachers**

| Research Competency | Competency Score | Competency Level |
|---------------------|------------------|------------------|
| Technical writing   | 2.50             | Low              |
| Conceptual          | 3.20             | Moderate         |
| Technological       | 3.10             | Moderate         |
| Methodological      | 1.85             | Low              |
| Evaluative          | 2.38             | Low              |
| Overall             | 2.61             | Moderate         |

Table 1 presents the level of research competency of the senior high school teaching research subjects in Sorsogon City schools. As shown in the table, the teachers perceived that they have a research competency level of moderate reflected at 2.61 as the overall weighted competency score.

This means that teachers believe that they already possess the average research competencies for the conduct of basic and action researches needed in the development of research skills of the students. However, since the result is in moderate level which is ranging from 3.10 to 3.20 of the technological and conceptual, this goes to show that they still need further enhancement of the competencies. Although these are accessible to teachers

since there are several hubs or platforms, the results do not reveal its accessibility. On the other hand, the other results revealed low level of competencies which are ranging from 1.85, 2.38, and 2.50 of the following: methodological, evaluative, and technical writing which means that teachers have to undergo proper studies and practice for the development of these competencies that may pave the way to the enhancement of other skills such as applying statistical tools, and, analyzing data in order to draw appropriate research findings and conclusions.

When asked by the researchers on how confident were they on their research competency to handle research subjects, majority of the respondents admitted that they felt their insufficiency and incompetency in some fundamental research skills such as in applying proper statistical analysis, selecting appropriate research designs, framing conceptual or theoretical frameworks, data management, interpretation and treatment of data, and using statistical and research softwares. The results mentioned above were echoed in the responses of the teachers during the conducted interview:

*“Medyo napapagalan kami magtukdo research ta iba man baga an approach sa masteral. Masakit an pagpili san tama na statistical tools, an pag interpret san data tapos pano an paggamit san Excel or SPSS.”* (We find it difficult to teach research subjects since it is quite different from our research subject in our Masters degree. It is hard to properly choose the appropriate statistical tools, interpret data, and how to use softwares such a Excel and SPSS in data treatment) – Teacher Lyra

*“Mahirap tagalaga magturo ng research lalo na limited din naman ang aming experience at kaalaman sa research. Wala naman kaming mga training pa. Pano ba namin malaman kung tama ba ang research design? Tama kaya ang tool na ginamit? Pano ba gumawa ng research instruments? Pati nga pagsulat ng research report medyo alangin pa. Yun bang confident ka sa tinuturo mo.”* (It is quite challenging for us to teach research subject especially that we have also limited experience and knowledge in research. We have no trainings. How do we know our research designs are proper? Are the tools we are using correct? How do we

*properly construct research instrument? Even our skill in writing a technical research report is also unpolished. We hope that we become confident with what we teach someday.)* - Ma'am Joan

The result implies that the research competency level of the teachers need to have proper platforms in order for them to fully equip not only determination or the utilization of concepts and technology but more on possessing technical writing skills and methodological skills since these bring much confidence and motivation in carrying out and transferring these competencies to their students in the subject research.

This result is supported by the study of Baiza [7] that the research competency level of the teachers indicates teacher's confidence in conceptual competency and technological competency. The conceptual competency covers the ability of the researcher to conceptualize research subjects, connect variables and establish link among variables, and the available findings of literature and studies.

### Profile of the Senior High School Research Teachers

Figure 1 discusses the educational background of the senior high school teachers teaching research subjects in Sorsogon City. The figure reveals that the majority of the teachers possess 39% have units in masteral courses; 24% have masteral degree, 16% got units in doctoral, 11% bachelor's degree and 7% doctoral degree respectively.

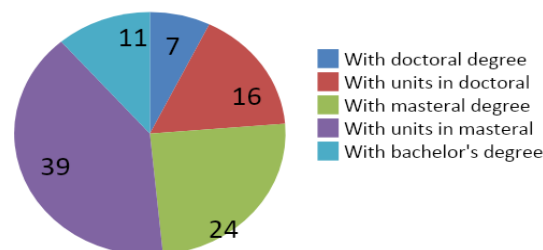


Figure 1. Educational Background of SHS Research Teachers

This data means that SHS research teachers' profile on educational attainment qualifies and conforms to Department Order s, 2016-03 which highlights those who meet the minimum requirements and qualified to practice teaching under RA 7836 and or those performing functions in support of education such as standard setting, policy and programs formulation, research and sector of monitoring and evaluation. As research has been intensified in this legal basis much it is expected to be possessed by the teachers and utilized in the classroom by the students since this is already a way of life.

The result implies that DepEd needs to continuously look for the most qualified SHS teacher which particularly stated in one of the DepEd’s guidelines. Particularly nowadays research is considered as the medium in discovering solutions to the existing problems not only in compliance to DepEd’s curriculum but also to equip 21st century learners.

This result is supported with Leann [8] finding that research is a tool for Building Knowledge and for Facilitating Learning which means that research is required not just for students and academics, but for all professionals and nonprofessionals alike. It is also important for budding and veteran writers, both offline and online.

**Table 2. Teachers with Relevant Seminars & Trainings on Research**

| Level           | F  | %     |
|-----------------|----|-------|
| International   | 26 | 26.8  |
| National        | 43 | 44.33 |
| Regional        | 21 | 21.65 |
| Local/ Division | 12 | 7.22  |

In addition, table 2 presents the number of research teachers attended seminars and training relevant to research. The presentation of the table is by level of the seminars ranging from local to international level. As revealed that there are 44.33 %or 43 teachers have attended national seminars or training in research and development, while the lowest percentage of 7.22 percent or 12 teachers have only attended local seminars. Furthermore, 26 teachers and 21 teachers said that they have participated in international and regional seminars with research and development as the course subject.

The data means that there is a lesser number of teachers who have attended regional and local level seminars and training in research as compared to national and international level. This could be attributed to the higher points for promotion given to national and international seminars when compared regional and local level training, thus attracting teachers to prefer the former. This is quite sad because if we are to increase the research productivity in education, locally- sponsored seminars, conferences and fora which will accelerate and boost research endeavours must be proliferated. It is noteworthy to mention that research training is ideally conducted in smaller groups (division-wide) rather than in bigger groups (international forum)

since capability building is the goal. Another possible reason is due to the minimal number of locally-organized seminars and training for research in the region and in the province.

*“Karamihan kasi samin ang pinipili na ay international or national. Kasi naman, mababa ang points ng division lang at regional.” (Most of teachers prefer to attend international and national trainings. The reason for this is because international and national trainings have higher points in our promotion criteria as compared to regional and local trainings.) – Sir Tony*

*“Bihira naman kasi talaga ang mga seminar sa research na ginagawa ng division. Hindi naman kasi mahilig sa research ang mga teacher natin. Usually, kapag may mga research conference, nilalangaw lang. Lalo na kung required ang teacher magpresent ng action research nila.” (It is seldom for the division office to organize local seminars for research. It is because most teachers are not interested or not engaged into research undertakings. Usually, when local research conferences are held, only few teachers are attending, especially when you require them to present their action research outputs.) - Sir Bryan*

Also as revealed in an interview that research articles they have published in any research journal both on the online and print media, provided no response on the questionnaires. This means that among the 97 surveyed SHS research teachers in Sorsogon City, none of them have already published any research article in both online and print academic journals. Instead, some of the teacher respondents wrote their action researches that were recognized as accomplishment of their division for research. The researcher deemed it necessary to present the data through unparalleled to the original objective of this study.

**Table 3. Action Researches Conducted by the Teachers**

| Level    | f  | %     |
|----------|----|-------|
| Regional | 2  | 2.06  |
| Division | 4  | 4.12  |
| District | 11 | 11.34 |
| School   | 27 | 27.84 |

Reflected in table 3 are the numbers of action researches conducted by the teachers. As shown in the table that there are 27.84% or 27 teachers who have

conducted school-based action research, 11.34 % or 11 and 2.06% or 2 teachers have already experienced conducting a district-wide, division-wide and regional level action research. The data means that though none of the research teachers have already published, about 45 % or 44 of them conducted action research in their respective schools and locality. Although, this result has also a negative implication since this could mean that the remaining 55 percent which is more than half of the respondents are teaching research subjects but are not actively engaging in research work.

Furthermore, table 4 discusses the number of awards and recognitions of the respondents relevant to research. The table revealed that there are 13 local awards, 5 regional awards and 2 national awards received by the research teachers.

**Table 4. Awards & Recognitions of Teachers Relevant to Research**

| Level         | f  | Level         |
|---------------|----|---------------|
| International | 0  | International |
| National      | 2  | National      |
| Regional      | 5  | Regional      |
| Local         | 13 | Local         |

It is noteworthy to mention that majority of these awards and recognitions were certificates of recognition as research coordinator, certificates of recognition for organizing a research-related activity, recognitions as research speaker, and best paper and best presenter awards in graduate school-organized research fora. The possible explanation lies in the fact that there is a minimum number of teachers in the province who are participating in research conferences and competitions as a research presenter, thus the finding.



*Figure 2. Teachers with Work Experience Relevant to Research*

Figure 2 presents the number of SHS research teachers with work experience relevant to research

and development in Sorsogon City. It is noticed that the majority of the respondents which comprise 66 research teachers or 68 % have no work experience relevant to research. This has negative implications since a research teacher should be actively and continually involved in research works and activities to render first-hand learning to the students.

On the other hand, 21 out of 97 respondents cited that they have work experience relevant to research as a master teacher in the Department of Education. Note that master teachers in the public school are required and mandated to conduct action research and should be exemplar instructional and curricular leaders of their own respective schools. Additionally, 7 teachers were once designated as research coordinator of their respective schools, and 2 were once research assistants, respectively.

**Table 5. Research Competency Level of Teachers when grouped by Educational Attainment**

| Educational Attainment | f  | Ave. Competency Score | Competency level |
|------------------------|----|-----------------------|------------------|
| With doctoral degree   | 7  | 3.35                  | Moderate         |
| With units in doctoral | 16 | 3.29                  | Moderate         |
| With masteral degree   | 24 | 2.68                  | Moderate         |
| With units in masteral | 39 | 2.57                  | Low              |
| With bachelor's degree | 11 | 2.36                  | Low              |

This part presents the research competency of the research teachers at the senior high schools of Sorsogon City when grouped by their respective profiles.

Presented in table 5 is the level of research competency of the teachers when grouped by their respective educational background. It is noticed that the teachers with masteral and doctoral degrees seem to have higher research competency as compared to those who have none.

Also, there are teachers with masteral degree, with units in doctoral course, and with doctoral degrees registered at a moderate level of research competency, while those with only units in masteral and with bachelor's degree demonstrated low level of research competency. This supports the idea that advanced education for continuous professional growth really affects the competency of teachers in research. Consequently, with this finding we say that teachers who handle research subjects in senior high school should be

continuously pursuing education for higher learning to foster quality instruction especially in this research-dependent society.

Moreover, the research competency level of the teachers are also grouped according to the level of their seminars attended relevant to research. As shown in table 6, the teachers who have attended national and international seminars registered a low level of research competency. On the contrary, the respondents who have participated in regional and locally-organized seminars for research and development have moderate research competency level.

Table 6. Research Competency Level of Teachers when grouped by Level of RD Seminars Attended

| Level of Seminars | f  | Ave. Competency Score | Competency level |
|-------------------|----|-----------------------|------------------|
| International     | 26 | 2.43                  | Low              |
| National          | 43 | 2.58                  | Low              |
| Regional          | 21 | 3.37                  | Moderate         |
| Local/ Division   | 12 | 3.39                  | Moderate         |

This finding supports the idea that capability trainings which are held in smaller groups have better and effective results than those held with bigger crowds which have relatively more difficult opportunity for more personalized collaboration and engagement in research. Please note that most international and national research conferences sponsored in DepEd are usually convention-type of fora which have minimal hands-on and more personal interaction among the usually-thousand participants. In contrast, locally sponsored research conferences have smaller numbers of participants and can really cater to the needs of the teacher-researchers in the locality.

Finally, table 7 shows the level of research competency of the teachers when grouped according to their respective work experience relevant to research and it is reflected that the teachers who have work experience as research assistant and research coordinator registered high competency in research as evident in their average competency score of 3.43 and 3.51 respectively. Meanwhile, the master teachers and the teachers who have no work experience relevant to research registered 2.64 and 2.03 which fall to moderate and low research competency categories, respectively.

Table 7. Research Competency Level of Teachers when grouped according to Work Experience Relevant to Research

| Nature of Work       | f  | Ave. Competency Score | Competency level |
|----------------------|----|-----------------------|------------------|
| Research assistant   | 3  | 3.43                  | High             |
| Master teacher       | 21 | 2.64                  | Moderate         |
| Research coordinator | 7  | 3.51                  | High             |
| No experience        | 66 | 2.03                  | Low              |

As reflected in the presentation, teachers who became research coordinators, master teachers, and research assistants seemed to demonstrate higher competency levels in research when compared to those who have no work experience in research. This is not surprising since these cohorts of teachers have direct experience in research activities and have undergone firsthand engagement and collaboration not with fellow researchers. Further, we argue that these cohorts like research coordinators, master teachers, etc. usually have the higher opportunity to attend and participate in training and conferences since they have designations whose functions have direct relation to research. On the other hand, ordinary teachers who have no special functions or designations have less chance to participate in research fora and seminars since usual people sent by the division are those who have designations. This implies that it is strategic to include research work experience as a criterion in selecting and hiring research teachers in the senior high school since these are already stipulated in the Results-Based Performance Management System (RPMS) Manual 2018 and DepEd Order #16 s. 2017.

## CONCLUSIONS AND RECOMMENDATIONS

The research teachers of the senior high schools possess moderate competency in research; (2) Majority of the research teachers are pursuing advanced education courses, majority attending seminars, some conducting action research, but few have work experiences in research, few achievements and awards relevant to research, and no research publications; (3) The research competency level of the teachers is seemingly affected by the educational attainment, the seminars attended by the faculty, and the research work experience of the teachers.

The researchers highly recommend the following: (1) Competency-enhancement trainings and courses on research and development be conducted; (2) Conduct of locally-organized and school-based research conferences and fora be increased and encouraged; (3) Educational attainment, seminars and trainings on research and

development, and research work experiences of the teachers be included as criteria in selecting and hiring research teachers for the senior high school program.

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