THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES

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Doctor of Philosophy (Ph.D.)
Major in Educational Management

RITA REYES-DIMAKILING

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APPROVAL SHEET

In partial fulfilment of the requirements for the degree, **DOCTOR OF PHILOSOPHY**, this dissertation entitled **"THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"** has been prepared and submitted by **RITA REYES-DIMAKILING** who, having passed the comprehensive examination and pre-oral defense, is hereby recommended for final oral examination.

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RITA REYES-DIMAKILING
Researcher

DEDICATION

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to Ernesto, my beloved husband,
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RITA

ABSTRACT

This study perceived usefulness of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII, improvement. This study aimed to perceive usefulness of the EBEIS implementation status, the design allowed the researcher to collect both quantitative and qualitative data from respondents. With respect to the respondents' assessment of the EBEIS in terms of user friendliness, accessibility and report accuracy, they rated with grand means of 4.30, 4.41 and 4. 44 respectively equivalent to a quantitative rating of "agree". The lowest scores on certain areas such as: the seven program components, the respondents' assessment of the EBEIS, the impact of EBEIS, the most serious problems encountered and results of correlational analyses may serves as basis on the proposed program strategies to improve the implementation of the EBEIS. The top managers of the Department of Education, Region VIII are generally educationally qualified in terms of the positions they occupy. Meanwhile, the implementers generally show proof of pursuing professional development. The most prevalent problems in the implementation of EBEIs dealt on; a) poor or weak internet access; b) no internet connection; c) presence of system problems during on-line encoding; and d) internet traffic during simultaneous encoding in the EBEIS. The EBEIS implementers should undergo a development program with emphasis on the enhancement of their competencies and their work values and commitment.

TABLE OF CONTENTS

Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

The role of the Management Information System (MIS) in an organization can be compared to the role of heart in the body. The information is the blood and MIS is the heart. In the body the heart plays the role of supplying pure blood to all the elements of the body including the brain. The heart work faster and supplies more blood when needed. It regulates and controls the incoming impure blood, processed it and sends it to the destination in the quantity needed. It fulfills the needs of blood supply to human body in normal course and also in crisis (Sakthivel 2014).

Sakthivel (2014) also states that the MIS plays exactly the same role in the organization. The system ensures that an appropriate data is collected from the various sources, processed and send further to all the needy destinations. The system is expected to fulfill the information needs of an individual, a group of individuals, the management functionaries: the managers and top management.

To ensure quality information, Almamary et al., (2013) pointed out Management Information System (MIS). MIS is an information system that takes internal data from the system and summarizes it to necessary reports meaningful and useful to managerial decision-making. It has improved information quality, subsequently affecting managerial decisions.

Mohamed et al., (2009) also supported the above statement through their study "Data completeness analysis in the Malaysian Educational Management Information System." They stated that the Education Management Information System (EMIS) plays a significant role in helping the education policy-makers, decision-makers, and managers to make timely and good decisions, which requires high quality data made available to relevant people. The authors also emphasized that since data collection involves the processes of importing, merging, and exporting at various levels, factors such as lack of facilities and of skilled staff or data manipulation errors can affect data quality.

The historical development of the MIS in the Department of Education (DepEd) started in the original Manual System in 1980's when school data were gathered and analyzed manually. Data entry errors and lack of coordination with other offices led to conflicting statistics. Increasing work volume led to processing delays. In 1993, there were two attempts to computerize the collection, processing and analysis of school data. Software was outsourced in both cases. However, there were problems in database installation and utilization. The system became functional.

The Unified Data Gathering System (UDGS) was developed in 1993. Software development was outsourced. Despite bugs or errors in the computer program, UDGS used for data analysis and preparation of Statistical Bulletins between 1993 and 2001. Reform of the Unified Data Gathering (UDGS) commenced in August 2001, and culminated in early 2002 with the

implementation of the new Basic Education Information System (BEIS). Major steps in the development of BEIS included the following: a) re-design of the data gathering instruments; b) local DepEd capacity building; c) central DepEd software training and BEIS software development, and BEIS analysis.

The Basic Education Information System (BEIS) served as the primary MIS of DepEd. It was developed by the Development Team from the Database Management Unit of the Research and Statistics Division, Office of Planning Service. The BEIS processed and generated the data needed for planning, budget preparation, resource allocation and performance indicators. BEIS was composed of three modules: Quick Counts, School Statistics and Performance Indicators.

The BEIS Quick Counts Module was installed and operationalized at the regional and division levels (DepEd Memo No. 211, dated October 2002). It was used to process quick summaries on total enrolment, number of nationally-funded teachers, instructional rooms and school furniture. The module produced automated reports on pupil-teacher, pupil instructional room and pupil-furniture analyses. The BEIS School Statistics Module provided details on school enrolment, staffing and facilities (DepEd Memo No. 77, March 2003). The BEIS Performance Indicators (BEIS-PI) calculated the Education for All (EFA) core indicators and other related educational indicators, based on the data generated through BEIS Quick Counts and School Statistics Modules (DepEd Memo No. 316, September 2003).

As recipient of AusAID through The Philippine-Australia Strengthening Implementation of Basic Education in Selected Provinces in Visayas (PA-STRIVE) in Regions VI, VII and VIII and of the Basic Education Sector Transformation (BEST) nationwide, DepEd decided to enhance the BEIS considering its discrepancies. Through the two programs, EBEIS was developed, pilot-tested and rolled out, and DepEd personnel underwent a capacity development in using BEIS.

Introduced in 2010, the Enhanced Basic Education Information System (EBEIS) is designed to improve data management to support planning, quality assurance and monitoring and evaluation at the school, division, regional and national levels. The ICT-enabled system was pilot tested in all schools and divisions in Regions VI, VII and VIII (DepEd Order No. 94, s. 2010).

EBEIS is a web-based management information system that improves data collection from schools and field offices and efficiently renders data or information delivery to various stakeholders; supports planning, quality assurance, monitoring and evaluation and other decision-making activities through information requirements; and makes sharing, using and reusing knowledge within DepEd possible through increased information access.

DepEd Region VIII is one of the three pilot regions (VI, VII and VIII) in the EBEIS implementation per DepEd Order No. 94, s. 2010 which the researcher was one of the facilitators of the EBEIS National Roll-out in school year 2011-2012 when the nationwide EBEIS implementation started.

There is no documented studies or published on the EBEIS assessment was conducted in the Department of Education, Region VIII. It cannot be assumed if the system was effective or ineffective without solid data. Room for any improvement cannot be determined with absence of any data on EBEIS. Thus, the researcher was prompted to conduct this study as an initial attempt to assess the status of EBEIS implementation in Region VIII, identify problems encountered by the implementers so she can recommend or propose program improvements to strengthen the EBEIS implementation in Region VIII and even in the whole Department of Education.

Statement of the Problem

This study perceived usefulness of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII, Philippines with the end-view of proposing program strategies for improvement.

Specifically, it sought answers to the following questions:

1. What is the profile of the top managers and implementers of the EBEIS in the Department of Education, Region VIII in terms of:

    1.1 age;

    1.2 educational background;

    1.3 length of service;

    1.4 number of ICT related seminars/trainings/workshops attended;

    1.5 assigned division;

1.6 geographic location (work station);

1.6.1 division; and

1.6.2 school?

2. What is the status of EBEIS implementation in DepEd Region VIII in terms of the following program components:

2.1 objectives;

2.2 programs/projects/activities;

2.3 personnel;

2.4 budget;

2.5 equipment and facilities;

2.6 ICT infrastructure support; and

2.7 monitoring and evaluation?

3. Is there a significant difference in the EBEIS implementation among the 12 Schools Divisions of Region VIII along the seven program components?

4. What are the problems encountered by the implementers of EBEIS?

5. What is the respondents' assessment of the EBEIS in terms of:

5.1 user-friendliness;

5.2 accessibility; and

5.3 report accuracy?

6. What is the perceived effects of the EBEIS in DepEd Region VIII in terms of:

6.1 efficiency;

6.2 effectiveness;

6.3 relevance; and

6.4 timeliness?

7. Is there a significant relationship between the profile of the implementers and the impact of the EBEIS?

8. What improvement program strategies may be proposed based on the findings of the study?

Hypotheses

Based on the specific questions posed in this study, these hypotheses were tested:

1. There is no significant difference in the EBEIS implementation among the 12 Schools Divisions of Region VIII along the seven program components.

1.1 objectives;

1.2 programs/projects/activities;

1.3 personnel;

1.4 budget;

1.5 equipment and facilities;

1.6 ICT infrastructure support; and

1.7 monitoring and evaluation.

2. There is no significant relationship between the profile of the implementers and the perceive effects of the EBEIS.

Theoretical Framework

This study is anchored primarily on the theory of Information Systems Success Model (ISSM) by Delone & McLean (2003). The theory explains IS success by "identifying, describing and explaining the relationships" of the six major success dimensions: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. These dimensions are interrelated and interdependent and provide a comprehensive view of IS success.

The Theory of Delone & Mc Lean (2003) was used because it relates to the present study in terms of information system and assessment in the implementation of EBEIS in Region VIII.

Another theory that relates to this study is the theory of Davis (1989), the Technology Acceptance Model (TAM). Davis presented a theoretical model aiming to predict and explain ICT usage behaviour, that is, what causes potential adopters to accept or reject the use of information technology. Theoretically, TAM is based on the Theory of Reasoned Action (TRA) by Hale et al., (2012).

In TAM, two theoretical constructs, perceived usefulness and perceived ease of use, are the fundamental determinants of system use, and predict attitudes toward system use, that is, the user's willingness to use the system. Perceived usefulness refers to "the degree to which a person believes that using a particular system would enhance his or her job performance" and perceived system "would be free of effort" (Davis, 1989).

TAM supports this study as the respondents' perceptions and ideas on EBEIS were helpful in the proposal of an improved EBEIS. It is important to identify if the respondents find the EBEIS particularly useful to pursue the existing EBEIS objectives and objective of this study.

According to Hall (2017), Management Information Systems (MIS) is interested in using information technology to carry out management functions. It is concerned with information related to people, products, procedures and technologies. As with any field of research, MIS research requires theories which provide a framework through which scholars and other researchers view phenomena in the field. As added by Hall (2017) identified key theories in Management Information System which include cognitive fit, cognitive dissonance, task-technology fit, competitive strategy and socio-technical.

Part of the cognitive theories, cognitive fit posits that information presentation affects task performance, while cognitive dissonance eliminates inconsistency between attitudes and behaviors. For technology to have positive impact, task technology fit regards the need to match IT capabilities with user tasks. On the economical side, competitive strategy aims to make a market attractive by identifying the economic factors.

Hall also identified three approaches to building theories in MIS: process, which focuses on sequences of events; variance, which is concerned with relationships among different parts of a system; and systems theory, which is concerned with how the interdependency of subsystems impacts the whole.

The aforementioned theories of Hall explain the inclusion of and the correlation between the four major components and the respondents' profiles in this study. These help the researcher to cover all relevant aspects of the EBEIS implementation to come up with a program that would allow maximum benefits of EBEIS to its clientele.

Conceptual Framework

This study was conducted on the idea that the success of any educational program like the Enhanced Basic Education Information System (EBEIS) was dependent upon its implementation.

The study assessed the implementation of the Enhanced Basic Education Information System (EBEIS) in the Department of Education Region VIII, Philippines. The assessment was made in order to identify what else can be done in the light of the experiences of the top managers and system implementers specifically along efficiency, effectiveness, and relevance of the system

Shown in Figure 1 is the conceptual framework which was derived from the three models or theories used in this study; namely the Information Systems Success Model (ISSM) by Delone & McLean (1992), Technology Acceptance Model (TAM) by Davis (1989), and the Management Information System Theories by Hall (2017). The success of information systems like the EBEIS as expressed in the cited theories are dependent on user friendliness, usefulness and how the components in the system are interrelated making it a holistic tool that help improve productivity of the organization.

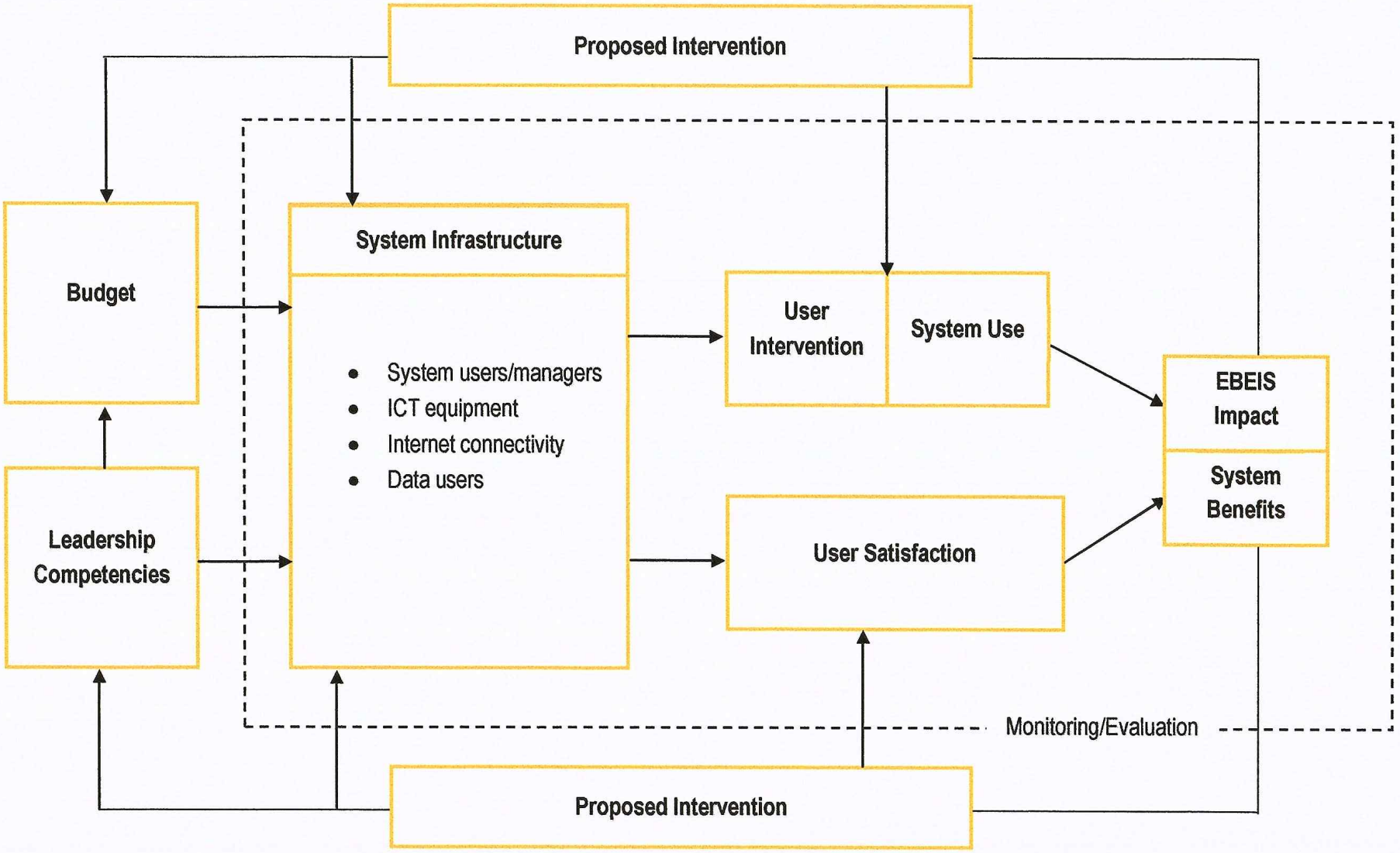

Figure 1. Conceptual Framework of the Study

The ease of use is always associated to the user's competencies; systems like EBEIS are expected to have been developed according to the user's competencies. If it's not, then the management are expected to capacitate users to improve users experience. There is no perfect database system; like the BEIS have already been enhanced to address the issues experienced by the users.

As shown in Figure 1, the EBEIS impact or benefits is a result of the level of use of the system which is a function of user satisfaction. Users are satisfied when the system is designed for the intended employees; to make their work easier. Other factors that are identified to influence positive user experience in using the system include the system infrastructures. This infrastructure includes computers and network connectivity including internet speed. Technical personnel who manage the infrastructure, data providers and data users are key elements in making the system running. Over-all, the system will not respond to what it ought to address without the push of the leaders who decides on how much resources needs to be shelled out to establish a functional system and regularly upgrade the same in response to the fast phase of technological development.

As stated, there is no perfect system; one of the primary reasons why this study was conducted. The end goal is to identify the strength and weakness of the EBEIS and recommend intervention to maximize the benefit of the system.

Significance of the Study

The result of this research study would benefit the following:

ICT or EBEIS Coordinators. The result of this study would provide them the relevance of data they submitted as basis for resource requirements and need of the school.

Planning officers. As key figures of EBEIS, they validate data submitted by the schools. The result of this study would enable them to formulate or recommend strategies and techniques on improving the system.

School heads. They are the primary source of all data and information. The result of this study would make them know the inefficient or defective practices in gathering, collecting, validation and submission of data. The result will emphasize that submission of inaccurate data would greatly affect the system results, thus, leading to short-sighted decisions for top management in education. With this, they can develop techniques and strategies on proper gathering, collecting, validation and submission of data or information.

Researchers. This would be useful for future researchers as a reference and for basis in conducting similar or parallel study.

Scope and Delimitation

This research study focused on the implementation of EBEIS in DepEd, Region VIII, Philippines. This was conducted in 12 Schools Divisions of DepEd Region VIII. Of the 13 schools divisions of Region VIII, only 12 were main respondents since DepEd Baybay City Division served as respondents for the

questionnaire dry-run. Figure 2 presents the map of Region VIII showing the 13 schools divisions. For ethical considerations, coding was used to protect the identity of each division.

The study determined the profile of the top managers and implementers of EBEIS as to their age, educational background, length of service, number of ICT related seminars/trainings/workshops attended, assigned division, geographic location (division and school). The status of EBEIS implementation in terms of objectives, program/projects/activities, personnel, budget, equipment and facilities, ICT infrastructure support, and monitoring and evaluation were assessed. The differences in the respondents' assessment of the EBEIS in terms of user-friendliness, accessibility and report accuracy were gauged. In terms of EBEIS impact, the efficiency, effectiveness, relevance and timeliness were considered. The profile of the implementers was correlated to the impact of EBEIS. The problems encountered by the EBEIS implementers were also considered.

The respondents included top managers and implementers of the 12 school divisions in DepEd Region VIII. The top managers consisted of Schools Division Superintendents (SDS) and Chief Education Supervisors of the School Governance and Operations Division (SGOD), while the implementers were the Division Planning Officers, the School Heads and the ICT or EBEIS coordinators in the selected elementary and secondary levels.

Figure 2. Map of Eastern Visayas showing the 13 Schools Divisions

There were 24 top managers (12 Schools Division Superintendents and 12 Chief Education Supervisors of the School Governance and Operations Division) and 701 implementers (Division Planning Officers, selected school heads and ICT or EBEIS coordinators). The total number of respondents were 725.

The coverage period was School Year 2017-2018.

Definition of Terms

In order to have a better understanding in this study, the following terms are defined conceptually and operationally.

Activities. This refers to an organized list of supervised form of actions intended to meet specified goals (Magallo, 2005). In this study, this refers to activities relevant to EBEIS, specifically orientation to school heads, teachers and ICT coordinators; collecting, gathering, encoding and validating of data in the EBEIS; and monitoring and evaluation.

Budget. An itemized summary of probable expenditure and income for a given period, usually embodying a systematic plan for meeting expenses (Crandall, 2002). In this study, it means the funds allocated in conducting relevant EBEIS activities.

Effectiveness. It is defined as the measure for deciding whether the system provides the desired output or not. Being effective means producing the right output in terms of quantity and quality. In this study, this refers to the measure of the goodness of the data generated from the EBEIS.

Efficiency. Indicates the manner in which the inputs are used by the system. Being efficient means the system uses inputs in a 'right' way. As used in this study, this refers to the accuracy and timeliness of the data generated from the EBEIS.

Enhanced Basic Education Information System (EBEIS). This is a web-based education management information system that generates school profile, school statistics, and education performance indicators.

Equipment or Facilities. These are the supplies or tools needed for a special purpose (Merriam-Webster, 2017). It is also used to make an action or process easy and convenient (Grolier, 2000). As used in this study, these include the computer (desktop, laptop or netbook) and printer used to facilitate relevant EBEIS activities particularly encoding, validating, submission and on-line monitoring of EBEIS.

Google Forms. A part of Google Drive, this creates surveys, tests, or web input forms. It allows anyone to create an easy-to-use web form, tied to a spreadsheet which you can track and post on the web. This was used in creating the survey questionnaires as this saves the respondents from the hassle of signing in. Instead, the respondents accessed the form via email, or Facebook or Messenger messages using a link.

ICT or EBEIS coordinators. This person is responsible for the hardware and software, internet connections, etc. The coordinator also supports ICT policy planning in schools, including the establishment of an ICT steering group, division of tasks and collaboration with stakeholders. In this study, this person is an expert

in computer manipulation and EBEIS operation who provided technical assistance to region, divisions and schools.

Implementation. It is defined as a plan or procedure to ensure the fulfillment of projected goals (Grolier, 2000). In this study, it refers as the act or process of attaining the goals in the EBEIS implementation in the Department of Education, Region VIII.

Implementers. This refers to the person who implements something or who puts it into practice or someone whose job is to put a plan or system into action (Cambridge English Dictionary). In this study, they are the Division Planning Officers, School Heads and ICT or EBEIS Coordinators.

Information and Communication Technology (ICT). This refers to the advancement and use of contemporary electronic information systems, brought by the convergence of computer and telecommunications technology. In this study, it refers to ICT gadgets and equipment, specifically internet connection through Wi-Fi and other means, computer (desktop, laptop or netbook) and other software and hardware.

Monitoring and Evaluation. It is defined as a combination of data collection and analysis (monitoring) and assessing to what extent a program or intervention has, or has not, met its objectives (evaluation). In this study, this refers to the supervision and assessment of EBEIS implementation in the Department of Education, Region VIII.

NVivo. It is a qualitative data analysis (QDA) computer software package produced by QSR International. NVivo is designed to help qualitative researchers organize and analyze non-numerical or unstructured data. In this study, the said software was used in the content analysis of the Focused Group Discussion (FGD) results.

Objectives. This refers to something one tries to do or achieve: a goal or purpose (Merriam-Webster, 2017). This also refers to the aims and targets of any program or activity towards fulfilling a certain end. In this study, this refers to the direction of the EBEIS implementation which concerns on program improvement.

Personnel. They are the human resources of an organization (Lockes, 2003). In this study, this pertains to Schools Division Superintendents, Chief Education Supervisors of the School Governance and Operations Division (SGOD), Division Planning Officers, School Heads, Teachers and ICT or EBEIS Coordinators involved in the EBEIS implementation.

Profile of the respondents. It is a demographic representation of the most noteworthy characteristics of an individual (Grolier, 2000). In this study, only included age, educational background, length of service, number of ICT-related seminars/trainings/workshops attended, assigned division, geographic location (division and school) of the respondents.

School head. A person responsible for the administrative and instructional supervision of the school or cluster of schools (RA 9155, 2001). In this study, school

head refers to the accountable person for the data accuracy and completeness in the EBEIS at the school level.

Top managers in the Department of Education. These include the policy makers at the Central, Regional and Division Offices. The top managers considered in this study were the Schools Division Superintendents and the Chief Education Supervisors of the School Governance and Operations Division (SGOD).

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

In this chapter, conceptual and research literature that relate in some aspects to this research were reviewed to give insights into the content of this study. Some literature and previous researches that have implications and relevance to this particular study are likewise presented. Moreover, related and relevant studies conducted abroad are discussed.

Related Literature

This section presents the different theories, concepts and principles on Management Information System (MIS) particularly in the Department of Education. The main focus of this study is to assess the implementation of the Enhanced Basic Education Information System (EBEIS) in Region VIII.

EBEIS is a web-based management information system that aims to achieve the following objectives: improve the collection of data from the schools and field offices and efficiently render delivery of data or information to various stakeholders; support information requirements for planning, quality assurance, monitoring and evaluation and other decision-making activities; provide a venue for sharing, using and reusing knowledge within DepEd through increasing access to information (DepEd Order No. 39, s. 2011).

The author of this study, emphasized that reliable result of the system will be the basis of the decision making of the top management in any organizations.

Management Information Systems (MIS) is a useful tool that provided organized and summarized information in a proper time to decision makers and enable making accurate decision for managers in organizations or in other words, it is a system that receives data from different units and produce information and provide Timely and accurate information for different levels of managers for making optimal decision (Pedarpur et al., 2013).

An Education Management Information System (EMIS) is a comprehensive system that bring together people, process, and technology to provide timely, cost effective, and user appropriate information to support educational management at whatever level is needed (Moses, 2001). As added by Moses (2001), EMIS contrasts with other types of information systems—notably: Statistical Information System (SIS): which is oriented to reporting historical data (at least a year after it is relevant) and often provides considerable detail, usually mainly at the national level, in support of specific research efforts; and Decision Support Information System (DSIS): which is oriented to direct support of key or future decisions within an educational system and typically requires the proper functioning of both an SIS and an EMIS— there are few effective forms of DSIS in operation now. These distinctions are relevant because most of the educational world --seldom known for a focus on speed and accuracy in information is oriented to a Statistical Information System type approach.

According to Aldarbesti & Saxena (2014), Education Management Information System (EMIS) plays an important role in developing appropriate plans, strategies and policies for improving the education system. Shah (2013), also support this view that Management Information System (MIS) can assist the school manager in determining the aims of the school, formulating strategic plans, distributing resources, and evaluating staff performance as well as organizational success.

As reiterated by the author of this study, reliable result of the system would be the basis of the decision making of the top management in any organizations. One of the most perplexing problems facing educational planners in developing countries is securing relevant, timely, and accurate data on which to base their policy deliberations (Chapman et al., 1990). Educational decision makers appreciate quality data and information if they have confidence that it leads to evidence-based decisions that ensure delivery of quality services, because they believe that quality services eventually promote the goal of improving national well-being.

Mishra (2013) stated that a Management Information System (MIS) is an important system that is intended to be used by the higher management of an organization. The MIS generally collects summarized data from different departments or subsystems of an organization and presents in a form that is helpful to the management for taking better decisions for the organization.

Data on every organization is a very essential part from data-gathering to the processing stages. Its interpretation is very important to the decision makers of every organization. Every organization and every situation inside an organization has unique informational needs. And the acquisition and management of data can be a challenge — and sometimes an endless mission.

Data is the lifeblood of today's organizations, and the effective and efficient management of data is considered an integral part of organizational strategy. Successful organizations should collect high quality data which would lead to high quality information. For a successful and effective managerial decision making, it is necessary to provide accurate, timely and relevant information to decision makers (Almamary et al., 2013). This statement explicitly explains the importance of data. Having erroneous data would lead to miscalculation, resulting to over budgeting, underutilization and waste of government resources due to inaccurate decisions, targeting and programming. Any erroneous data or information collected would certainly affect the future decisions of an organization.

Quality data is an important aspect of using information for educational management functions in education systems. Powel (2006) stated that by using quality data, decision makers are able to make good policy choices that enhance the efficiency and effectiveness of the education system performance. Access to quality data and its utilization facilitate proper allocation of resources to achieve prioritized objectives and gauge expected outcomes. It is challenging task for the

government and decision makers to understand whether the invested resources in education have created impact that brings out transformative changes to human capital formation. They need mechanisms that provide analytical information describing how educational inputs are transformed into educational outputs. Policy makers are under pressure to respond to new policy demands and it is important that they have the appropriate information to make informed decisions. EMIS must respond to such demands and those working in this area must understand how this impact on the demands for information.

According to Regoniel (2012), data analysis is only as good as the quality of data obtained during the data collection process. Data should be as accurate, truthful or reliable as possible for if there are doubts about their collection, data analysis is compromised. Interpretation of results will be faulty that will lead to wrong conclusions. This explains the importance of proper gathering and validating of data in any organizations. Faulty processes may result in wrong decisions. Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion.

The previous statements are proof of the importance of valid and reliable data. In this modern times, manual gathering and processing of data is obsolete. Use of computers and systems are employed in order to have systematic gathering and processing of data.

According to Li et al., (2018), the association between the strength of information systems and the subsequent forecasting ability of the information

produced by those systems is investigated. The authors hypothesized that management forecasts are less accurate for firms with information technology material weaknesses in their financial reporting system than the forecasts for firms that do not have information technology material weaknesses. In addition, three dimensions of information technology material weaknesses: data processing integrity, system access and security, and system structure and usage. The association with forecast accuracy appears to be strongest for IT control weaknesses most directly related to data processing integrity. The results supported the contention that information technology controls, as a part of the management information system, affect the quality of the information produced by the system.

Lewis et al. (2017) cited that organizations increasingly depend on information technology for the execution of a variety of operational, tactical, and strategic processes. Further, Lessen and Sorensen (2006) noted that technology can help school administration by providing the tools for collecting and managing data, assessing learning, documenting activities, disseminating information and enhancing research productivity.

Computers and other Information and Communication technologies at present facilitate the flow of data gathering and processing in any organizations.

According to Anderson (2013), Information and communication technology (ICT) refers to the advancement and use of contemporary electronic information systems, brought about by the convergence of computer and

telecommunications technology. ICT is also concerned with improving human and organizational problem solving through use of technologically based processes and systems that enhance the efficacy of information in a variety of tactical and strategic operational situations. ICT provides a common intellectual framework to interconnect all of the stages of hazard phenomena and resultant human and environmental interaction.

Anderson (2013) added that the healthy functioning of modern societies is effectively based on the high-quality and expeditious circulation of information. This is even more germane in the case of societies vulnerable to natural hazards. There, accurate information and its reliable and timely communication are of importance, as people's lives, assets, and environments are at stake.

Konopra & Korrapati (2006) stated that it is not the single computer that enhances the educational service; it is the entire information sharing system with all elements of networking, software, hardware elements, and application used in the process that creates a common framework of operations. Konopra and Korrapati (2006) also denoted that modern society value knowledge and information as one of its most important assets.

Mumtaz (2000) stated that a number of factors which influence teachers' decisions to use ICT in the classroom: access to resources, quality of software and hardware, ease of use, incentives to change, support and collegiality in their school, school and national polices, commitment to professional learning and background in formal computer training. The review highlights the role of

pedagogy and suggests that teachers' beliefs about teaching and learning with ICT are central to integration. It is suggested that successful implementation of ICT needs to address three interlocking frameworks for change: the teacher, the school and policy makers.

Education and information management system is very much important in an effective School Based Management System. According to Cheng & Chan (2000), based on their work in Hong Kong, recommended a multi-perspective approach to the implementation of school-based management; 'structural, political, human resource and cultural perspectives'. Cheng and Chan (2000) noted that from these different perspectives, the identification and interpretation of issues, problems, difficulties and obstacles to the implementation of SBM are different; so are the strategies to handle these issues. For example, they note that from a human resource perspective, some obstacles to SBM can be teacher dissatisfaction with school condition, lack of adequate training, skills and knowledge and lack of resources. From a political perspective, the obstacles might be lack of teacher empowerment and conflict. From a structural perspective, it might be the absence of clear accountability, roles and common goals whilst from a cultural perspective, it might be resistance to change and lack of transformational leadership that can change school culture and transform staff's beliefs and values. This multi-perspective approach reinforces further the need for professional development and support to facilitate SBM.

In every organization monitoring and evaluating the implementation of the programs/projects/activities like Education Management Information System is relevant to assess its effectiveness for improvement. Baddr (2019) defined monitoring as a periodic assessment of the progress of a project towards achievement of its planned activities and results. It starts with the implementation of the first activity, and continues as long as all activities are accomplished. While Evaluation is the assessment at one point in time of the impact of a program/project or of a work and the extent to which stated objectives have been achieved. Evaluation is defined as the retrospective analysis of experience to assess the stated objective of a project/program was achieved and to determine how and why the objectives were and were not achieved.

Related Studies

The following research studies of different authors were gathered because they are similar or very much related to the present research study.

Although the researcher of this study claims that this present study is the initial attempt to assess the implementation of EBEIS in Region VIII, there were individuals who attempted to conduct a case study on EBEIS.

Read & Atinc (2017), in their Philippines Case Study, cited that interviews revealed no compromises were made in the beginning of EBEIS implementation forcing teachers and school heads in schools that lacked internet access to find the nearest school or division office to upload their data, sometimes even through the

night. As an incentive, resources are withheld from the schools until the data are inputted. Read & Atinc (2017) also found out that while data have not been utilized to their fullest potential at all levels, a wealth of granular data on a wide variety of indicators are being collected within schools and communities, including input, output, and financing data. Recent reforms have automated school-level data collection and input processes and created incentives for school heads to input and upload extensive amounts of data, which has reduced gaps in coverage. In addition, the Department of Education has instituted the Learner Information System (LIS), which strengthen the quality and validity of student and school-level data. So, too, new local government procedures have attempted to increase transparency and validity of financing data. This existing supply can be powerful tool in decision-making, targeting of reforms, agenda setting, and monitoring of programs effectiveness.

This case study made by Read & Atinc (2017) mentioned on the pilot testing of the Enhanced Basic Education Information System (EBEIS) in Regions 6, 7, and 8, and their inputs are very much useful in this present study. Their case study is related to the present study because both dealt with EBEIS implementation. The study differed on its respondents.

Nayak et al., (2012) stated that decision making is an integral part of the functioning of any organization. To facilitate decision making in this ever-competitive world it is imperative that managers have the right information at the right time to bridge the gap between need and expectation. To facilitate better

flow of information adequate Management Information Systems (MIS) is the need of the hour. Thus it is important to have an understanding of the MIS followed in an organization by all levels of management in order to take effective decisions. A management information system collects and processes data (information) and provides it to managers at all levels who use it for decision making, planning, program implementation, and control. The MIS has many roles to perform like the decision support role, the performance monitoring role and the functional support role.

The present study is similar to that of Nayak et al., (2012) because both considered the role and support of the manager in an organization in the implementation of the Management Information System.

In the study of Nguyen (2011) entitled "Identifying Factors Influencing on Effectiveness of School Management Information System (SMIS)-An Example of Upper Secondary Schools in Vietnam," cited that SMIS is one of the most popular software which used in schools. Vietnam, SMIS is produced by MOET via SREM project funded by European Commission. It has been piloting to 100.00 percent upper secondary schools in Vietnam and will be deployed to all primary and lower secondary school as well in coming years. Nguyen added that the main purpose of the study is to research the factors which may be affected to effectiveness of SMIS use in school. Otherwise, the study also recommended to MOET and SMIS producer some useful suggestions for how to upgrade and deploy SMIS software to serve schools better in the future. Specifically, the study

examined the relationship between Information quality, System quality, Service quality, User satisfaction and Effectiveness of SMIS factors each other. The results indicated four factors information quality, system quality and service quality has positively related to User satisfaction and then user satisfaction has positively related effectiveness of SMIS use in the schools.

The study of Nguyen (2011) is related to the present study because of the use of software. It also attempted to evaluate the usefulness and effectiveness of the software in their organization. While the former study examined the relationship between information quality, system quality, service quality, user satisfaction and effectiveness of SMIS, the latter assessed the implementation of EBEIS in Region VIII. The studies differ in research environment, the research variables and research respondents.

The study of Chitolie-Joseph (2011), entitled "An Investigation into the Use of the Education Management Information System (EMIS) in Secondary Schools in St. Lucia-The Case of One Secondary School," cited that her study investigates the use of the Education Management Information System (EMIS) at the Bocage Secondary School in St. Lucia. Also in the study of Chitole-Joseph (2011), it was mentioned that she undertook her study by examining how the EMIS was being used and what was required to facilitate its use and the research findings revealed that the EMIS was underutilized and that technical, economic, training and personal, software and organizational factors contributed to the limited use of the system.

Chitole-Joseph (2011) also presented the possible implications of the findings to the future use of the EMIS in St. Lucia and the wider Caribbean. These implications include management, budgeting, recruitment, human resource development, EMIS selection and the formulation of policies that benefit developing countries. The study of Chitole-Joseph (2011) is related to the present study because both deals on Education Information system. They differ because the former focused on EMIS utilization while the present study focused on EBEIS implementation. They also differ in terms of scope of the study in the sense that the former considered secondary school in St. Lucia Secondary School while the present researcher considered the whole region in the Department of Education.

The succeeding research study can be of use by the framers of EBEIS in the future. They tackle on security and confidentiality of the data gathered and processed. In the study of Ara (2014), entitled "Information Security in Crisis Management Systems", the exchange of sensitive information system different components over a network is a crucial part of Information Systems and needs to be highly secure. In relation, various components on Information Security, and proposed an implementation solution for a Crisis Management Information Security System (CMISS). The CMISS is designed to be secured enough to handle confidential information and to be able to manage the changing needs on security and availability of a dynamic crisis situation.

The similarity of the study of Ara (2014) to the present study is that both ensuring access control to data and information. They differ in terms of purpose

because the former gave emphasis on the security of the information while the present study focuses on the assessment in the implementation of the EBEIS.

In the study of Yeong-Taak et al., (2013), entitled "A Study on the Effect of Educational Management System on Internal Factors of School Organization," they found out that Educational information systems appeared to have effect on school teachers as well. It can be said that it is mostly school teachers who handle the jobs at school, and Educational Information System is updated in reflection of improvement proposals by teachers. Thus, the system has effect on customer (student) satisfaction. In addition, parents themselves can see how their children are doing at school, the administration and the direction of the school, by connecting the Educational Information System. The study also shows that today, a great number of schools employed Educational Information Systems for their strategy to attract students and for the development of their schools. Finally, the study leads to an investigation on how internal factors such as workforce, teachers' satisfaction, customer satisfaction and strategy affect the performance of the school. According to the results, all factors except strategy have effect on the resultant performance of the school. In the case of strategy, it can be said that strategy is about the future of the school and has indirect effect on the performance of school mainly through different factors.

The study of Yeong-Taak et al., (2013) is similar to the present study because both considered the involvement of teacher in the management of information system. They differ because the former leads to an investigation on how internal

factors such as workforce, teachers' satisfaction, customer satisfaction and strategy affect the performance of the school while the present study deals on the assessment of the system.

In the study Tezci (2009) entitled "Teacher effect on ICT use in education: The Turkey sample," the results show that the most commonly used and well known ICT types among teachers are the Internet, e-mail and word processing, and teachers' attitudes towards computers and the Internet are generally positive. It was also found out that their attitude varies with their years of experience and levels of knowledge.

Issham et al., (2011) stated that in an effort to facilitate greater integration of information and communication technology (ICT) within classroom, the Malaysian government has provided intensive and continuous ICT training for teachers to undertake. One of the three major areas being highlighted by the Ministry of Education (MOE) is to use ICT as teaching and learning tools in education. One of the root causes identified was majority of teachers are still less inclined toward embracing changes to incorporate ICT into their teaching. The study of Issham et al., (2011) attempted to determine whether internet is a factor that influences teachers' perception toward their own ICT skills. A survey was completed by 84 school teachers who taught IT subjects from various schools in Penang, Malaysia. The results showed that in general, the teachers were quite confident in demonstrating their ICT skills while delivering the lessons. Furthermore, it has also been found that those who could access internet at both

home and school were more confident in their professional ICT usage. It was also emphasized that internet usage is a possible key in facilitating teacher's confidence towards using ICT professionally.

The findings of the research of Hoque et al., (2012) demonstrated that 84.00 percent of the teachers are not aware of national ICT policy though it exists. Findings shows that most of the schools (80.00 percent) do not have ICT policy at the school level though the facilities and equipment of ICT are available in most Malaysian schools. Almost all teachers have high level of skills in using computer and profoundly the basic skills needed for teachers in IT are attained by all the teachers. Likewise, 95.00 percent schools have photocopy machines and scanners while the multimedia projector is available in 85.00 percent schools. Seventy-two percent of the schools are equipped with video camera, overhead projector and laptop. However, it is interesting that their expertise and skills are not integrated with educational management or with teaching/classroom purposes. Rather they are used for daily administrative purposes. Further, the findings of the study will benefit the policy makers of developing countries, Principals, teachers, and other education related personalities of Malaysia likewise.

The present study is related to the study of Hoque et al., (2012) because teachers and school heads are both respondents and their ICT skills are also considered. They differ in terms of purpose, the latter focused on ICT utilization among teachers and principals while the present study deal on the EBEIS implementation.

In the study of Adam et al., (2012) entitled "Transformation-Ready: The Strategic Application of Information and Communication Technologies in Africa." The Education for All and Millennium Development Goal (MDG), initiatives were introduced when most developing countries faced resource constraints for educational expansion. Therefore, EFA and MDG funding came mainly from external donors. The promotion of EFA and MDG resulted in sudden and dramatic expansion of school enrolments. As a result, stakeholders needed immediate mechanisms to track the progress of the system in dealing with such expanded access. Twenty-nine External donors required governments to measure progress and achievement of EFA goals and objectives (Adam et al., 2011) by monitoring and evaluating educational quality standards. UNESCO (2010) classifies these standards into three domains: 1) quality of inputs to education, which included teachers, curricula and teaching/learning materials, school environment and physical facilities, and financial resources; 2) quality of process, such as teaching and learning methodologies, teacher/pupil interactions, management and community support, and 3) quality of outputs and outcomes, including completion rate of a level, specific acquired knowledge, skills, values and behavior, ability to access or create jobs, participation and contribution to the society and local community and continuity in terms of learning, doing, being and living together (UNESCO, 2010).

The aforementioned research showed some points of similarity in some variables like budget/funding in the implementation of the system. They differ in some other variables.

In the study of Luena (2012) affirmed that the government of Tanzania should strengthen the Education Management Information System (EMIS) to ensure that it leads to educational policies based on accurate, valid, relevant and timely data and information. The Tanzanian education system is not isolated from other education systems in the world. Therefore, a well-developed EMIS will support the government to modernize management of the education sector so that it can comply with internationally standardized models that emphasize evidence-based decision making for policy formulation, planning, monitoring and evaluation of the education sector performance. However, the EMIS itself needs policies that clearly define its roles and provide a roadmap that enables it to accomplish its objectives of helping the education sector to improve its performance. Despite the financial and technical challenges that obligate the government to receive donor support, the government might hold the supremacy and take the lead in ensuring that EMIS gets sufficient and necessary resources that conform to the actual demand, which is created by subsequent sector's expansion. Nevertheless, the EMIS might ensure that it influences the government and other users to demand and utilize its outputs by producing quality data and information that provides answers to the policy questions. Moreover, the EMIS development strategies must focus on creating user-friendly interfaces that give

broad choices for end-users to access data and information in different formats that can be convenient to them.

EMIS would become more valuable only if it is positively perceived, accepted and effectively utilized by all stakeholders at all levels. Further research should explore EMIS perception, acceptance and its relevance, particularly in the lower education management and delivery levels, which are the primary providers of education data and information.

It is important to gather information that would be useful in improving the current EMIS and building a system that serves stakeholders' interests and demands. They emphasized that EMIS must continually be strengthened so that it can increase its efficiency in producing authentic data and information that liaises with stakeholders' demands. The management officials underlined the importance of linking EMIS functions with national priorities, which are stipulated in the educational policy reform programs. They also emphasized the importance of looking at existing structural disconnect between the EMIS unit and educational management authorities at all administrative hierarchies, and finding ways of creating strong links between EMIS and other departments at the ministerial levels.

Decision makers and other educational managers at the district and ministry levels have a low appreciation for and knowledge about EMIS. Therefore, it is important to motivate decision makers to utilize EMIS outputs, thereby increasing their commitment to and accountability for EMIS functions.

The study of Luena (2012) is related to the present study because both considered monitoring and evaluation as one of the variables in the study. Also both considered decision makers as user of the EMIS or EBEIS. They differ in the objectives because the former emphasized of helping the education sector EMIS itself needs policies that clearly define its roles and provide a roadmap that enables it to accomplish its objectives of helping the education sector to improve its performance while this study focused on the implementation and assessment of EBEIS in the whole region.

Martins et al., (2019), in their study entitled "Assessing the success behind the use of education management information systems in higher education" states that the continuous use of dynamic and disruptive ICT as energizing elements of the educational process is a reality of current days, where millennials are the center of an education paradigm in which students are much more inclined to use technologies than enrolling in a traditional non-digital course. Considering education management information systems (EMIS) capacities to collect, analyze, process and publish information and data, it is easy to perceive their relevance to both education organizations and students. Nevertheless, and despite EMIS complexity and inherent possibilities, the existing literature does not provide for a detailed characterization on the impact these systems might have on students' success.

The study of Wicander (2011) attempted to explore perceptions of decision makers about EMIS. They recognize and value EMIS as a tool that enhance

decision making and policy reforms. The government is willing to prioritize EMIS investment and utilization on its own or is it relying on the external pressure that influences participation in global data and information sharing. The EMIS is relevant to users within Tanzania, especially to the education management officials. This study intended to provide a previously unavailable analysis of the attitudes held by administrators about the EMIS. The study findings would inform the government, development partners and other stakeholders about other ways of supporting EMIS to make it more efficient and sustainable.

The study of Wicander (2011) is similar to the present study since both considered EMIS/EBEIS as bases for decision making of the management officials or top management. They differ because the study of Wicander focused on the management officials while the present study focuses on the top management and implementers.

The study of Komkaew (2012) entitled "Management Information System (MIS) Implementation Challenges, Success Key Issues, Effects and Consequences: A Case Study of Fenix System" cited that the analysis of the research framework and empirical findings has contributed to a description of the main challenges and key success issues regarding MIS Implementation, together with an identification of important effects and consequences when implementing MIS. The results show that MIS implementation is surrounded with challenges which mainly concern management, administration, and people issues involved in MIS implementation process. Additionally, it was concluded that the key issues which the MIS

implementation project should be presented with primarily focused on the project team and their team work. The last main finding is concentrated on effects and consequences and it found out that MIS implementation mainly affects business process which lead to change, for instance jobs, routines, and so forth.

The study of Komkaew (2012) is similar to the present study since both dealt with the implementation of the MIS/EBEIS. However, the study of Komkaew (2012) showed that MIS implementation is surrounded with challenges which mainly concern management, administration, and people issues involved in MIS implementation process while the present study focused on the following components like objectives, programs/projects/activities, personnel, equipment and facilities, budget and monitoring and evaluation.

Goktas et al., (2013), stated that the purpose of their study was to reveal barriers encountered by Turkish primary school teachers in the integration of ICT, to propose potential enablers to overcome those barriers, and to compare the current status of ICT integration in 2011 with the status of ICT integration in 2005. Part of the data for this comparison was gathered in 2005 as part of a doctoral study by Goktas (2006). A survey design was used to investigate the barriers and enablers. Data were collected from 1373 teachers from 52 schools in 39 provinces. The results indicate that 'lack of hardware', 'lack of appropriate software materials', 'limitations of hardware', 'lack of in-service training', and 'lack of technical support' were the most important barriers. The highest ranked enablers were 'allocation of more budget', 'allocation of specific units for peer support,

allocation of support offices and personnel for teachers, and 'offering higher quality pre-service training for ICT'. Other leading enablers were 'supporting teachers to enable effective ICT use, having technology plans, offering higher quality and more quantity of in-service training, and designing appropriate course content/instructional programs. Analysis of an independent t-test revealed that most barriers showed significant differences and most enablers showed moderate or low differences between teachers' perceptions of their situation in 2005 and in 2011.

Chapter 3

METHODOLOGY

This chapter presented a comprehensive discussion of the methods and procedures used in the conduct of the study, including research design, instrumentation, validation of the instrument, data-gathering procedure, and treatment of data which covers the statistical measures used in hypotheses testing with their corresponding formulae. It also includes the significance level at which the hypotheses were tested.

Research Design

This study on The Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII, Philippines employed the Convergent Parallel Mixed Method Design (Creswell & Clark, 2011), specifically sequential explanatory design. As the study aimed to perceive usefulness of the EBEIS implementation status, the design allowed the researcher to collect both quantitative and qualitative data from the respondents of DepEd Region VIII top managers and EBEIS implementers. The researcher first obtained quantitative data from a respondent-group of 725 through surveys. From this group, the researcher chose her FGD respondents to gather qualitative data. Qualitative data in this study further explained and interpreted the quantitative data.

Conducted in SY 2017-2018, the study determined the status of EBEIS implementation in the DepEd, Region VIII through its objectives, programs/ projects/activities, personnel, budget, equipment and facilities, ICT infrastructure support, and monitoring and evaluation. The differences of the respondents' EBEIS assessment in terms of user-friendliness, accessibility and report accuracy were gauged. The respondents' profiles were determined, particularly their age, educational background, length of service, number of ICT-related seminars/trainings/workshops attended, assigned division, and work station (division and school). Then it was correlated with the EBEIS impact in terms of efficiency, effectiveness, relevance and timeliness.

The results served as basis for proposing improvement program strategies to strengthen the EBEIS implementation.

Instrumentation

The research instruments used in this study are the survey questionnaire and interview guide. These collected pertinent data to answer specific questions stated in this study.

Survey questionnaire. Created using Google Forms, the researcher-made questionnaire collects the quantitative data of the study. Since Google Form only requires the respondents to have internet connection and email, Facebook or Messenger accounts, it is an effective tool in this study. After accessing the form, the respondents only ticked the box that corresponds their answer.

The survey questionnaire has five parts. Part I contains the respondent profile in terms of age, educational background, length of service, number of ICT seminars/trainings/workshops attended, assigned division, and work station (division and school).

Part II includes items that assess the EBEIS implementation status in DepEd Region VIII in terms of objectives, programs/projects/activities, personnel, budget, equipment and facilities, ICT infrastructure, and monitoring and evaluation as criteria variables.

The responses were interpreted using the 5-point Likert scale, as follows: 5-Very Highly Implemented (VHI); 4-Highly Implemented (HI); 3-Moderately Implemented (MI); 2-Least Implemented (LI); and 1-Not Implemented (NI). The number of items in Part II per program component is as follows: a. objectives of EBEIS implementation-10; b. programs/projects/ activities-19; c. personnel-21; d. budget-8; e. equipment and facilities-9; f. ICT Infrastructure-10; and g. monitoring and evaluation-5.

Part III collects the respondents' assessment of EBEIS in terms of user-friendliness, accessibility and report accuracy. The number of items is as follows: user friendliness-7, accessibility-8, and report accuracy-5.

Part IV measures the impact of EBEIS in DepEd Region VIII, specifically, the efficiency (7 items), effectiveness (7), relevance (7), and timeliness (5).

Parts III and IV employed the same 5-point Likert scale with the following numerical values and interpretations: 5-Strongly Agree (SA); 4-Agree (A); 3-Neutral (N); 2-Disagree (D); and 1-Strongly Disagree (SD).

Part V, which consists of 21 items, gathers the problems encountered by the EBEIS implementers. Answers in Part V were interpreted using also the 5-point Likert scale, to wit: 5-Most Serious Problem (MoSP); 4-More Serious Problem (MSP); 3-Serious Problem (SP); 2-Less Serious Problem (LSP); and 1-Not a Serious Problem at all (NSP).

Focus Group Discussion (FGD) Interview Guide. Similar to the survey questionnaire, the FGD interview guide was also self-made as there were no previous studies on the EBEIS implementation. Following the interview guide pattern or format, the guide consisted of 11 items.

Validation of Instrument

The questionnaire was subjected to validation before their fielding to the respondents. After the questionnaire was scrutinized by the panel of examiners during the researcher's proposal defense and by experts, it was administered for dry-run in DepEd Baybay City Division, Baybay City particularly to the top managers and implementers on January 19, 2018. Using purposive sampling, there was a total of 21 respondents (one Schools Division Superintendent, one SGOD Representative, one Division Planning Officer, nine School Heads, and nine ICT

or EBEIS Coordinators) who answered the questionnaire for one hour from 10:45am to 11:45am.

After collecting the answered questionnaires, the researcher summarized the comments and suggestions and presented these to the dry-run respondents for further scrutiny of the questionnaire. Comments and suggestions were solicited from the respondents during the scrutiny and were incorporated in the final survey questionnaire.

Some revisions were the manner of stating the directions in each part and the items listed in the problems encountered by the implementers. Having gained the internal consistency reliability coefficient of 0.98 (Cronbach's α=0.98) basically interpreted as "excellent," the final draft of the questionnaire was prepared and submitted to the panelists and adviser for approval. The final revised questionnaire was uploaded in Google Forms for the respondents to answer online.

The interview guide for the FGD was also reviewed by the panelists, adviser, and experts. Comments and suggestions were incorporated. The final guide was presented to them before use in the FGD.

Sampling Procedure

The respondents of this study were the top managers and EBEIS implementers from the 12 Schools Divisions, namely: Biliran, Borongan City,

Calbayog City, Catbalogan City, Eastern Samar, Leyte, Maasin City, Northern Samar, Ormoc City, Samar, Southern Leyte, and Tacloban City.

The respondents for top managers consisted of Schools Division Superintendents and Chief Education Supervisors of the School Governance Operations Divisions (SGOD). The EBEIS implementers were made of Division Planning Officers, identified school heads and ICT or EBEIS school coordinators. The respondents were chosen on the basis of their awareness of the status on the EBEIS implementation.

The schools as well as school heads and ICT coordinators were selected using PHStat. PHStat is a statistics add-in for Microsoft Excel.

The researcher utilized total enumeration or universal sampling in selecting the top managers. In determining the needed sample size for school heads and ICT or EBEIS coordinators, Slovin's formula (Santos, 1998) was employed. Using these sampling methods, the total number of respondents from the twelve 12 school divisions in Region VIII were 24 top managers and 701 implementers with a total of 725 respondents.

Following the suggestions of the panelists, the top managers and implementers in the Focused Group Discussion (FGD) were from Samar Division. In the selection of FGD participants, purposive sampling was utilized.

Table 1 presents the frequency and percentage distribution of respondents from each coded division.

Table 1

Respondents of the Study

Division	Respondent's Category				Total	Percent
	Top Managers		Implementers			
	f	Percent	F	Percent		
1. Division 1	2	8.33	27	3.85	29	4.00
2. Division 2	2	8.33	11	1.57	13	1.79
3. Division 3	2	8.33	33	4.71	35	4.83
4. Division 4	2	8.33	11	1.57	13	1.79
5. Division 5	2	8.33	80	11.41	82	11.31
6. Division 6	2	8.33	223	31.81	225	31.03
7. Division 7	2	8.33	13	1.85	15	2.07
8. Division 8	2	8.33	104	14.84	106	14.62
9. Division 9	2	8.33	17	2.43	19	2.62
10. Division 10	2	8.33	109	15.55	111	15.31
11. Division 11	2	8.33	62	8.84	64	8.83
12. Division 12	2	8.33	11	1.57	13	1.79
Total	**24**	**100.00**	**701**	**100.00**	**725**	**100.00**

Data Gathering Procedure

The researcher secured necessary permissions from the DepEd Regional Director and the 12 Schools Division Superintendents before the actual data-gathering. The researcher sought a letter of introduction from the SSU Graduate Studies Dean for the Regional Director and the Schools Division Superintendents.

After permissions were obtained, the researcher also asked permission from the respondents before they answered the questionnaire through google forms, providing them also the granted consent from the Regional Director and their respective Schools Division Superintendents.

When all answered questionnaires of the respondents were in the possession of the researcher, the data or information was organized, tabulated, analyzed and interpreted using the following statistical tools: frequency counts and percentage, mean and standard deviation, weighted mean and standard deviation, One-Way Analysis on Variance (ANOVA), Tukey Test, and Pearson-r and Spearman Rank Order Correlations.

The qualitative data was gathered through FGD. The researcher oriented the respondents first on the FGD purpose. She asked permission to record their responses as verbatim answers were necessary. When the respondents gave their consent, the researcher started asking questions from the interview guide. FGD was done with one group at the office of the Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division of Samar on March 7, 2019.

The FGD results were later analyzed through content analysis using NVivo 12 software. **NVivo 12** was utilized to analyze the responses of the FGD participants. It is a qualitative data analysis (QDA) computer software package produced by Qualitative Software Resources (QSR) International. It organizes and analyzes non-numerical or unstructured data.

Statistical Treatment of Data

The following statistical treatments were used in analyzing data of this study:

Frequency counts and percentage was used in determining the profile of the top managers and EBEIS implementers of the Department of Education, Region VIII.

Mean and standard deviation identified the problems encountered by the respondents in the EBEIS implementation in their respective divisions.

The weighted mean and standard deviation assessed the perception of the top managers and EBEIS implementers on the status of EBEIS implementation in the DepEd Region VIII.

One-way Analysis on Variance (ANOVA) determined the implementation differences among schools divisions along the seven program components.

Tukey test, a post hoc test, was employed for multiple comparisons when ANOVA results indicated significant difference.

Pearson-r and Spearman Rank Order Correlations computed the significant relationship between the profiles of the implementers and the impact of EBEIS.

NVivo 12 was utilized to analyze the responses of the FGD respondents. It is a qualitative data analysis (QDA) computer software package produced by Qualitative Software Resources (QSR) International. It organizes and analyzes non-numerical or unstructured data.

It utilized the word frequency query where the most frequently mentioned words in the discussion were analyzed through a word cloud tab and cluster analysis. The word cloud analysis displays in varying font sizes, where frequently

occurring words are in bigger fonts. Cluster analysis tab displays up to 100 words as a horizontal dendrogram, where words that co-occur are clustered together.

Alpha level of 0.05 was used to determine the statistical significance of the differences and the relationships of the perceptions of the respondents on the variables in this study using the appropriate statistical tools to answer the specific questions asked.

Chapter 4

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents the results of the study with emphasis on the presentation, analysis and implementation of data gathered from the instrument used by the researcher fielded to the top managers and implementers of EBEIS in the Department of Education, Region VIII, Philippines.

Profile of the Respondents

This portion answers the questions on profile of the respondents in terms of age, educational background, length of service, number of ICT-related trainings, assigned division, and geographic location. Tables 2 to 6 contain the necessary data on this.

Age. The age profile of the implementers is shown in Table 2. As gleaned from the table, the highest number of frequency is in the age bracket of 32-36 years with 17.76 percent or 121 out of 701 implementers. This is followed by 115 or 16.41 percent in the age bracket of 27-31 years. While the least frequency, with only six respondents comprised of 0.86 percent is in the age bracket of 62-66 years. As a whole, the average age of the implementers was pegged at 40.07 years with a standard deviation of 10.39 years. The norm of their ages ranged from 29.68 to 50.46 years. The results imply that most of the implementers were in their early 40's.

Table 2

Age Distribution of the Top Managers and Implementers of the EBEIS

Age (in years)	Respondent's Category				Total	Percent (%)
	Implementers		Top Managers			
	F	Percent (%)	F	Percent (%)		
62-66	6	0.86	1	4.17	7	0.97
57-61	43	6.13	2	8.33	45	6.21
52-56	73	10.41	9	37.50	82	11.31
47-51	92	13.12	5	20.83	97	13.38
42-46	59	8.42	5	20.83	64	8.83
37-41	110	15.69	1	4.17	111	15.31
32-36	121	17.26	0	0.00	121	16.69
27-31	115	16.41	0	0.00	115	15.86
22-26	59	8.42	0	0.00	59	8.14
Not Specified	23	3.28	1	4.17	24	3.31
Total	**701**	**100.00**	**24**	**100.00**	**725**	**100.00**
Mean	**40.07 yrs.**	-	**50.78 yrs.**	-	**40.42 yrs.**	-
SD	**10.39 yrs.**	-	**5.91 yrs.**	-	**10.44 yrs.**	-

Table 2 also shows the age profile of top managers. As shown in the table, nine out of 24 or 37.50 percent belonged to the age bracket of 52-56 years old. This is followed by 20.83 percent which were between 42-46 and 47-51 years of age. Meanwhile, the least age of the top manager respondents were 37-41 and 62-66 years, with one or 4.17 percent. The average age of the top managers was 50.78 years with a standard deviation of 5.91 years. The findings denoted that most top managers were in their early 50's and much older than the implementers.

Educational background. Table 3 reflects the actual data on the education profile of top managers and implementers of the EBEIS. It can be seen in the table that of the 701 implementers, 45 or 6.40 percent were doctoral degree holders; 61 or 8.70 percent had master's degrees with doctoral units; 135 or 19.30 percent were master's graduates; 349 or 49.80 percent had master's units; 109 or 15.50 percent had finished the baccalaureate degrees; and two or 0.30 percent did not specify their educational background. The findings imply that the implementers have recognized the importance of growing professionally by pursuing graduate studies.

Table 3

Educational Background of the Top Managers and Implementers of the EBEIS

Educational Background	Respondent's Category				Total	Percent
	Implementers		Top Managers			
	F	Percent	f	Percent		
Bachelor's Degree Holder	109	15.55	0	0.00	109	15.03
Bachelor's Degree Holder w/ Master's Units	349	49.79	0	0.00	349	48.14
Master's Degree Holder	135	19.26	3	12.5	138	18.90
Master's Degree Holder w/ Doctoral Units	61	8.70	5	20.83	66	9.03
Doctoral Degree Holder	45	6.42	16	66.67	61	8.41
Not Specified	2	0.29		0.00	2	0.28
Total	**701**	**100.0**	**24**	**100.00**	**725**	**100.00**

Table 3 shows that 66.67 percent or 16 out of 24 top managers were holders of doctoral degree. This is followed by five top managers or 20.83 percent who had master's degree with doctoral units; and three out of 24 or 12.5 percent were master's graduates. The result implied that the top managers possessed the necessary educational qualifications needed by their respective administrative positions.

Length of service. As regards the length of service of the implementers, Table 4 reveals that 20.40 percent or 143 out of 701 had 6-10 years of service. This is followed by 139 or 19.83 percent in the 11-15 bracket.

The least number of implementers in the work experience belonged to the bracket of over 35 years with 13 or 1.85 percent. The average years in service of the implementer-respondents was 14.11 years with a standard deviation of 10.00 years. The cited results imply that most of the implementers were still young in the service.

Table 4 also reflects the length of service of the top managers. As revealed, 10 or 41.67 percent belonged to the bracket of 16-20 years. This is followed by seven or 29.17 percent, belonging to 11-15 years and 31.35 years. The average years of service of top managers was 26.13 years with a standard deviation of 6.33 years. The cited results implied that majority of the top managers acquired a remarkable number of years in their administrative functions.

Table 4

Length of Service of the Top Managers and Implementers of the EBEIS

Length of Service (in years)	Respondent's Category				Total	Percent
	Implementers		Top Managers			
	F	Percent	F	Percent		
greater than 35 years	13	1.85	0	0.00	13	1.79
6-10	37	5.28	0	0.00	37	5.10
31-35	58	8.27	1	4.17	59	8.14
26-30	86	12.27	3	12.50	89	12.28
21-25	65	9.27	7	29.17	72	9.93
16-20	132	18.83	10	41.67	142	19.59
1-5	139	19.83	1	4.17	140	19.31
11-15	143	20.40	2	8.33	145	20.00
less than 1 year	23	3.28	0	0.00	23	3.17
Not Specified	5	0.71	0	0.00	5	0.69
Total	**701**	**100.00**	**24**	**100.00**	**725**	**100.00**
Mean	**14.11 yrs.**	**-**	**26.13 yrs.**	**-**	**14.55 yrs.**	**-**
SD	**10.00 yrs.**	**-**	**6.33 yrs.**	**-**	**10.11 yrs.**	**-**

ICT-related trainings. Data in Table 5 reflects the number of ICT-related trainings by the implementers. As shown in the table, 504 or 71.90 percent attended 1-5 seminars/ trainings/workshops; 97 or 13.84 percent had none; and 80 or 11.41 percent had 6-10 of these. The average number of these opportunities attended by the implementers was four with a standard deviation of 4. The findings implied that implementers were less exposed to ICT-related seminars/trainings/ workshops.

Similarly, Table 5 also provides the same data type of top managers. As revealed by the same table, 17 or 20.83 percent attended 1-5 seminars/trainings/

Table 5

Number of ICT-Related Seminars/Trainings/Workshops Attended by the Top Managers and Implementers of the EBEIS

Number of Seminars/ Trainings/ Workshops	Respondent's Category				Total	Percent
	Implementers		Top Managers			
	F	Percent	F	Percent		
greater than 20	3	0.43	0	0.00	3	0.41
16-20	10	1.43	0	0.00	10	1.38
11-15	7	1.00	0	0.00	7	0.97
6-10	80	11.41	7	29.17	87	12.00
1-5	504	71.90	17	70.83	521	71.86
None	97	13.84	0	0.00	97	13.38
Total	**701**	**100.00**	**24**	**100.00**	**725**	**100.00**
Mean	**4 trainings**	**-**	**5 trainings**	**-**	**4 trainings**	**-**
SD	**4 trainings**	**-**	**3 trainings**	**-**	**4 trainings**	**-**

workshops, and the remaining seven or 29.17 percent attended 6-10 of these. The group had an average of five seminars/trainings/workshops with a standard deviation of 3. These implied that the top manager were more or less updated on matters relevant to their work as top managers.

Assigned division. Reflected in Table 6 is the number of implementers and top managers assigned to the different schools divisions in the Department of Education Region VIII. The data revealed that Division 6 has the largest number

Table 6

Assigned Division of the Top Managers and Implementers of the EBEIS

Assigned Division	Respondent's Category				Total	Percent
	Implementers		Top Managers			
	f	Percent	f	Percent		
Division 1	27	3.85	2	8.33	29	4.00
Division 2	11	1.57	2	8.33	13	1.79
Division 3	33	4.71	2	8.33	35	4.83
Division 4	11	1.57	2	8.33	13	1.79
Division 5	80	11.41	2	8.33	82	11.31
Division 6	223	31.81	2	8.33	225	31.03
Division 7	13	1.85	2	8.33	15	2.07
Division 8	104	14.84	2	8.33	106	14.62
Division 9	17	2.43	2	8.33	19	2.62
Division 10	109	15.55	2	8.33	111	15.31
Division 11	62	8.84	2	8.33	64	8.83
Division 12	11	1.57	2	8.33	13	1.79
Total	**701**	**100.00**	**24**	**100.00**	**725**	**100.00**

of implementers consisting of 223 or 31.81 percent. This is followed by Division 10 with 109 or 15.55 percent; and Division 8 with 104 or 14.84 percent. The least number of implementers consisting of 11 or 1.57 percent came from Division 2, Division 4 and Division 12.

On the other hand, top managers in each division were represented by two, or 8.33 percent, Schools Division Superintendent (SDS) and the Chief Education Supervisor of the School Governance and Operations Division (SGOD) in the Division Offices with a total of 24 top managers.

Status of EBEIS Implementation

The implementers' perceptions on the status of EBEIS implementation along objectives, programs/projects/activities, personnel, budget, equipment and facilities, ICT infrastructure support, and monitoring and evaluation was determined. The data and discussion of results are presented in Tables 7 to 13.

Objectives. Table 7 reveals the consolidated responses of implementers and top managers relative to the status of EBEIS implementation in terms of objectives. The respondents assessed the 10 indicators, garnering a weighted mean ranging from 4.36 to 4.53 and a grand mean of 4.42, considered as "highly implemented." Whereas, item one had a weighted mean of 4.53 considered as "very highly implemented." The findings imply that the objectives of the EBEIS were clearly defined, disseminated and carried out to the clientele.

Table 7

Status of EBEIS Implementation in DepEd Region VIII in Terms of Objectives

Indicators	Weighted Mean	Interpret-ation
1. The objectives of the EBEIS are clearly defined.	4.53	VHI
2. The following objectives of the EBEIS are well carried/met.	4.48	
2.1 The objective that it engaged in school for encoding of school statistics in the EBEIS system is well carried out/met.	4.42	HI
2.2 The objective that it strengthened the validation of data for accuracy purposes is carried out/met.	4.36	HI
2.3 The objective that it generated reports to support budget and plan formulation is carried out/met.	4.36	HI
2.4 The objective that it identified necessary adjustments and institutional support requirements to enhance EBEIS system effectiveness, efficiency, relevance and sustainability is carried out/met.	4.37	HI
2.5 The objective that it established an accurate and reliable data of schools which are vital on its planning, budgeting, allocation of resources and setting operational targets is carried out/met.	4.46	HI
3. The objectives of the EBEIS are disseminated to the clientele schools.	4.44	HI
4. Varied modes of dissemination are utilized.		
4.1 Mode of dissemination such as EBEIS Orientation is utilized.	4.37	HI
4.2 Mode of dissemination such as conduct of conference is utilized.	4.41	HI
4.3 Mode of dissemination such as issuance of memorandum is utilized.	4.40	HI
Grand Total	**48.60**	**-**
Grand Mean	**4.42**	**HI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)
3.51-4.50 Highly Implemented (HI)
2.51-3.50 Moderately Implemented (MI)
1.51-2.50 Least Implemented (LI)
1.00-1.50 Not Implemented (NI)

Programs/projects/activities. Table 8 shows the status of implementation along programs/projects/activities or PPA as assessed by the respondents. There were 15 indicators identified as areas of PPA of which the respondents were asked to give their opinions.

Table 8

Status of EBEIS Implementation in DepEd Region VIII in Terms of Programs/Projects/Activities

	Indicators	Weighted Mean	Interpret-ation
1.	Collection of basic statistics data.	4.55	VHI
2.	Validation of school data.	4.56	VHI
3.	Implementation of Beginning of the School Year (BOSY) and End of School Year (EOSY).	4.66	VHI
4.	Updating of the BOSY 2017-2018 and other data encoding requires EOSY 2016-2017 status.	4.57	VHI
5.	Updating school information in the EBEIS.	4.58	VHI
6.	Submission of school statistics in the EBEIS.	4.55	VHI
7.	EBEIS Orientation to School Heads and ICT/EBEIS Coordinators.	4.49	HI
8.	Creation of a Division Validation Team/Focal Persons	4.50	HI
9	Division validation by the team/focal persons.	4.57	VHI
10.	On-line division validation of the EBEIS data.	4.50	HI
11.	Monitoring and evaluation of EBEIS activities.	4.42	HI
12.	Provision of technical assistance.	4.50	HI
13.	EBEIS Orientation to Division.	5.00	VHI
14.	On-line EBEIS monitoring and evaluation.	4.28	HI
15.	Provision of technical assistance to Division.	4.31	HI
	Grand Total	**68.04**	**-**
	Grand Mean	**4.54**	**VHI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)
3.51-4.50 Highly Implemented (HI)
2.51-3.50 Moderately Implemented (MI)
1.51-2.50 Least Implemented (LI)
1.00-1.50 Not Implemented (NI)

Based on the responses, the status of implementation along PPA ranged from a weighted mean of 4.28 to 5.00 bearing a qualitative description of "highly implemented" to "very highly implemented." In summary, the respondents assessed the PPA as "very highly implemented" as evidenced by the computed grand mean of 4.54 both from the division and regional levels.

Personnel. Table 9 presents the status of EBEIS implementation in terms of personnel. The respondents assessed the timeline indicators with a qualitative description of "highly implemented," equivalent to a weighted mean ranging from 3.58 to 4.50. On the other hand, the remaining 11 indicators received a weighted mean of 4.54 to 4.72 with a verbal interpretation of "very highly implemented."

In summary, the combined assessment of the respondents on the status of EBEIS implementation along personnel was "highly implemented" as evidenced by the computed grand mean of 4.39.

The results revealed that the personnel in the EBEIS implementation were committed to perform the given roles and functions. They ensured the quality of EBEIS implementation towards the attainment of the regional and division goals.

Budget. Table 10 presents the status of EBEIS implementation in terms of budget. The respondents assessed the 12 indicators which got a weighted mean of 3.45 to 4.29 with a qualitative description of "moderately implemented" to

Table 9

Status of EBEIS Implementation in DepEd Region VIII in Terms of Personnel

Indicators		Weighted Mean	Interpretation
1.	Sufficient number of personnel to carry-out the activities of EBEIS have been provided.	4.28	HI
2.	The personnel involved is provided with relevant seminars/trainings/workshops/orientation to implement the EBEIS.	3.92	HI
3.	The personnel has been capacitated to develop their skills and competence in relation to his/her assignment.	4.39	HI
4.	A mechanism has been put in place to ensure that personnel perform the given roles and functions assigned to them.	4.54	VHI
5.	Personnel's commitment and dedication to the assigned task have been developed or recognized.	4.42	HI
6.	The personnel at the specific governance level perform the specified tasks	4.62	VHI
6.1	The school head utilizes the data gathering forms, which are vital in the collection of data.	4.58	VHI
6.2	The school head properly updates the school profile.	4.54	VHI
6.3	The school head ensures that the data submitted and maintained in the EBEIS are accurate and timely.	4.59	VHI
6.4	The school head designates a School EBEIS Coordinator/ICT Coordinator.	4.72	VHI
6.5	The school head monitors the progress of updating in the Learner Information System (LIS).	4.58	VHI
6.6	The school head ensures that data on learners in the LIS and in any form of storage are kept secured and protected from any unauthorized access.	4.58	VHI
	Division Level		
6.7	The Division Planning Officer ensures the quality of data and smooth implementation of information systems.	4.61	VHI

	Indicators	Weighted Mean	Interpret-ation
6.8	The Division IT Officer or designated ICT coordinator provides technical assistance.	4.5	HI
6.9	The Division Office, through the Schools Division Superintendent, creates a validation team/focal persons.	4.61	VHI
6.10	The Division Office through the Schools Division Superintendent creates a monitoring and evaluation team in the implementation of EBEIS activities.	4.60	VHI
	Regional Level		
6.11	The Regional Planning Officer ensures the quality of EBEIS implementation in the region.	4.4	HI
6.12	The Regional IT Officer or designated ICT coordinator provides technical assistance.	3.58	HI
6.13	The Policy, Planning and Research Division (PPRD) personnel provide technical assistance (on-line/on-site) to school divisions during EBEIS activities.	4.23	HI
6.14	The Regional Office creates a monitoring and evaluation team during the EBEIS activity of the schools divisions.	4.11	HI
6.15	The Regional Planning Officer and the Regional ICT Coordinator create a system access for a newly created division.	4.08	HI
7.	All the personnel involved in the Learner Information System (LIS) and EBEIS in all the schools, divisions, and regional office are allowed to render overtime (OR) services to meet the target schedule.	4.43	HI
8.	Service credits have been provided for the overtime services of the personnel involved during the EBEIS activity (encoding and submission).	4.03	HI
Grand Total		**100.94**	**-**
Grand Mean		**4.39**	**HI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)
3.51-4.50 Highly Implemented (HI)
2.51-3.50 Moderately Implemented (MI)
1.51-2.50 Least Implemented (LI)
1.00-1.50 Not Implemented (NI)

Table 10

Status of EBEIS Implementation in DepEd Region VIII in Terms of Budget

Indicators	Weighted Mean	Interpret-ation
1. The funds are downloaded by the Central Office directly to the Division offices for implementation of LIS/EBEIS and other planning activities are utilized in accordance with its guidelines.	4.29	HI
2. The funds that are downloaded by the Central Office is sufficient to finance the different EBEIS activities (orientation, coaching and mentoring, benchmarking and others).	4.18	HI
3. The school head uses the Maintenance and Other Operating Expenses (MOOE) in financing the EBEIS activities.	4.23	HI
4. Funds have been allocated for the overtime services of the persons involved in the EBEIS activities.	3.45	MI
5. Other sources of funds utilized in the implementation of the EBEIS activities have been sourced out and utilized.	3.86	HI
6. Communication allowance is provided to planning officer to follow-up the on-line submission of the school to meet the target date set by the Central Office.	4.00	HI
7. Sufficient budget for the reproduction of the data gathering forms has been provided.	4.04	HI
8. Liquidation reports are prepared for the expenses incurred in the EBEIS implementation.	4.14	HI
Grand Total	**32.19**	**-**
Grand Mean	**4.02**	**HI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)
3.51-4.50 Highly Implemented (HI)
2.51-3.50 Moderately Implemented (MI)
1.51-2.50 Least Implemented (LI)
1.00-1.50 Not Implemented (NI)

"highly implemented." The combined assessment of the respondents on the status of EBEIS implementation along budget was "highly implemented" as evidenced by the computed grand mean of 4.02.

It is interesting to note that the results reveal that funds for overtime services of the persons involved in the EBEIS activities were only moderately implemented. Something should be done to upgrade this to be highly or even very highly implemented. The ratings of moderately and highly implemented were indicative that budget was not enough as intended.

Equipment and facilities. The status of EBEIS implementation in terms of equipment and facilities is presented in Table 11. Thirteen indicators were assessed, getting a weighted of 2.81 to 4.26 with a verbal interpretation of "moderately implemented" to "highly implemented." In summary, the combined assessment of the respondents on the status of EBEIS implementation along equipment and facilities was moderately implemented, evidenced by the computed grand mean of 3.47.

The result reveals that eight indicators or 62.00 percent were moderately implemented. This indicated that equipment and facilities should be functional and usable; properly maintained; and internet-available.

It also indicated that encoding, submission and validation of necessary data should be done timely. These findings implied the need to promptly address these

Table 11

Status of EBEIS Implementation in DepEd Region VIII in Terms of Equipment and Facilities

	Indicators	Weighted Mean	Interpretation
1.	Computers, laptops and audio-visual materials are provided/made available during the EBEIS orientation.	4.26	HI
2.	Computers or laptops are made available for the EBEIS activities particularly during on-line encoding and submission at the school level.	4.22	HI
3.	Computers or laptops are made available during on-line validation.	4.04	HI
4.	The equipment and facilities are ensured to be functional and usable.	3.39	MI
5.	Maintenance of IT software is regularly scheduled.	3.48	MI
6.	Sufficient number of IT facilities and equipment are made available.	3.14	MI
7.	Internet access is made available in the school in doing the on-line encoding and submission of data and information in the EBEIS.	3.37	MI
8.	The school head or the ICT/EBEIS school coordinator uses the internet to do on-line encoding and submission of data/information to the system.	3.52	HI
	8.1 The EBEIS activities like encoding, submission and validation is usually done at the SCHOOL.	3.56	HI
	8.2 The EBEIS activities like encoding, submission and validation is usually done at the DIVISION.	2.85	MI
	8.3 The EBEIS activities like encoding, submission and validation is usually done at HOME.	3.23	MI
	8.4 The EBEIS activities like encoding, submission and validation is usually done at the INTERNET CAFE.	2.81	MI
	8.5 The EBEIS activities like encoding, submission and validation is usually done using a CELLPHONE/MOBILE DATA.	3.29	MI
	Grand Total	**45.16**	**-**
	Grand Mean	**3.47**	**HI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)
3.51-4.50 Highly Implemented (HI)
2.51-3.50 Moderately Implemented (MI)
1.51-2.50 Least Implemented (LI)
1.00-1.50 Not Implemented (NI)

highly valued aspects of equipment and facilities to maximize the implementers' performance and productivity.

ICT infrastructure support. Table 12 presents the consolidated responses of the implementers and top managers relative to the status of EBEIS implementation in terms of ICT infrastructure support.

The responses for 13 indicators gained a weighted mean of 1.73 to 3.66 with a verbal interpretation of least implemented, moderately implemented to highly implemented. In summary, the combined assessment on the status of EBEIS implementation in terms of ICT infrastructure and support was moderately implemented with the computed grand mean of 2.95 as evidence.

The result reveals that two indicators or 15.00 percent were highly implemented; eight indicators or 62.00 percent were moderately implemented; and three indicators or 23.00 percent were least implemented. These also indicated a lack of internet connection in the community and inadequate or insufficient equipment connectivity mechanisms such as computers.

These findings implied the need to properly address these aspects of ICT infrastructure support to maximize the implementers' performance and productivity.

Monitoring and evaluation. Table 13 presents the status of EBEIS implementation in terms of monitoring and evaluation. The indicators got a weighted mean ranging from 4.32 to 4.52, equivalent to the verbal interpretations

Table 12

Status of EBEIS Implementation in DepEd Region VIII in Terms of ICT Infrastructure Support

	Indicators	Weighted Mean	Interpret-ation
1.	Internet connection is made available at the SCHOOL.	3.66	HI
2.	Internet connection is made available in the DIVISION.	3.54	HI
3.	The Division Office have ICT Hubs to conduct ICT based systems/initiatives.	3.48	MI
4.	A room for gadgets and equipment is provided.	3.4	MI
5.	Equipment and connectivity mechanism such as desktop or laptop is provided.	3.37	MI
6.	Technical support acts as a liaison on technical matters.	3.22	MI
7.	Equipment and connectivity mechanism such as funds to pay monthly Internet Service Provider (ISP) subscription or reimbursement for internet usage is provided.	3.05	MI
8.	Equipment and connectivity mechanism such as internet modem or Wi-Fi facility is provided.	2.96	MI
9.	Internet connection is made available in the COMMUNITY like an Internet Café	2.67	MI
10.	Equipment and connectivity mechanism such as IT Hub or ICT equipped center/working station is provided.	2.64	MI
11.	Internet connection is made available in the COMMUNITY like other internet access.	2.33	LI
12.	Equipment and connectivity mechanism such as tablet or smartphone is provided.	2.33	LI
13.	Internet connection is made available in the COMMUNITY like a free Wi-Fi.	1.73	LI
	Grand Total	**38.38**	**-**
	Grand Mean	**2.95**	**MI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)

3.51-4.50 Highly Implemented (HI)

2.51-3.50 Moderately Implemented (MI)

1.51-2.50 Least Implemented (LI)

1.00-1.50 Not Implemented (NI)

Table 13

Status of EBEIS Implementation in DepEd Region VIII in Terms of Monitoring and Evaluation

	Indicators	Weighted Mean	Interpret-ation
1.	The Policy, Planning and Research Division through the Regional Planning Officer conducts on-line monitoring as to the status of submission and validation of the schools divisions, as basis for the provision of technical assistance.	4.52	HI
2.	The Division Planning Officer conducts on-line monitoring on the status of submission and validation of the schools divisions, as basis for the provision of technical assistance.	4.51	VHI
3.	The Division Office creates a monitoring and evaluation team or focal persons to monitor the conduct of the EBEIS orientation to school heads and ICT coordinators.	4.41	HI
4.	The monitoring team reports the findings as basis for the problem-resolution and policy recommendations.	4.39	HI
5.	The Division Office provides monitoring tool to be utilized by the monitoring and evaluation team for EBEIS activities.	4.32	HI
	Grand Total	**22.15**	**-**
	Grand Mean	**4.43**	**HI**

Legend:

4.51-5.00 Very Highly Implemented (VHI)
3.51-4.50 Highly Implemented (HI)
2.51-3.50 Moderately Implemented (MI)
1.51-2.50 Least Implemented (LI)
1.00-1.50 Not Implemented (NI)

of highly implemented to very highly implemented. The combined assessment of the respondents on monitoring and evaluation was highly implemented, with the computed mean of 4.43. The result reveals that the division and regional offices had functional monitoring and evaluation team for EBEIS activities. These offices were performing their functions and responsibilities assigned to them.

Comparison in the Status of EBEIS Implementation by Division Along the Seven Program Components

This sub-section presents the comparison of the perceptions of the respondents on the status of EBEIS implementation manifested in terms of objectives, programs/projects/activities, personnel, budget, equipment and facilities, ICT infrastructure support, and monitoring and evaluation. The analyses and interpretations of data presented in the succeeding tables employed ANOVA.

Table 14 shows the results of ANOVA applied to the responses of the respondents on the EBEIS implementation status manifested. It should be recalled that the respondents assessed the status of EBEIS implementation in terms of objectives with different grand means and standard deviations as reflected in Table 13.

To determine whether the differences among the 12 divisions were significant or not, one-way ANOVA was applied. The sources of variation between was 19.263 and within is 22.0243. Results showed that the computer F-value of 5.479 is greater than the P-value of 0.00. Moreover, the P-value of 0.000 is smaller than the 0.05 level of significance. Therefore, the hypothesis which states that "there are no significant differences in the status of EBEIS implementation by division" is rejected. It means that the responses of the raters differed from each

other. It indicated that their assessment based on the weighted means were different from each other.

Table 14

Comparison Among the Status of EBEIS Implementation by Division Along Objectives

Descriptives			
Division	**n**	**Mean**	**SD**
Division 1	27	4.31	0.68
Division 2	11	4.77	0.34
Division 3	33	4.43	0.53
Division 4	11	4.73	0.53
Division 5	80	4.15	0.49
Division 6	223	4.46	0.64
Division 7	13	4.70	0.34
Division 8	104	4.28	0.58
Division 9	17	4.82	0.28
Division 10	109	4.48	0.51
Division 11	62	4.32	0.56
Division 12	11	5.00	0.00
Total	701	4.4137	.58494

ANOVA						
Sources of Variation	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Evaluation**
Between Groups	19.263	11	1.751	5.478	.000	Significant
Within Groups	220.243	689	0.32			
Total	239.506	700				

Since the computed F-value is significant, Tukey's Honestly Significantly Difference test reflected in Table 15 was applied to determine which division pair as assessed by the respondents had significant variations in their responses.

Table 15

Post Hoc Analysis in Comparing the Status of EBEIS Implementation in DepEd Region VIII by Division Along Objectives

Pair	Mean Difference	p-value	Evaluation
Division 1 & Division 2	-.45791	.503	Not Significant
Division 1 & Division 3	-.11549	1.000	Not Significant
Division 1 & Division 4	-.41973	.641	Not Significant
Division 1 & Division 5	.16269	.980	Not Significant
Division 1 & Division 6	-.14447	.984	Not Significant
Division 1 & Division 7	-.38519	.681	Not Significant
Division 1 & Division 8	.03405	1.000	Not Significant
Division 1 & Division 9	-.50283	.153	Not Significant
Division 1 & Division 10	-.16986	.964	Not Significant
Division 1 & Division 11	-.00954	1.000	Not Significant
Division 1 & Division 12	-.68519*	.036	Significant
Division 2 & Division 3	.34242	.849	Not Significant
Division 2 & Division 4	.03818	1.000	Not Significant
Division 2 & Division 5	.62060*	.033	Significant
Division 2 & Division 6	.31344	.821	Not Significant
Division 2 & Division 7	.07273	1.000	Not Significant
Division 2 & Division 8	.49196	.207	Not Significant
Division 2 & Division 9	-.04492	1.000	Not Significant
Division 2 & Division 10	.28805	.905	Not Significant
Division 2 & Division 11	.44837	.391	Not Significant
Division 2 & Division 12	-.22727	.999	Not Significant
Division 3 & Division 4	-.30424	.927	Not Significant
Division 3 & Division 5	.27818	.422	Not Significant
Division 3 & Division 6	-.02898	1.000	Not Significant
Division 3 & Division 7	-.26970	.951	Not Significant
Division 3 & Division 8	.14953	.976	Not Significant
Division 3 & Division 9	-.38734	.481	Not Significant
Division 3 & Division 10	-.05438	1.000	Not Significant
Division 3 & Division 11	.10595	.999	Not Significant
Division 3 & Division 12	-.56970	.145	Not Significant
Division 4 & Division 5	.58242	.063	Not Significant
Division 4 & Division 6	.27526	.917	Not Significant
Division 4 & Division 7	.03455	1.000	Not Significant
Division 4 & Division 8	.45378	.322	Not Significant
Division 4 & Division 9	-.08310	1.000	Not Significant

Pair	Mean Difference	p-value	Evaluation
Division 4 & Division 10	.24987	.964	Not Significant
Division 4 Division 11	.41019	.537	Not Significant
Division 4 & Division 12	-.26545	.995	Not Significant
Division 5 & Division 6	-.30716*	.002	Significant
Division 5 & Division 7	-.54787	.056	Not Significant
Division 5 & Division 8	-.12864	.932	Significant
Division 5 & Division 9	-.66552*	.001	Significant
Division 5 & Division 10	-.33255*	.004	Significant
Division 5 & Division 11	-.17223	.818	Not Significant
Division 5 & Division 12	-.84788*	.000	Significant
Division 6 & Division 7	-.24072	.943	Significant
Division 6 & Division 8	.17851	.249	Not Significant
Division 6 & Division 9	-.35836	.330	Significant
Division 6 & Division 10	-.02540	1.000	Not Significant
Division 6 & Division 11	.13493	.885	Not Significant
Division 6 & Division 12	-.54072	.085	Not Significant
Division 7 & Division 8	.41923	.329	Not Significant
Division 7 & Division 9	-.11765	1.000	Not Significant
Division 7 & Division 10	.21532	.979	Not Significant
Division 7 & Division 11	.37565	.566	Not Significant
Division 7 & Division 12	-.30000	.980	Not Significant
Division 8 & Division 9	-.53688*	.016	Significant
Division 8 & Division 10	-.20391	.264	Not Significant
Division 8 & Division 11	-.04359	1.000	Not Significant
Division 8 & Division 12	-.71923*	.004	Significant
Division 9 & Division 10	.33297	.508	Not Significant
Division 9 & Division 11	.49329	.066	Not Significant
Division 9 & Division 12	-.18235	1.000	Not Significant
Division 10 & Division 11	.16032	.827	Not Significant
Division 10 & Division 12	-.51532	.150	Not Significant
Division 11 & Division 12	-.67565*	.015	Significant

For the attainment of objectives, the results showed significant mean differences between and among divisions. The responses from Division 5 on the status of EBEIS implementation in terms of objectives significantly differed from

those of Division 2, Division 6, Division 9 and Division 10 but not with the remaining six divisions.

The findings implied that their assessment based on the weighted means were different from each division. The EBEIS implementation as perceived by the respondents from Division 12 differed significantly from the perceptions of Division 1, Division 5, Division 8, and Division 11 but not with the other divisions. The EBEIS implementation as perceived by the respondents from Division 6 differed significantly from the perceptions of Division 7, Division 9, and Division 5. The respondents from Division 8 significantly differed from Division 9. It means that the responses of the raters from the aforementioned pairs differed from each other. Furthermore, the results implied that their assessment based on the weighted means were different from each division.

The results on the status of EBEIS implementation in terms of programs, projects, and activities is shown in Table 16. The table shows the ANOVA results.

Results showed that the computed F-value of 5.252 is very much greater than the P-value of 0.00. The p-value of 0.00 is smaller than the 0.05 level of significance, therefore, the hypotheses stating "there is no significant differences in the status of EBEIS implementation in terms of PPA by division" is rejected.

Since the computed F-value is significant, Turkey's Honestly Significant Difference Test was applied to determine which pair of divisions as assessed by the respondents had significant variations in their responses. Table 17 shows the results on the analyses of data. The EBEIS implementation as perceived by the

respondents from Division 1 differed significantly from the respondents of Division 12 and Division 9.

Table 16

Comparison Among the Status of EBEIS Implementation in DepEd Region VIII by Division Along Programs/ Projects/Activities

Descriptives			
Division	**n**	**Mean**	**SD**
Division 1	27	4.35	0.72
Division 2	11	4.65	0.41
Division 3	33	4.60	0.48
Division 4	11	4.83	0.26
Division 5	80	4.34	0.49
Division 6	223	4.60	0.58
Division 7	13	4.79	0.31
Division 8	104	4.38	0.52
Division 9	17	4.89	0.22
Division 10	109	4.64	0.41
Division 11	62	4.44	0.53
Division 12	11	4.96	0.13
Total	701	4.54	0.53

ANOVA						
Sources of Variation	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Evaluation**
Between Groups	15.238	11	1.385	5.252	.000	Significant
Within Groups	181.730	689	.264			
Total	196.967	700				

Table 17

Post Hoc Analysis in Comparing the Status of EBEIS Implementation in DepEd Region VIII by Division Along Programs/Projects/Activities

Pair	Mean Difference	p-value	Evaluation
Division 1 & Division 2	-.29919	.898	Not Significant
Division 1 & Division 3	-.24162	.811	Not Significant
Division 1 & Division 4	-.47101	.302	Not Significant
Division 1 & Division 5	.01357	1.000	Not Significant
Division 1 & Division 6	-.24430	.453	Not Significant
Division 1 & Division 7	-.43094	.351	Not Significant
Division 1 & Division 8	-.02402	1.000	Not Significant
Division 1 & Division 9	-.53320*	.040	Not Significant
Division 1 & Division 10	-.28693	.282	Not Significant
Division 1 & Division 11	-.08685	1.000	Significant
Division 1 & Division 12	-.60646*	.047	Significant
Division 2 & Division 3	.05758	1.000	Not Significant
Division 2 & Division 4	-.17182	1.000	Not Significant
Division 2 & Division 5	.31276	.763	Not Significant
Division 2 & Division 6	.05489	1.000	Not Significant
Division 2 & Division 7	-.13175	1.000	Not Significant
Division 2 & Division 8	.27517	.873	Not Significant
Division 2 & Division 9	-.23401	.991	Not Significant
Division 2 & Division 10	.01226	1.000	Not Significant
Division 2 & Division 11	.21235	.983	Not Significant
Division 2 & Division 12	-.30727	.963	Not Significant
Division 3 & Division 4	-.22939	.981	Not Significant
Division 3 & Division 5	.25519	.406	Not Significant
Division 3 & Division 6	-.00268	1.000	Not Significant
Division 3 & Division 7	-.18932	.993	Not Significant
Division 3 & Division 8	.21760	.608	Not Significant
Division 3 & Division 9	-.29159	.758	Not Significant
Division 3 & Division 10	-.04532	1.000	Significant
Division 3 & Division 11	.15477	.964	Not Significant
Division 3 & Division 12	-.36485	.665	Not Significant
Division 4 & Division 5	.48458	.131	Not Significant
Division 4 & Division 6	.22671	.958	Not Significant
Division 4 & Division 7	.04007	1.000	Not Significant

Pair	Mean Difference	p-value	Evaluation
Division 4 & Division 8	.44699	.207	Not Significant
Division 4 & Division 9	-.06219	1.000	Not Significant
Division 4 & Division 10	.18408	.993	Not Significant
Division 4 Division 11	.38416	.487	Not Significant
Division 4 & Division 12	-.13545	1.000	Not Significant
Division 5 & Division 6	-.25787*	.007	Significant
Division 5 & Division 7	-.44451	.145	Not Significant
Division 5 & Division 8	-.03759	1.000	Not Significant
Division 5 & Division 9	-.54677*	.004	Significant
Division 5 & Division 10	-.30050*	.004	Significant
Division 5 & Division 11	-.10042	.992	Not Significant
Division 5 & Division 12	-.62003*	.010	Significant
Division 6 & Division 7	-.18664	.982	Not Significant
Division 6 & Division 8	.22028*	.017	Significant
Division 6 & Division 9	-.28890	.524	Not Significant
Division 6 & Division 10	-.04263	1.000	Not Significant
Division 6 & Division 11	.15745	.597	Not Significant
Division 6 & Division 12	-.36216	.490	Not Significant
Division 7 & Division 8	.40692	.232	Not Significant
Division 7 & Division 9	-.10226	1.000	Not Significant
Division 7 & Division 10	.14401	.998	Not Significant
Division 7 & Division 11	.34409	.553	Not Significant
Division 7 & Division 12	-.17552	1.000	Not Significant
Division 8 & Division 9	-.50919*	.009	Significant
Division 8 & Division 10	-.26291*	.011	Significant
Division 8 & Division 11	-.06283	1.000	Not Significant
Division 8 & Division 12	-.58245*	.019	Significant
Division 9 & Division 10	.24627	.796	Not Significant
Division 9 & Division 11	.44636	.068	Not Significant
Division 9 & Division 12	-.07326	1.000	Not Significant
Division 10 & Division 11	.20009	.374	Not Significant
Division 10 & Division 12	-.31953	.716	Not Significant
Division 11 & Division 12	-.51962	.086	Not Significant

Similarly, the perceptions of the respondents from Division 5 differed significantly from those of Division 9, Division 12 and Division 10. Furthermore, the perceptions from Division 8 differed significantly from those of Division 9, Division 12, Division 6 and Division 10. The results concluded that the assessments of the respondents based on the weighted means were significantly different from each other.

Shown in Table 18 are the results of the comparison in the status of EBEIS implementation by division along personnel. To determine whether the differences among the 12 divisions were significant or not, one-way ANOVA was applied.

The source of variation between groups was 5.524 and within groups was 193.190. Results showed that the computed F-value of 1.791 was greater than the P-value of 0.00. Therefore, the hypothesis "there are no significant differences on the status of EBEIS implementation by division along personnel" is accepted. It revealed that the perceptions of the respondents from the different divisions in terms of personnel were basically similar. Hence, no significant differences were found among the respondents from the 12 divisions.

Table 19 also shows the means, standard deviations and ANOVA results on the status of EBEIS implementation in terms of budget. Results show that the completed F value of 2.959 was greater than the P-value of 0.00 in as much as the p-value of 0.00 was smaller than the 0.05 level of significance. Therefore, the

hypothesis that stated there were no significant differences in the status of EBEIS implementation in terms of budget by division is rejected.

Table 18

Comparison Among the Status of EBEIS Implementation in DepEd Region VIII by Division Along Personnel

Descriptive			
Division	**n**	**Mean**	**SD**
Division 1	27	4.5626	.50439
Division 2	11	4.6718	.41866
Division 3	33	4.6467	.44115
Division 4	11	4.8609	.17947
Division 5	80	4.5244	.46763
Division 6	223	4.5914	.59509
Division 7	13	4.8400	.31273
Division 8	104	4.5132	.58705
Division 9	17	4.7353	.39202
Division 10	109	4.6624	.42074
Division 11	62	4.4739	.61107
Division 12	11	4.8891	.36784
Total	701	4.5925	.53280

ANOVA						
Sources of Variation	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Significant**	**Evaluation**
Between Groups	5.524	11	.502	1.791	.056	Not Significant
Within Groups	193.190	689	.280			
Total	198.714	700				

Since the completed F-value is significant, Tukey's Honestly Significance Difference Test was applied to determine which pair of divisions as assessed by the respondents had significant deviation in their responses.

Table 19

Comparison Among the Status of EBEIS Implementation in DepEd Region VIII by Division Along Budget

Descriptive			
Division	**n**	**Mean**	**SD**
Division 1	27	3.88	1.03
Division 2	11	3.94	0.67
Division 3	33	3.92	0.80
Division 4	11	4.16	0.75
Division 5	80	3.71	0.74
Division 6	223	4.10	0.95
Division 7	13	4.23	0.70
Division 8	104	3.91	0.73
Division 9	17	4.41	0.83
Division 10	109	4.02	0.98
Division 11	62	3.84	0.84
Division 12	11	4.89	0.38
Total	701	3.99	0.88

ANOVA						
Sources of Variation	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Evaluation**
Between Groups	24.611	11	2.237	2.959	.000	Significant
Within Groups	521.025	689	.756			
Total	545.636	700				

Table 20 shows that the EBEIS implementation along budget as perceived by the respondents from Division 12 was significantly different as perceived from Division 5, Division 8 and Division 11 divisions. Moreover, Division 5 differed significantly from Division 6. The findings concluded that the assessments of the respondents on the weighted means of the aforementioned were significantly different from each other.

Table 20

Post Hoc Analysis in Comparing the Status of EBEIS Implementation in DepEd Region VIII by Division Along Budget

Pair	Mean Difference	p-value	Evaluation
Division 1 & Division 2	-.05737	1.000	Not Significant
Division 1 & Division 3	-.03434	1.000	Not Significant
Division 1 & Division 4	-.27646	.999	Not Significant
Division 1 & Division 5	.17432	.999	Not Significant
Division 1 & Division 6	-.21421	.988	Not Significant
Division 1 & Division 7	-.34863	.990	Not Significant
Division 1 & Division 8	-.02161	1.000	Not Significant
Division 1 & Division 9	-.52850	.718	Not Significant
Division 1 & Division 10	-.13060	1.000	Not Significant
Division 1 & Division 11	.04783	1.000	Not Significant
Division 1 & Division 12	-1.00192	.060	Not Significant
Division 2 & Division 3	.02303	1.000	Not Significant
Division 2 & Division 4	-.21909	1.000	Not Significant
Division 2 & Division 5	.23169	1.000	Not Significant
Division 2 & Division 6	-.15684	1.000	Not Significant
Division 2 & Division 7	-.29126	1.000	Not Significant
Division 2 & Division 8	.03576	1.000	Not Significant
Division 2 & Division 9	-.47112	.963	Not Significant
Division 2 & Division 10	-.07323	1.000	Not Significant
Division 2 & Division 11	.10521	1.000	Not Significant
Division 2 & Division 12	-.94455	.312	Not Significant
Division 3 & Division 4	-.24212	1.000	Not Significant
Division 3 & Division 5	.20866	.992	Not Significant
Division 3 & Division 6	-.17987	.994	Not Significant
Division 3 & Division 7	-.31429	.994	Not Significant
Division 3 & Division 8	.01273	1.000	Not Significant
Division 3 & Division 9	-.49415	.757	Not Significant
Division 3 & Division 10	-.09626	1.000	Not Significant
Division 3 & Division 11	.08217	1.000	Not Significant
Division 3 & Division 12	-.96758	.064	Not Significant
Division 4 & Division 5	.45078	.904	Not Significant
Division 4 & Division 6	.06225	1.000	Not Significant

Pair	Mean Difference	p-value	Evaluation
Division 4 & Division 7	-.07217	1.000	Not Significant
Division 4 & Division 8	.25485	.999	Not Significant
Division 4 & Division 9	-.25203	1.000	Not Significant
Division 4 & Division 10	.14586	1.000	Not Significant
Division 4 Division 11	.32430	.993	Not Significant
Division 4 & Division 12	-.72545	.723	Not Significant
Division 5 & Division 6	-.38853*	.031	Significant
Division 5 & Division 7	-.52295	.686	Not Significant
Division 5 & Division 8	-.19593	.936	Not Significant
Division 5 & Division 9	-.70282	.103	Not Significant
Division 5 & Division 10	-.30492	.420	Not Significant
Division 5 & Division 11	-.12649	.999	Not Significant
Division 5 & Division 12	-1.17624*	.002	Significant
Division 6 & Division 7	-.13442	1.000	Not Significant
Division 6 & Division 8	.19260	.780	Not Significant
Division 6 & Division 9	-.31429	.956	Not Significant
Division 6 & Division 10	.08361	1.000	Not Significant
Division 6 & Division 11	.26204	.624	Not Significant
Division 6 & Division 12	-.78771	.132	Not Significant
Division 7 & Division 8	.32702	.982	Not Significant
Division 7 & Division 9	-.17986	1.000	Not Significant
Division 7 & Division 10	.21803	.999	Not Significant
Division 7 & Division 11	.39646	.942	Not Significant
Division 7 & Division 12	-.65329	.799	Not Significant
Division 8 & Division 9	-.50688	.530	Not Significant
Division 8 & Division 10	-.10899	.999	Not Significant
Division 8 & Division 11	.06944	1.000	Not Significant
Division 8 & Division 12	-.98031*	.021	Significant
Division 9 & Division 10	.39790	.842	Not Significant
Division 9 & Division 11	.57633	.393	Not Significant
Division 9 & Division 12	-.47342	.962	Not Significant
Division 10 & Division 11	.17843	.980	Not Significant
Division 10 & Division 12	-.87132	.070	Not Significant
Division 11 & Division 12	-1.04975*	.013	Significant

Table 21 presents the comparison results on the EBEIS implementation status by division in terms of equipment and facilities. To determine whether the differences among the twelve divisions were significant or not, one-way ANOVA was employed. Results showed that the completed F-value of 7.476 was very much greater than the P-value of 0.00. The P-value of 0.00 was lower than the 0.05 level of significance.

Table 21

Comparison Among the Status of EBEIS Implementation in DepEd Region VIII by Division Along Equipment and Facilities

Descriptive						
Division				**n**	**Mean**	**SD**
Division 1				27	3.57	0.64
Division 2				11	3.08	0.73
Division 3				33	3.38	0.65
Division 4				11	3.55	0.95
Division 5				80	3.34	0.71
Division 6				223	3.73	0.71
Division 7				13	3.25	0.85
Division 8				104	3.51	0.66
Division 9				17	4.14	0.49
Division 10				109	3.69	0.67
Division 11				62	3.61	0.59
Division 12				11	4.82	0.60
Total				701	3.62	0.71
ANOVA						
Sources of Variation	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Evaluation**
Between Groups	38.015	11	3.456	7.476	.000	Significant
Within Groups	318.500	689	.462			
Total	356.514	700				

Therefore, the hypothesis which stated that "there are no significant differences in the status of EBEIS implementation in terms of equipment and facilities by division" is rejected.

Since the completed F-value was significant, Tukey's Honestly Significant Difference Test was applied. The results in Table 22 showed significant means differences between and among divisions. The EBEIS implementation along equipment and facilities as perceived by the respondents from Division 12 differed significantly from the perceptions of Division 1, Division 2, Division 3, Division 4, Division 5, Division 7, Division 9, Division 10 and Division 11 except Division 8 and Division 6.

The responses from Division 9 significantly differed from those of Division 2, Division 3, Division 5 and Division 7. The responses from Division 11 differed significantly from those of Division 10 and Division 8, and the responses from Division 5 differed significantly from those of Division 6. It meant that the responses of the respondents from the aforementioned pair divisions differed from each other.

The results on the status of EBEIS implementation along ICT infrastructure and support is reflected in Table 23. Results show that the completed F-value of 12.389 was very much greater than the 0.05 level of significance, hence, the hypothesis "there are no significant differences in the states of EBEIS implementation along ICT infrastructure and support by the division" is rejected.

Table 22

Post Hoc Analysis in Comparing the Status of EBEIS Implementation in DepEd Region VIII by Division Along Equipment and Facilities

Pair	Mean Difference	p-value	Evaluation
Division 1 & Division 2	.49269	.676	Not Significant
Division 1 & Division 3	.18421	.997	Not Significant
Division 1 & Division 4	.01360	1.000	Not Significant
Division 1 & Division 5	.22665	.941	Not Significant
Division 1 & Division 6	-.16194	.991	Not Significant
Division 1 & Division 7	.31353	.969	Not Significant
Division 1 & Division 8	.05440	1.000	Not Significant
Division 1 & Division 9	-.57068	.223	Not Significant
Division 1 & Division 10	-.12626	.999	Not Significant
Division 1 & Division 11	-.04250	1.000	Not Significant
Division 1 & Division 12	-1.25003*	.000	Significant
Division 2 & Division 3	-.30848	.979	Not Significant
Division 2 & Division 4	-.47909	.889	Not Significant
Division 2 & Division 5	-.26605	.988	Not Significant
Division 2 & Division 6	-.65464	.080	Not Significant
Division 2 & Division 7	-.17916	1.000	Not Significant
Division 2 & Division 8	-.43830	.670	Not Significant
Division 2 & Division 9	-1.06337*	.003	Significant
Division 2 & Division 10	-.61895	.151	Not Significant
Division 2 & Division 11	-.53519	.403	Not Significant
Division 2 & Division 12	-1.74273*	.000	Significant
Division 3 & Division 4	-.17061	1.000	Not Significant
Division 3 & Division 5	.04244	1.000	Not Significant
Division 3 & Division 6	-.34615	.214	Not Significant
Division 3 & Division 7	.12932	1.000	Not Significant
Division 3 & Division 8	-.12981	.998	Not Significant
Division 3 & Division 9	-.75488*	.012	Significant
Division 3 & Division 10	-.31046	.479	Not Significant
Division 3 & Division 11	-.22671	.927	Not Significant
Division 3 & Division 12	-1.43424*	.000	Significant
Division 4 & Division 5	.21305	.998	Not Significant

Pair	Mean Difference	p-value	Evaluation
Division 4 & Division 6	-.17554	1.000	Not Significant
Division 4 & Division 7	.29993	.996	Not Significant
Division 4 & Division 8	.04080	1.000	Not Significant
Division 4 & Division 9	-.58428	.535	Not Significant
Division 4 & Division 10	-.13986	1.000	Not Significant
Division 4 Division 11	-.05610	1.000	Not Significant
Division 4 & Division 12	-1.26364*	.001	Significant
Division 5 & Division 6	-.38859*	.001	Significant
Division 5 & Division 7	.08688	1.000	Not Significant
Division 5 & Division 8	-.17225	.866	Not Significant
Division 5 & Division 9	-.79732*	.001	Significant
Division 5 & Division 10	-.35290*	.023	Not Significant
Division 5 & Division 11	-.26915	.449	Not Significant
Division 5 & Division 12	-1.47668*	.000	Significant
Division 6 & Division 7	.47547	.373	Not Significant
Division 6 & Division 8	.21634	.239	Not Significant
Division 6 & Division 9	-.40873	.415	Not Significant
Division 6 & Division 10	.03569	1.000	Not Significant
Division 6 & Division 11	.11944	.987	Not Significant
Division 6 & Division 12	-1.08809*	.000	Not Significant
Division 7 & Division 8	-.25913	.980	Not Significant
Division 7 & Division 9	-.88421*	.022	Significant
Division 7 & Division 10	-.43979	.547	Not Significant
Division 7 & Division 11	-.35603	.860	Not Significant
Division 7 & Division 12	-1.56357*	.000	Significant
Division 8 & Division 9	-.18065	.735	Not Significant
Division 8 & Division 10	-.09690	.999	Not Significant
Division 8 & Division 11	-1.30443*	.000	Significant
Division 8 & Division 12	.52818	.167	Not Significant
Division 9 & Division 10	-.67936	.292	Not Significant
Division 9 & Division 11	.08376	1.000	Not Significant
Division 9 & Division 12	-1.12378*	.000	Significant
Division 10 & Division 11	-1.20754*	.000	Significant
Division 10 & Division 12	-1.12378*		
Division 11 & Division 12	-1.20754*		

Table 23

Comparison Among the Status of EBEIS Implementation in DepEd Region VIII by Division Along ICT Infrastructure Support

Descriptive			
Division	**n**	**Mean**	**SD**
Division 1	27	2.85	0.72
Division 2	11	2.45	0.51
Division 3	33	2.68	0.66
Division 4	11	3.01	0.81
Division 5	80	2.57	0.59
Division 6	223	3.06	0.63
Division 7	13	2.54	0.82
Division 8	104	2.79	0.63
Division 9	17	3.20	0.62
Division 10	109	2.69	0.62
Division 11	62	2.88	0.64
Division 12	11	4.50	0.77
Total	701	2.87	0.69

ANOVA						
Sources of Variation	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Evaluation**
Between Groups	55.068	11	5.006	12.389	.000	Significant
Within Groups	278.420	689	.404			
Total	333.488	700				

To determine the pair of divisions having significant variations in their responses, the Tukey's Honestly Significant Difference Test was applied. Table 24 shows the results on the data analysis. The EBEIS implementation along ICT infrastructure and support as perceived by the respondents from Division 12

Table 24

Post Hoc Analysis in Comparing the Status of EBEIS Implementation in DepEd Region VIII by Division Along ICT Infrastructure Support

Pair	Mean Difference	p-value	Evaluation
Division 1 & Division 2	.39721	.846	Not Significant
Division 1 & Division 3	.17114	.997	Not Significant
Division 1 & Division 4	-.16007	1.000	Not Significant
Division 1 & Division 5	.28117	.702	Not Significant
Division 1 & Division 6	-.20900	.904	Not Significant
Division 1 & Division 7	.30399	.960	Not Significant
Division 1 & Division 8	.05774	1.000	Not Significant
Division 1 & Division 9	-.35017	.829	Not Significant
Division 1 & Division 10	.15198	.994	Not Significant
Division 1 & Division 11	-.03128	1.000	Not Significant
Division 1 & Division 12	-1.65552*	.000	Significant
Division 2 & Division 3	-.22606	.997	Not Significant
Division 2 & Division 4	-.55727	.654	Not Significant
Division 2 & Division 5	-.11603	1.000	Not Significant
Division 2 & Division 6	-.60620	.087	Not Significant
Division 2 & Division 7	-.09322	1.000	Not Significant
Division 2 & Division 8	-.33947	.875	Not Significant
Division 2 & Division 9	-.74738	.100	Significant
Division 2 & Division 10	-.24522	.987	Not Significant
Division 2 & Division 11	-.42849	.651	Not Significant
Division 2 & Division 12	-2.05273*	.000	Significant
Division 3 & Division 4	-.33121	.941	Not Significant
Division 3 & Division 5	.11003	1.000	Not Significant
Division 3 & Division 6	-.38014	.062	Not Significant
Division 3 & Division 7	.13284	1.000	Not Significant
Division 3 & Division 8	-.11341	.999	Not Significant
Division 3 & Division 9	-.52132	.206	Significant
Division 3 & Division 10	-.01916	1.000	Not Significant
Division 3 & Division 11	-.20243	.946	Not Significant
Division 3 & Division 12	-1.82667*	.000	Significant
Division 4 & Division 5	.44124	.581	Not Significant
Division 4 & Division 6	-.04893	1.000	Not Significant
Division 4 & Division 7	.46406	.828	Not Significant
Division 4 & Division 8	.21781	.995	Not Significant
Division 4 & Division 9	-.19011	1.000	Not Significant

Pair	Mean Difference	p-value	Evaluation
Division 4 & Division 10	.31205	.925	Not Significant
Division 4 & Division 11	.12878	1.000	Not Significant
Division 4 & Division 12	-1.49545*	.000	Significant
Division 5 & Division 6	-.49017*	.000	Significant
Division 5 & Division 7	.02282	1.000	Not Significant
Division 5 & Division 8	-.22343	.433	Not Significant
Division 5 & Division 9	-.63135*	.012	Significant
Division 5 & Division 10	-.12919	.967	Not Significant
Division 5 & Division 11	-.31246	.141	Not Significant
Division 5 & Division 12	-1.93669*	.000	Significant
Division 6 & Division 7	.51298	.170	Not Significant
Division 6 & Division 8	.26673*	.022	Significant
Division 6 & Division 9	-.14118	.999	Not Significant
Division 6 & Division 10	.36098*	.000	Significant
Division 6 & Division 11	.17771	.729	Not Significant
Division 6 & Division 12	-1.44653*	.000	Significant
Division 7 & Division 8	-.24625	.977	Not Significant
Division 7 & Division 9	-.65416	.185	Not Significant
Division 7 & Division 10	-.15200	1.000	Not Significant
Division 7 & Division 11	-.33527	.854	Not Significant
Division 7 & Division 12	-1.95951*	.000	Significant
Division 8 & Division 9	-.40791	.372	Not Significant
Division 8 & Division 10	.09425	.995	Not Significant
Division 8 & Division 11	-.08902	.999	Not Significant
Division 8 & Division 12	-1.71326*	.000	Significant
Division 9 & Division 10	.50216	.102	Not Significant
Division 9 & Division 11	.31889	.800	Not Significant
Division 9 & Division 12	-1.30535*	.000	Significant
Division 10 & Division 11	-.18327	.811	Not Significant
Division 10 & Division 12	-1.80751*	.000	Significant
Division 11 & Division 12	-1.62424*	.000	Significant

differed significantly from the perceptions of Division 1, Division 3, Division 4, Division 7, Division 6, Division 8, Division 10, Division 9, Division 11. Moreover, responses from Division 5 differed significantly from those of Division 6 and Division 9, and responses from Division 6 differed significantly from those of

Division 8 and Division 10. The findings implied that the weighted means were significantly different.

Table 25 shows the results of the analysis of variance on the status of EBEIS implementation by division along monitoring and evaluation. The table revealed

Table 25

Comparison Among the Status of EBEIS Implementation in DepEd Region VIII by Division Along Monitoring and Evaluation

Descriptive						
Division				**N**	**Mean**	**SD**
Division 1				27	4.40	0.63
Division 2				11	4.34	0.79
Division 3				33	4.45	0.64
Division 4				11	4.80	0.44
Division 5				80	4.25	0.55
Division 6				223	4.51	0.72
Division 7				13	4.49	0.38
Division 8				104	4.21	0.65
Division 9				17	4.69	0.49
Division 10				109	4.50	0.62
Division 11				62	4.35	0.59
Division 12				11	5.00	0.00
Total				701	4.43	0.65
ANOVA						
Sources of Variation	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Evaluation**
Between Groups	16.856	11	1.532	3.752	.000	Significant
Within Groups	281.418	689	.408			
Total	298.274	700				

that some p-values were lower than the 0.05 level of significance. These denoted that the respondents with different divisions significantly differ in their perceptions along monitoring and evaluation. These findings led to a decision to reject to null hypothesis "there are no significant differences in the status of EBEIS implementation in terms of monitoring and evaluation by division."

Table 26 shows the results of data analysis using the Turkey's Honestly Significance Difference Test. The EBEIS monitoring and evaluation as perceived by the respondents from Division 8 differed significantly from the perceptions of Division 12 and of Division 5. The findings implied that the assessments of the respondents on the aforementioned divisions based on the weighted means were significantly different from each other.

Problems Encountered by Implementers in EBEIS

This study also surveyed the problems that implementers encountered in EBEIS. The summarized results is found in Table 27.

The assessment of the implementer-respondents revealed that there were "more serious problem," obtaining weighted means ranging from 3.59 to 4.03. The top four problems were "poor or weak internet access," "no internet connection," "presence of system problems during on-line encoding," and "internet traffic during simultaneous encoding in the EBEIS."

Table 26

Post Hoc Analysis in Comparing the Status of EBEIS Implementation in DepEd Region VIII by Division Along Monitoring and Evaluation

Pair	Mean Difference	p-value	Evaluation
Division 1 & Division 2	.05727	1.000	Not Significant
Division 1 & Division 3	-.04848	1.000	Not Significant
Division 1 & Division 4	-.40000	.844	Not Significant
Division 1 & Division 5	.15500	.995	Not Significant
Division 1 & Division 6	-.11399	.999	Not Significant
Division 1 & Division 7	-.09231	1.000	Not Significant
Division 1 & Division 8	.19279	.964	Not Significant
Division 1 & Division 9	-.29412	.944	Not Significant
Division 1 & Division 10	-.09844	1.000	Not Significant
Division 1 & Division 11	.05484	1.000	Not Significant
Division 1 & Division 12	-.60000	.268	Not Significant
Division 2 & Division 3	-.10576	1.000	Not Significant
Division 2 & Division 4	-.45727	.878	Not Significant
Division 2 & Division 5	.09773	1.000	Not Significant
Division 2 & Division 6	-.17126	.999	Not Significant
Division 2 & Division 7	-.14958	1.000	Not Significant
Division 2 & Division 8	.13552	1.000	Not Significant
Division 2 & Division 9	-.35139	.959	Not Significant
Division 2 & Division 10	-.15571	1.000	Not Significant
Division 2 & Division 11	-.00243	1.000	Not Significant
Division 2 & Division 12	-.65727	.399	Not Significant
Division 3 & Division 4	-.35152	.916	Not Significant
Division 3 & Division 5	.20348	.929	Not Significant
Division 3 & Division 6	-.06551	1.000	Not Significant
Division 3 & Division 7	-.04382	1.000	Not Significant
Division 3 & Division 8	.24127	.766	Not Significant
Division 3 & Division 9	-.24563	.981	Not Significant
Division 3 & Division 10	-.04996	1.000	Not Significant
Division 3 & Division 11	.10332	1.000	Not Significant
Division 3 & Division 12	-.55152	.355	Not Significant
Division 4 & Division 5	.55500	.228	Not Significant
Division 4 & Division 6	.28601	.953	Not Significant

Pair	Mean Difference	p-value	Evaluation
Division 4 & Division 7	.30769	.991	Not Significant
Division 4 & Division 8	.59279	.134	Not Significant
Division 4 & Division 9	.10588	1.000	Not Significant
Division 4 & Division 10	.30156	.943	Not Significant
Division 4 & Division 11	.45484	.568	Not Significant
Division 4 & Division 12	-.20000	1.000	Not Significant
Division 5 & Division 6	-.26899	.058	Not Significant
Division 5 & Division 7	-.24731	.980	Not Significant
Division 5 & Division 8	.03779	1.000	Not Significant
Division 5 & Division 9	-.44912	.264	Not Significant
Division 5 & Division 10	-.25344	.232	Not Significant
Division 5 & Division 11	-.10016	.999	Not Significant
Division 5 & Division 12	-.75500*	.014	Significant
Division 6 & Division 7	.02168	1.000	Not Significant
Division 6 & Division 8	.30678*	.003	Significant
Division 6 & Division 9	-.18013	.994	Not Significant
Division 6 & Division 10	.01555	1.000	Not Significant
Division 6 & Division 11	.16883	.795	Not Significant
Division 6 & Division 12	-.48601	.366	Not Significant
Division 7 & Division 8	.28510	.936	Not Significant
Division 7 & Division 9	-.20181	.999	Not Significant
Division 7 & Division 10	-.00613	1.000	Not Significant
Division 7 & Division 11	.14715	1.000	Not Significant
Division 7 & Division 12	-.50769	.734	Not Significant
Division 8 & Division 9	-.48691	.139	Not Significant
Division 8 & Division 10	-.29123*	.044	Significant
Division 8 & Division 11	-.13795	.973	Not Significant
Division 8 & Division 12	-.79279*	.006	Significant
Division 9 & Division 10	.19568	.991	Not Significant
Division 9 & Division 11	.34896	.697	Not Significant
Division 9 & Division 12	-.30588	.986	Not Significant
Division 10 & Division 11	.15328	.938	Not Significant
Division 10 & Division 12	-.50156	.354	Not Significant
Division 11 & Division 12	-.65484	.077	Not Significant

Table 27

Problems Encountered by the Implementers of EBEIS

	Indicators	Weighted Mean	Interpret-ation
1.	Poor or weak internet access.	4.03	MSP
2.	No internet connection.	3.85	MSP
3.	Presence of system problems during on-line encoding.	3.85	MSP
4.	Over-loaded school ICT/EBEIS coordinator of additional assignments/loads	3.44	SP
5.	Lack of time of the school ICT/EBEIS coordinator in encoding and submission of reports.	3.16	SP
6.	Data from the EBEIS like School Report Card cannot be downloaded immediately or not available.	3.05	SP
7.	Insufficient funds for internet expenses.	2.96	SP
8.	Lack if not absence of IT technical know-how of school head.	2.87	SP
9.	Indifference of some School Heads to the EBEIS Program.	2.52	SP
10.	Manipulation of EBEIS school data.	2.4	FSP
	School Level		
11.	Low internet access hinders on-line validation at the division level.	3.34	SP
12.	Presence of system problem.	3.34	SP
13.	Delayed submission of reports in hard copies and on-line by the school.	2.88	SP
14.	Erroneous or incomplete data submitted by some of the schools or school heads.	2.83	SP
15.	Lack of time of the Planning Officer to analyze data due to other tasks assigned or overlapping work.	2.6	SP
16.	Lack of manpower of the Planning and Research Unit to validate the data submitted by the school.	2.53	SP
17.	Inadequate knowledge and skill of the Planning Officer to manipulate the EBEIS.	2.01	FSP
	Division Level		
18.	Internet traffic during simultaneous encoding in the EBEIS.	3.59	MSP
19.	Late downloading of funds from the central office intended for EBEIS regional activities.	2.64	SP
20.	Lack of time in the provision of technical assistance to the Schools Divisions.	2.52	SP
21.	Passive attitude of some division planning officer to monitor and follow-up the EBEIS status of schools submission.	2.27	FSP
	Grand Total	**62.68**	**-**
	Grand Mean	**2.98**	**SP**

Legend:

4.51-5.00 Most Serious Problem (MoSP)
3.51-4.50 More Serious Problem (MSP)
2.51-3.50 Serious Problem (SP)
1.51-2.50 Fairly Serious Problem (FSP)
1.00-1.50 Not Serious Problem at All (NSP)

Fourteen problems were considered by the respondents as "serious problem" ranging from 2.53 to 3.44. These were "overloaded school ICT/EBEIS coordinators of additional assignments," "low internet access hinders online validation at the division level," "presence of system problem," "lack of time of the school ICT/EBEIS coordinator in encoding and submission of reports," and "data from the EBEIS like School Report Card cannot be downloaded or not available."

Taken as whole, the implementers assessed the given problems as "serious problem" as evidenced by a grand mean of 2.98.

Respondents' Assessment of the EBEIS

The study surveyed the EBEIS assessment as perceived by respondents. The assessments were categorized to user-friendliness, accessibility and report accuracy. Tables 28 to 30 summarize the data.

User-friendliness. Table 28 presents the weighted mean and verbal interpretation on the respondents' EBEIS assessment on user-friendliness. All indicators were assessed by the respondents as "agree." Their weighted means ranged from 4.09 to 4.4 with a 4.30 grand mean, having a description of "agree."

The EBEIS assessment as user-friendliness indicated that the messages and instinctive were easy to understand and learn. The instructions and steps could be easily remembered and followed, and the system provided the precise information needed.

Table 28

Respondents' Assessment of the EBEIS in terms of User Friendliness

	Indicators	Weighted Mean	Interpretation
1.	The messages and instructions are easy to understand and learn.	4.4	A
2.	The instructions and steps can be easily remembered and followed.	4.36	A
3.	The system provides the precise information needed.	4.33	A
4.	The response time is acceptable as long as internet connection and device are of standard quality.	4.32	A
5.	The EBEIS is user-friendly/easy to use.	4.31	A
6.	The EBEIS software is easy to learn and flexible/adjustable.	4.26	A
7.	The user interface is intuitive.	4.09	A
	Grand Total	**30.07**	-
	Grand Mean	**4.30**	**A**

Legend:

4.51-5.00 Strongly Agree (SA)
3.51-4.50 Agree (A)
2.51-3.50 Neutral (N)
1.51-2.50 Disagree (D)
1.00-1.50 Strongly Disagree (SD)

Accessibility. Table 29 presents the EBEIS assessment on accessibility. Seven indicators were assessed as "strongly agree." Their weighted means ranged from 4.55 to 4.63. The assessment was indicative that: 1) The ICT/EBEIS coordinator has the access to open the account of the school; 2) The school head has the access in the school level data and information in the EBEIS; and 3) There is a restriction in the accessibility of the EBEIS.

In summary, the responses of the implementers clustered around the range "agree" with a grand mean of 4.41.

Table 29

Respondents' Assessment of the EBEIS in terms of Accessibility

	Indicators	Weighted Mean	Interpretation
1.	The ICT/EBEIS Coordinator has the access to open the account of the school.	4.63	SA
2.	The username and password are required by the accountable person in accessing data and information from the EBEIS.	4.6	SA
3.	The school head has the access in the school level data and information in the EBEIS.	4.6	SA
4.	The Division Planning Officer has the access to open the account of the division and the school in the EBEIS.	4.56	SA
5.	The school head is required to use his/her username and password in order to access the EBEIS.	4.55	SA
6.	The school head is accountable person to open and encode the data and information in the EBEIS.	4.37	A
7.	There is a restriction in the accessibility of the EBEIS.	4.05	A
8.	The internal and external stakeholders can only view the data and information in the EBEIS.	3.88	A
	Grand Total	**35.24**	**-**
	Grand Mean	**4.41**	**A**

Legend:

4.51-5.00 Strongly Agree (SA)

3.51-4.50 Agree (A)

2.51-3.50 Neutral (N)

1.51-2.50 Disagree (D)

1.00-1.50 Strongly Disagree (SD)

Report accuracy. Table 30 presents the assessment of the EBEIS in terms of report accuracy. Five indicators of the EBEIS were assessed by the respondents as "agree." Their weighted means ranged from 4.38 to 4.49 with a grand mean of 4.44, receiving the interpretation "agree."

This indicates that the data and information generated through EBEIS was reliable; the system generated verifiable reports; the output generated often satisfied the EBEIS user; and the generated data through the EBEIS was consistent with the actual data.

Table 30

Respondents' Assessment of the EBEIS in terms of Report Accuracy

	Indicators	Weighted Mean	Interpretation
1.	Data and information generated through the EBEIS is reliable.	4.49	A
2.	The system generates verifiable reports.	4.46	A
3.	The output generated often satisfies the EBEIS user.	4.44	A
4.	The generated data through the EBEIS is consistent with the actual data.	4.41	A
5.	The EBEIS provides reports that seem to be just about exactly what is needed.	4.38	A
	Grand Total	**22.18**	**-**
	Grand Mean	**4.44**	**A**

Legend:

4.51-5.00 Strongly Agree (SA)
3.51-4.50 Agree (A)
2.51-3.50 Neutral (N)
1.51-2.50 Disagree (D)
1.00-1.50 Strongly Disagree (SD)

Impact of the EBEIS in DepEd Region VIII

This study assessed the impact of the EBEIS in terms of efficiency, effectiveness, and timeliness as perceived by the respondents.

Efficiency. Table 31 presents the impact of the EBEIS in terms of efficiency. Based on the table, the seven indicators were rated as "agree" which weighted

Table 31

Impact of the EBEIS in DepEd Region VIII in terms of Efficiency

	Indicators	Weighted Mean	Interpretation
1.	EBEIS data and information are the basis for fast decision-making of the managers.	4.45	A
2.	EBEIS data generate accurate reports	4.41	A
3.	EBEIS data and information are readily available.	4.37	A
4.	Data being collected are always attuned to present needs.	4.36	A
5.	EBEIS data and information are regularly updated.	4.35	A
6.	Historical data are always available.	4.27	A
7.	EBEIS data are accessible when needed.	4.29	A
	Grand Total	**30.50**	**-**
	Grand Mean	**4.36**	**A**

Legend:

4.51-5.00 Strongly Agree (SA)
3.51-4.50 Agree (A)
2.51-3.50 Neutral (N)
1.51-2.50 Disagree (D)
1.00-1.50 Strongly Disagree (SD)

means ranged from 4.27 to 4.45. The three uppermost mean ratings were "EBEIS data and information are the basis for fast decision-making of the managers," "EBEIS data generate accurate reports," and "EBEIS data and information are readily available." The respondents concluded that the EBEIS impact in terms of efficiency was pegged at 4.36 with a descriptive rating of "agree."

Effectiveness. It can be gleaned in Table 32 that one indicator was rated by the respondents "strongly agree" with a weighted mean of 4.52. This indicated

Table 32

Impact of the EBEIS in DepEd Region VIII in terms of Effectiveness

	Indicators	Weighted Mean	Interpretation
1.	Information from the EBEIS meets user's needs.	4.43	A
2.	EBEIS provides relevant and necessary information.	4.52	SA
3.	EBEIS data ensure prompt, complete and accurate information needed.	4.43	A
4.	Data and information generated through EBEIS are the bases for the following:		
	4.1 Data and information generated through the EBEIS are bases for relevant decision-making of the managers.	4.50	A
	4.2 Data and information generated through the EBEIS are bases for reliable decision-making of the managers.	4.48	A
5.	EBEIS conforms the user's feedback and requirement.	4.39	A
6.	EBEIS eliminates manual consolidation of data.	4.37	A
	Grand Total	**31.12**	**-**
	Grand Mean	**4.45**	**A**

Legend:

4.51-5.00 Strongly Agree (SA)
3.51-4.50 Agree (A)
2.51-3.50 Neutral (N)
1.51-2.50 Disagree (D)
1.00-1.50 Strongly Disagree (SD)

that the "EBEIS provides relevant and necessary data." The remaining six indicators were rated "agree" with a weighted mean from 4.37 to 4.50. The results implied that "data and information generated through the EBEIS are bases for relevant/reliable decision-making of the managers." As a whole, the respondents rated this area "agree" on the effectiveness of the implementation of the EBEIS.

Relevance. Based on the data presented in Table 33, the respondents assessed the six indicators as "strongly agree," gaining a weighted mean of 4.53 to 4.58 and a grand mean of 4.54, bearing a descriptive rating of "strongly agree." The results indicated that reports generated through the EBEIS were very relevant and could be the bases for planning, budgeting resource allocation, policy recommendation, decision-making, and technical assistance.

Timeliness. Table 34 presents the impact of the EBEIS in terms of timeliness. Based on the table, the five indicators were rated by the respondents as "agree" which weighted mean ranged from 4.32 to 4.43. The three uppermost mean ratings were "EBEIS data is submitted and validated within the scheduled time fame," "EBEIS data are made available and verifiable when needed," "data and information in the EBEIS are up-to-date," and "EBEIS facilitates promptness for data generation." The respondents "agreed" on the timeliness of the EBEIS implementation of DepEd.

Table 33

Impact of the EBEIS in DepEd Region VIII in terms of Relevance

Indicators		Weighted Mean	Interpretation
1.	Report generated through the EBEIS are bases for the following:		
1.1	Reports generated through the EBEIS are bases for PLANNING.	4.58	SA
1.2	Reports generated through the EBEIS are bases for BUDGETING.	4.55	SA
1.3	Reports generated through the EBEIS are bases for RESOURCES ALLOCATION.	4.56	SA
1.4	Reports generated through the EBEIS are bases for POLICY RECOMMENDATION.	4.55	SA
1.5	Reports generated through the EBEIS are bases for RELIABLE AND APPROPRIATE DATA-DRIVEN DECISION MAKING.	4.54	SA
1.6	Reports generated through the EBEIS are bases for PROVISION OF TECHNICAL ASSISTANCE.	4.53	SA
1.7	Reports generated through the EBEIS are bases for STAKEHOLDER'S REFERENCE.	4.44	A
Grand Total		**31.75**	**-**
Grand Mean		**4.54**	**SA**

Legend:

4.51-5.00 Strongly Agree (SA)
3.51-4.50 Agree (A)
2.51-3.50 Neutral (N)
1.51-2.50 Disagree (D)
1.00-1.50 Strongly Disagree (SD)

Table 34

Impact of the EBEIS in DepEd Region VIII in terms of Timeliness

	Indicators	Weighted Mean	Interpretation
1.	Data and information in the EBEIS are up-to-date.	4.36	A
2.	EBEIS facilitates promptness for data generation.	4.36	A
3.	EBEIS data like performance indicators and education statistics are timely generated.	4.32	A
4.	EBEIS data is submitted and validated within the scheduled time-frame	4.43	A
5.	EBEIS data are made available and verifiable when needed/opportune time.	4.43	A
	Grand Total	**21.90**	**-**
	Grand Mean	**4.38**	**A**

Legend:

4.51-5.00 Strongly Agree (SA)
3.51-4.50 Agree (A)
2.51-3.50 Neutral (N)
1.51-2.50 Disagree (D)
1.00-1.50 Strongly Disagree (SD)

Correlation Between the Impact of the EBEIS and the Implementers' Profile

Table 35 presents the correlations between the perceived impact of the EBEIS and the profile of the respondents. To establish correlations between the profile of the respondents and the EBEIS impact, the Pearson-Product Moment Correlation Coefficient was applied.

Table 35

Relationship Between the Impact of the EBEIS and the Implementers' Profile

Profile	Efficiency			Effectiveness			Timeliness			Relevance		
	r-value	p-value	Eval-uation	r-value	p-value	Eval-uation	r-value	p-value	Eval-uation	r-value	p-value	Eval-uation
Age	.137**	.000	S	.165**	.000	S	.149**	.000	S	.103**	.007	S
Educational qualification	.096*	.011	NS	.101**	.007	S	.087*	.022	S	.109**	.004	S
Length of Service	.098**	.009	S	.113**	.003	S	.100**	.008	S	.080*	.035	S
Number of trainings	-.033	.414	NS	.046	.263	NS	.080*	.049	S	.034	.398	NS

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

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

S - Significant

NS - Not Significant

The implementers' age posted a significant relationship with efficiency, effectiveness, timeliness, and relevance. The educational qualifications of the respondents posted a significant relationship with effectiveness, timeliness and relevance.

The length of service of the respondents showed a significant relationship with efficiency, effectiveness, timeliness and relevance. The number of seminars/ trainings/workshops attended by the respondents also revealed a significant relationship with efficiency, effectiveness, and relevance.

Summing up, the respondents' age, educational qualification, length of service and number of trainings posted significant relationships with the impact of the EBEIS. In light of these findings, the null hypothesis "there is no significant relationship between the profile of the implementers and the impact of the EBEIS" is rejected.

Results of the Focus Group Discussion (FGD)

During the FGD, the participants mentioned that most of the content in EBEIS can be utilized in all governance levels in educational system. Also, the participants were asked the question: "What is your idea on the Enhanced Basic Education Information System (EBEIS)? Can you explain your answer?"

Participant A:

> *In my idea, EBEIS was created in order to come up with a more accurate and honest reporting of data in every institution. Before, we cannot depend the report on enrollment data of a*

particular school or institution because in the past some report were incorrect and some school heads are not reporting the correct data.

Participant B:

I do believe that EBEIS is a system that can generate accurate data, access school data such as performance indicators of the school or institution and the division. I'd like also to focus on the word enhanced because of its fastest and easiest way of sending the data from the school or institution to the district, division, region and even in the central office.

Participant C:

My idea on EBEIS, it is a system that monitors and evaluate in terms of access, quality and governance. It is also the basis for planning and budgeting purposes. The content in the EBEIS shows in the different levels of governance.

Participant D:

EBEIS is a storage of all the data in the specific school or institution. It keeps all the records of the school.

Based from the participants' responses, it can be noted that data or information generated from EBEIS were accurate and timely, that effectively supported planning, budgeting, formulating policies and other decision-making activities at various levels of governance of the education system like school, division, regional and national levels.

As stipulated in DepEd Order No. 39, s. 2011, "Enhanced Basic Education Information System (EBEIS) is a web-based system that maintain a database of public and private schools' education statistics. The system was developed due to the urgent need to improve the collection of data from schools and streamline data management processes to deliver timely, relevant and accurate information to

effectively support planning, budgeting, formulation policies and other decision-making activities at various levels of education system such as school, division, regional and national levels."

Mishra (2013) stated that management information system (MIS) is an information system intended to be used by an organization's higher management. The MIS generally collects summarized data from different departments or subsystems of an organization and presents these in a form that is helpful to the management for taking better decisions for the organization.

As projected in word cloud analysis, generally, the school heads considered EBEIS as an absolute necessity in managing a school. Alderbesti and Saxena (2014) supported the statement that MIS is very important to have relevant information for correct, timely and effective decisions to be made. MIS has assumed great importance in decision-making.

Another question was asked to the participants during the FGD. "Do you believe that EBEIS is an absolute necessity in managing your school? Is it a necessity in school? Why? Or why not?"

Participant A:

> *Yes, EBEIS is really a necessity for us school heads in managing our school because we can easily generate data. It is a source of almost all the data regarding our school that can really help in decision-making.*

Participant B:

> *Yes, I agree that EBEIS is an absolute necessity in terms of data retrieval and school heads can easily grasp the performance of the school with the help of the data generated from the system.*

According to Frost (2019), the role of top management is more than making decisions that affect all employees. It is also to set the bar for the way managers treat the staff and relate to each other, which also affect the success of the company. Understanding the effects of their role helps the top management make changes as necessary to the way they make decisions, the way they interact with other managers and teams, and how they are perceived by the staff. When employees feel their input is valued, they're more likely to do their jobs enthusiastically and improve the achievement of the company.

Question asked to the participants: "When you were hired as Planning Officer what support did you expect from the top management? Do you think you will be supported by your head?"

Participant A:

> *Yes, 100% support were given by the top management, we don't have problem with EBEIS activities or trainings and we were trusted by the top management.*

Participant B:

> *Yes, we were given full support by the top management particularly the Schools Division Superintendent and Assistant Schools Division Superintendent. Everyone supported us in terms of EBEIS activities or trainings.*

Based from the responses of the participants, it denoted that full support were given by the top management in EBEIS activities or trainings.

The participants were asked with another question, " When were given tasks as ICT or EBEIS coordinator as an additional tasks or assignment did you find it difficult or burden in your part?"

Participant A:

> *It's not a burden being an ICT or EBEIS coordinator as an additional tasks or assignment but the problem is our location wherein very far and no network or signal. So, we are having problem with accessibility of internet connection particularly during EBEIS encoding and submission to meet the deadline set by the central office.*

Participant B:

> *Not a burden, because on my part, my school head is the first one to enter the needed data in a hard copy template then he will give it to me then I will be the one to enter into the system. I'm pretty sure that the data that I encoded are all accurate.*

Participant C:

> *I don't consider being an ICT or EBEIS coordinator a burden but the only problem is, there are some teachers when it comes to data gathering and submission, they are having problems in meeting the deadline. This is the reason that we could hardly meet the deadline set by the central office.*

Participant D:

> *Also, another problem was the late submission of the teachers who own the data for EBEIS encoding.*

Participant E:

> *An Office Order must be issued by the school head specifying the roles and accountabilities of the teachers in the implementation of the EBEIS.*

Based from the participants' responses, it can be noted that the participants, being an ICT or EBEIS coordinators was neither a burden nor a problem in their part. Instead, they considered the school location as the main problem in accessing internet during EBEIS activity.

Another question was asked to the participants: "Have you conducted overtime activities for EBEIS? What did you do?"

Participant A:

> *Yes, most of the time we conducted overtime EBEIS activities particularly during Beginning of School Year (BOSY) and the End of the School Year (EOSY) to meet the deadline set by DepEd Central Office.*

Participant B:

> *Yes, we conducted overtime EBEIS activity specially when globe has poor internet access during day time.*

Participant C:

> *Internet only gets fast transmission during early morning or at 12 midnight. So, we need to be awake during night time just to have our encoding on-line.*

Participant D:

> *"Error 505" appeared in the desktop of the computer indicating that there is system problem.*

Participant E:

> *It's about time for the DepEd Central Office to increase the MBPS capacity of the system because the connection is very low particularly if there is simultaneous encoding in the system that resulted to internet traffic or system problem.*

As stipulated in DepEd Order No. 94, s. 2010, paragraph 4 states that "since time is of the essence in meeting the BEIS schedules, this is to reiterate that all personnel involved in BEIS at the school, district, division, regional, and central levels are herein allowed to render overtime services during weekdays, weekends, and holidays as provided in DepEd Order No. 58, s. 2008 and DepEd Order No. 10, s. 2009."

Another question was asked to the participants: "Where do you get the funds for the overtime pay of personnel who are involved in the EBEIS activities? How did you get it?"

Participant A:

> *We get from the DepEd Central Office downloaded funds charge to LIS or EBEIS fund per DepEd Order issuance for the overtime pay of personnel who are involved in the EBEIS activities. However, the fund is only for the division personnel only.*

Participant B:

> *As school head, I give compensatory time off (CTO) and internal arrangement are being made and I always make memorandum in the school level or I request from the division office whenever I will be issuing service credit to teachers who will render overtime activities.*

Participant C:

> *To the management, there is a need to request to the Division Office compensatory time off (CTO) or service credit to those who will render overtime EBEIS activities.*

Another question was asked to the participants: "Does your ICT or EBEIS coordinator assist you in your EBEIS activities? In what ways?"

Participant A:

> *Yes, our ICT coordinator provided technical assistance during EBEIS activities or as needed.*

Participant B:

> *Our ICT or EBEIS coordinator gives or provides technical assistance when needed and even 24/7 duty. One call or chat away, immediately they provided technical assistance.*

These implied that the ICT or EBEIS coordinators gave or provided technical assistance to teachers during EBEIS activities.

The following responses by the participants manifested the problems encountered by the implementers in the EBEIS implementation:

Participant A:

> *Mostly, accessibility of internet connection is our problem. The very reason for having hard time in sending the data on-line so we opt to visit the internet café to send the data.*

Participant B:

> *We encountered system errors 401, 501 and 599. So even though there is internet connection but the system cannot be opened due to system problem. Also, it causes delays in the on-line encoding and submission and it is beyond our control.*

Below are the responses by the participants when asked if their school and division office have internet connection:

Participant A:

> *Our school doesn't have internet connection and there is no available internet connection in our area or location. We have pocket Wi-Fi but the connection is very slow so we just go to Division Office to access the internet during weekend.*

Participant B:

Yes, we have internet access in the Division Office but sometimes we encountered system problems.

The participants were asked to answer this question, "How do you assess the quality of data generated in the EBEIS in terms of accuracy and timeliness?"

Participant A:

In terms of data accuracy generated from EBEIS, yes it is 100% accurate because when you input a correct data you will also generate an accurate data. The theory of Garbage IN-Garbage OUT is also applied. Before you encode the data in the system, you need to screen or validate it in order to generate accurate data.

Participant B:

We are disappointed that the performance indicators that is generated from the system is sometimes not available due to system problem or late. This will affect the late decision-making of the managers.

Another question was raised to the participants: "What possible strategies would you suggest or recommend in order to improve the EBEIS implementation?"

Participant A:

We need to tap knowledgeable person on EBEIS to lead in the conduct of division level capability building.

Participant B:

We demand that the school should initiate in the conduct of school-level capability building specially if there is additional or new feature in the system. This is the responsibility of the school head.

There is also a need to tap knowledgeable person in the conduct of capability building.

Participant C:

School heads need to tap network internet service provider during EBEIS activity and for easy access so work will not be affected.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, the corresponding conclusions drawn as well as the recommendations made on the basis of these conclusions.

Summary of Findings

This section of the chapter discusses the major findings of the study as follows:

1. Top managers in the Department of Education, Region VIII were in their early 50's or 50.78 and with doctorate degrees; had spent about 26.13 years in the service and attended an average of five trainings related to ICT.

2. Generally, the EBEIS implementers were in their early 40's or 40.07; bachelor's degree holder with Master's Units; had spent 14.11 years in the service and had attended an average of four trainings related to ICT.

3. As perceived by the top managers and implementers, the following are the status of implementation of EBEIS:

    3.1 objectives - 4.42 grand mean (highly implemented)

    3.2 programs/projects/activities – 4.54 grand mean (very highly implemented)

    3.3 personnel – 4.39 grand mean (highly implemented)

3.4 budget - 4.02 grand mean (highly implemented)

3.5 equipment and facilities - 3.47 grand mean (moderately implemented)

3.6 ICT infrastructure and support - 2.95 grand mean (moderately implemented)

3.7 monitoring and evaluation - 4.43 grand mean (highly implemented)

4. There were significant differences in the status of EBEIS implementation in terms of objectives by Division. The p-value of 0.000 is smaller than the 0.05 level of significance denoting the rejection of the null hypothesis.

5. In terms of objectives, respondents from Eastern Samar significantly differed from the respondents of Division 6, Division 9, Division 10, Division 12, and Division 2. The same manner Division 12 respondents significantly differed from the respondents of Division 1, Division 8, and Division 11. Whereas, Division 9 respondents significantly differed from the respondents of Leyte and Northern Samar divisions.

6. There were significant differences in the status of EBEIS implementation in terms of programs/projects/activities. The p-value of 0.000 is smaller than the 0.05 level of significance denoting the rejection of the null hypothesis.

7. In terms of programs/projects/activities, respondents from Division 1 differed significantly from the respondents of Division 12 and Division 9.

Similarly, respondents from Division 5 differed significantly from the respondents of Division 9, Division 10, and Division 12. Furthermore, the perceptions of the respondents from Division 8 differed significantly from the perceptions of the respondents of Division 6, Division 9, Division 10, and Division 12.

8. There were no significant differences in the status of EBEIS implementation in terms of personnel. The p-value of 0.6 is greater than the 0.05 level of significant denoting the acceptance of the null hypothesis.

9. There were significant differences in the status of EBEIS implementation as perceived by the respondents in terms of budget. The p-value of 0.000 is smaller than the 0.05 level of significance denoting the rejection of the null hypothesis.

10. The EBEIS implementation along budget as perceived by the respondents from Division 12 differed significantly from the respondents of Division 5, Division 8, and Division 11. Moreover, the respondents from Eastern Samar differed significantly from the respondents of Division 6.

11. There were significant differences in the status of implementation as perceived by the respondents in terms of equipment and facilities. The p-value of 0.000 is smaller than the 0.05 level of significance denoting the rejection of the null hypothesis.

12. The EBEIS implementation along equipment of facilities as perceived by the respondents from Division 12 differed significantly from the respondents of Division 1, Division 2, Division 3, Division 4, Division 5, Division

7, Division 9, Division 10, and Division 11. The respondents from Division 9, significantly differed from the respondents from Division 2, Division 3, Division 5, and Division 7. Respondents from Division 11 differed significantly from the respondents of Division 8 and Division 10. Respondents from Division 5 differed significantly from the respondents of Division 6.

13. There were significant differences in the states of EBEIS implementation along ICT infrastructure support. The p-value of 0.000 is smaller than the 0.05 level of significance, hence, the rejection of the null hypothesis.

14. In terms of ICT infrastructure support, respondents from Division 12 differed significantly from the respondents of Division 1, Division 3, Division 4, Division 6, Division 7, Division 8, Division 9, Division 10, and Division 11. Moreover, the respondents from Division 5 differed significantly from the respondents of Division 6 and Division 9.

15. There were significant differences in the state of EBEIS implementation along monitoring and evaluation. The p-value of 0.000 is smaller than the 0.05 level of significance, hence, the rejection of the null hypothesis.

16. The EBEIS implementation along monitoring and evaluation as perceived by the respondents from the Division 8 differed significantly from the respondents of Division 6, Division 10, and Division 12. Similarly, the respondents of Division 12 differed significantly from the respondents of Division 5.

17. On the problems encountered by the implementers of EBEIS, the respondents manifested "serious" the given problems as supported by the grand

mean of 2.98. However, there were four problems that were rated "most serious problem" such as: a) poor or weak internet access, b) no internet connection, c) presence of system problems during on-line encoding; and d) internet traffic during simultaneous encoding in the EBEIS.

18. With respect to the respondents' assessment of the EBEIS in terms of user friendliness, accessibility and report accuracy, they rated with grand means of 4.30, 4.41 and 4.44 respectively equivalent to a qualitative rating of "agree".

19. On the impact of the EBEIS along efficiency, effectiveness and timeliness, the respondents "agreed" with all the items used to characterize the impact of the EBEIS. This is evidenced by the grand mean of 4.36, 4.45 and 4.38 respectively

20. In correlating the impact of the EBEIS and the implementers' profile, the correlational analyses revealed the following p-values for age: 0.00, 0.00 and 0.00 for efficiency, effectiveness and timeliness, respectively. All P-values proved numerically lower than the 0.05 alpha level of significance, hence the hypotheses were correspondingly rejected.

21. In correlating the impact of the EBEIS and the educational qualifications of the implementers, the correlated analyses revealed the following p-value: 0.011, 0.007 and 0.022 for efficiency, effectiveness and timeliness respectively. All P-value proved numerically lower than the 0.05 alpha level of significance, hence, the hypotheses were correspondingly rejected.

22. In correlating the impact of the EBEIS and the length of service of the implementers, the correlational analyses revealed the following p-value: 0.009, 0.003 and 0.008 for efficiency, effectiveness and timeliness respectively. All P-value proved numerically lower than the 0.05 alpha level of significance, hence, the hypotheses were correspondingly rejected.

23. In correlating the impact of the EBEIS and the number of trainings of the implementers, the correlational analyses revealed the following p-value 0.049 for timeliness. The p-value proved numerically lower than the 0.05 alpha level of significance, hence, the hypotheses was correspondingly rejected. However, the P-value for efficiency and effectiveness are higher than the 0.05 alpha level of significance, denoting the acceptance of the corresponding hypotheses.

24. The lowest scores on certain areas such as: the seven program components, the respondents' assessment of the EBEIS, the impact of EBEIS, the most serious problems encountered and results of correlational analyses may serves as basis on the proposed program strategies to improve the implementation of the EBEIS.

Conclusions

From the foregoing findings, the following conclusions were drawn:

1. The top managers of the Department of Education, Region VIII are generally educationally qualified in terms of the positions they occupy.

Meanwhile, the implementers generally show proof of pursuing professional development.

2. There were significant differences in the implementation of EBEIS by division in terms of objectives, programs/projects/activities, budget, equipment and facilities, ICT infrastructure support and monitoring and evaluation.

3. The most prevalent problems in the implementation of EBEIS dealt on; a) poor or weak internet access; b) no internet connection; c) presence of system problems during on-line encoding; and d) internet traffic during simultaneous encoding in the EBEIS.

4. The respondents agreed unanimously in their perceptions on the assessment and impact of the EBEIS.

5. Along efficiency, the extent of implementation of EBEIS is better/higher for implementers who are older and with longer length of service.

6. Along effectiveness the extent of implementation of EBEIS is higher/better for implementers who are older, with higher educational qualification and longer length of service.

7. Along timeliness the implementation of EBEIS proved to be better/higher for implementers who are older, with higher educational qualification, who have served longer in the service and who have attended more trainings.

8. Along relevance, the implementation of EBEIS proved to be better/higher for implementers who are older, with higher educational qualification and who has been in the service longer.

9. It is expected that implementers of the EBEIS who have undergone on the proposed program strategies could develop and implement an action plan that is suited to their own schools and divisions.

Recommendations

Based on the findings and conclusions, the following recommendations were offered:

1. The EBEIS implementers should undergo a development program with emphasis on the enhancement of their competencies and their work values and commitment.

2. Policy makers and educational planners should formulate realistic policies and clear road map or achievable development plans by prioritizing more resources and equipment on proper implementation of EBEIS.

3. There is a need to review the policies and standards of the EBEIS for further improvement of budget, equipment, facilities and ICT infrastructure support.

4. Establish a monitoring scheme to continuously observe, evaluate and sustain the implementation of the EBEIS in Regional and Division levels.

5. Peak performing implementers and top managers should be recognized and rewarded. This would motivate others to strive for excellence.

6. The problems considered serious in the implementation of EBEIS need to be addressed by the Department of Education in partnership with the Department of Budget and Management and Congress of the Philippines.

7. Since the profile of the implementers correlated significantly with the impact of the EBES, it is recommended that they enroll in graduate program to finish their appropriate master's degree. The implementers serve as catalyst for educational reforms towards the improvement of educational programs.

8. A similar study may be conducted in other regions using the same instrument to assess the EBEIS implementation.

Chapter 6

PROPOSED PROGRAM STRATEGIES TO IMPROVE THE IMPLEMENTATION OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION REGION VIII

Rationale

The Enhanced Basic Education Information System (EBEIS) is a web-based information system that maintains a database of public and private schools' education statistics. The system was developed due to the urgent need to improve the collection of data from schools and streamline data management processes to deliver timely, relevant and accurate information to effectively support planning, budgeting, formulating policies and other decision-making activities at various levels of the education system i.e. school, division, regional and national levels (DepEd Order No. 39, s. 2011 dated May 19, 2011).

Based on the results of the study, the major findings were the lowest scores on certain items such as: the seven program components (objectives, programs/projects/activities, budget, equipment and facilities, ICT infrastructure support and monitoring and evaluation); the respondents' assessment of the EBEIS in terms of user friendliness, accessibility, and report accuracy; and the impact of the EBEIS in terms of efficiency, effectiveness, relevance, and timeliness. The most serious problems encountered and results of correlational analyses may

serves as basis on the proposed program strategies to improve the implementation of the EBEIS in DepEd Region VIII.

The findings also revealed that the most prevalent problems in the implementation of EBEIS dealt on the following: a) poor or weak internet access; b) no internet connection; c) presence of system problems during on-line encoding; and d) internet traffic during simultaneous encoding in the EBEIS.

Table 36

Proposed Program Strategies for the Top Managers and EBEIS Implementers in DepEd Region VIII

Logical Framework

Objectives	Measurable Indicators	Means of Verification	Important Assumption
GOAL:			
Improve the implementation of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII.	Enhanced Basic Education Information System (EBEIS) in DepEd Region VIII implementation improved	Impact evaluation report	Functional monitoring and evaluation on the implementation of the EBEIS to be conducted to Divisions and Schools
PURPOSE:			
The general objective of the Enhanced Basic Education Information System is to improve the collection of data	100% of the problems considered serious in the implementation of EBEIS be addressed by the Department of	List of the most serious problems encountered by the EBEIS implementers	Institutionalization of the Plans and Programs related to the implementation of EBEIS in schools and divisions

Objectives	Measurable Indicators	Means of Verification	Important Assumption
from schools and streamline data management processes to deliver timely, formulate policies and other decision making activities at various governance levels of the education system e.g. school, division, regional and national levels.	Education Region VIII		
OUTPUTS:			
1. Regional Memorandum for the conduct of consultation meeting with the top managers and EBEIS implementers	Regional Memorandum prepared	Approved Regional Memorandum	The Regional Director and the PPRD Chief discussed and agreed the content of the Regional Memorandum
2. Activity proposal in the conduct of the EBEIS Training to top managers and implementers	Activity Proposal developed	Approved activity proposal with plans and programs	Top managers and EBEIS implementers representatives worked together to come-up with a holistic plan
4. Regional Memorandum for the conduct of the EBEIS Training to top managers and implementers	Regional Memorandum prepared in the conduct of the EBEIS activities based on need	Approved Regional Memorandum	Regional Memorandum issued to the field for implementation

Objectives	Measurable Indicators	Means of Verification	Important Assumption
ACTIVITIES:	**INPUTS: Php**		
1. One-Day Consultation meeting regarding EBEIS status of implementation per division with the Regional Director, Policy Planning and Research Division (PPRD) Chief, Schools Division Superintendents, SGOD Chiefs, Region and Division Planning Officers	Amount will vary based on the venue, meals and materials 42 participants • 1 RD • 1PPRD Chief • 1 Regional Planning Officer • 13 SDSs, 13 SGOD Chiefs • 13 Division Planning Officers	• Approved Regional Memorandum • Activity Completion Report • Attendance Sheet • Minutes of the Consultation Meeting	Regional Office allocated funds for the conduct of the consultation meeting
2. Regional Training of Trainers on EBEIS (RTOT) based on needs	Amount will vary based on the venue, meals and materials 91 participants Note: 7 participants per Division (Division	• Approved Regional Memorandum • Activity Completion Report • Attendance • Evaluation Sheet • Pictorial	The Regional Office allocated funds for the conduct of the Regional Training of Trainers on EBEIS

Objectives	Measurable Indicators	Means of Verification	Important Assumption
	Planning Officer, selected school heads and EBEIS coordinators in the elementary, secondary and Senior High School)		
3. Division Training of Trainers on EBEIS	Amount will vary according to the size of the Division	• Approved Memorandum • Activity Completion Report • Attendance • Evaluation Sheet • Pictorial	The Division Office utilized the MOOE funds or EBEIS downloaded funds for the conduct of the training
4. Monitor and Evaluate the conduct of the Division Training of Trainers	Travel expenses may vary based on the distance of the training venue	• Monitoring tool • Approved Travel Authority • Certificate of Appearance	The Regional Director approved the travel authority and allocated funds for the travel expenses of the Regional Monitors.
5. Technical Assistance provision to EBEIS implementers (actual and on-line) based on need	Technical assistance to the field need travel fund but if on-line no need of fund allocation	• Approved Travel Authority, Certificate of Appearance and TA Report • On-line Technical Assistance (Screen shots	Allocated funds for the actual travel of the TA provider

Objectives	Measurable Indicators	Means of Verification	Important Assumption
		of the request for TA and the response of the TA provider)	
6. Monitoring and Evaluation	No need of fund allocation if on-line but if no available internet there's a need to allocate funds for the purchase of a pocket wifi	• Monitoring Tool or Report	On-line monitoring to assess progress of EBEIS implementation
7. Submission of quarterly Accomplishment Report	None	• Accomplishment Report	Division submit quarterly accomplishment report to the Region

Table 37

Gantt Chart

Activities	1Q	2Q	3Q	4Q	Remarks
1. One-Day Consultation meeting regarding EBEIS status of implementation per Division with the Regional Director, Assistant Regional Director, Chief Education Supervisor of the Policy Planning and Research Division (PPRD), 13 Schools Division Superintendents, 13 SGOD Chiefs, 1 Region and 13 Division Planning Officers					Consultation Meeting Agenda: 1. Presentation of EBEIS status in DepEd Region VIII by Division 2. Presentation of the EBEIS Guidelines emphasizing the roles and accountability of the top managers and the EBEIS implementers 3. Present the most serious problems encountered by the implementers in the implementation of EBEIS (Divisions and Schools) 4. Open Forum 5. Action Planning 6. Next Steps
2. Regional Training of Trainers (RTOT) on EBEIS based on needs					1. Regional Training of Trainers on EBEIS be conducted to improve the competencies, work values and commitment of EBEIS implementers (Division Planning Officers, selected School Heads and EBEIS or ICT

Activities	1Q	2Q	3Q	4Q	Remarks
					Coordinators) 2. After the RTOT the division trained participants will cascade the same in their respective Divisions.
3. Division Training of Trainers on EBEIS					Division Training of Trainers on EBEIS be conducted to improve the competencies, work values and commitment of EBEIS implementers (School Heads and EBEIS or ICT Coordinators)
4. Monitor and Evaluate the conduct of the Division Training of Trainers on EBEIS					Monitor the conduct of the Division Training of Trainers to ensure technology transfer to EBEIS implementers
5. Technical Assistance provision to EBEIS implementers based on need					Provision of technical assistance to implementers will help improve the EBEIS implementation
6. Monitoring and Evaluation					Regular conduct of monitoring and evaluation to ensure progress, proper implementation and help solve serious problems encountered by the EBEIS implementers

Activities	1Q	2Q	3Q	4Q	Remarks
7. Submission of accomplishment report by quarter					For filing, dissemination and bases for the provision of technical assistance and policy recommendation

Prepared by:

RITA R. DIMAKILING

B I B L I O G R A P H Y

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APPENDICES

APPENDIX A

COMMUNICATION LETTERS

Republic of the Philippines
Samar State University
Catbalogan City, Samar

January 22, 2018

DR. RAMIR B. UYTICO, CESO IV
Regional Director
Department of Education
Regional Office VIII
Government Center, Candahug,
Palo, Leyte

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES".

In this regard, your approval in the distribution and retrieval of the survey questionnaires through google forms to the identified respondents of the study particularly the Schools Division Superintendents, Chief Education Supervisors of the School Governance and Operations Divisions (SGOD), Division Planning Officers, selected elementary and secondary School Heads and their respective ICT or EBEIS school coordinators of DepEd Region VIII is earnestly requested.

Thank you very much in advanced for the favorable action you will be extending on this behalf.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph.D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, College of Graduate Studies

Approved:

(SGD.) RAMIR B. UYTICO, Ed.D., CESO IV
Regional Director

Republic of the Philippines
Department of Education
REGIONAL OFFICE NO. VIII (EASTERN VISAYAS)
Government Center, Candahug, Palo, Leyte

1st Indorsement
January 23, 2018

Respectfully referred to the Schools Division Superintendents of the Department of Education, Region VIII the herein attached letter of **Mrs. Rita R. Dimakiling** requesting permission and assistance in the distribution and retrieval of her Survey Questionnaire to the Identified respondents with the condition that all the responses will solely be used for research purposes and will be treated with high confidentiality.

(SGD.) RAMIR B. UYTICO, Ed.D., CESO IV
OIC-Regional Director

Republic of the Philippines
Department of Education
Region VIII. Eastern Visayas
SCHOOLS DIVISION OF CALBAYOG CITY

MRS. RITA R. DIMAKILING
Researcher
Samar State University
Catbalogan City, Samar

Dear Mrs. Dimakiling,

Blissful day!

Permit is hereby granted to the researcher of Samar State University, Catbalogan City Samar, requesting permission to distribute and retrieve the survey questionnaires relative to her doctoral dissertation entitled "**THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII**" particularly to the School Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and the ICT or EBEIS school coordinators in this division, provided that this permission only covers the data collection procedures, timeline and participants stated in your research; proper arrangement with the School Heads will be sought; and it is advised that DepEd Order No. 9, s. 2005, (instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith), shall be Observed.

In view of this, may we request a copy of your final manuscript for future office reference.

Please be guided accordingly.

Very truly yours,

(SGD.) RAUL D. AGBAN, Ed.D.
OIC-School Division Superintendent

March 4, 2019

DR. MARIZA S. MAGAN, CESO V
Schools Division Superintendent
DepEd Samar Division
Catbalogan City, Samar

Madam:

Greetings of Peace!

I am currently working on my doctoral dissertation entitled *"The Enhanced Basic Education Information System (EBEIS) in the Department of Education , Region VIII, Philippines"* which generally aims to assess the implementation and the impact of the Enhanced Basic Education Information System in the Department of Education particularly Region VIII with the end-view of proposing program strategies for improvement.

Part of my methodologies is to conduct Focus Group Discussion (FGD) with Samar Division top managers (Schools Division Superintendent and the Chief of the Schools Governance and Operations Division (SGOD) and the EBEIS Implementers (School Heads and EBEIS Coordinators)

In this regard, I would like to request permission from your good Office in the conduct of FGD with selected School Heads and EBEIS Coordinators in your Division on March 7, 2019 at the SGOD Conference Room, Samar Division.

Also I would like to request the presence of Ms. Carol C. Ocenar, Senior High School Teacher of Hinabangan, National High School, Samar Division to be present during the FGD to assist me in the data gathering thru qualitative research using the Nvivo instrument.

Rest assured that all responses or information will solely be used for research and will be treated with high confidentiality.

I humbly look forward to finishing my paper through your approval.

Thank you so much. God Bless.

Very truly yours,

(SGD.) RITA R. DIMAKILING
Researcher

Approved:

(SGD.) MARIZA S. MAGAN Ed.D., CESO V
Schools Division Superintendent
Samar Division

March 12, 2019

DR. CARMELA R. TAMAYO, CESO V
Schools Division Superintendent
Northern Samar Division
Catarman, Northern Samar

Madam:

Greetings of Peace!

I am currently working on my doctoral dissertation entitled *"The Enhanced Basic Education Information System (EBEIS) in the Department of Education , Region VIII, Philippines"* which generally aims to assess the implementation and the impact of the Enhanced Basic Education Information System in the Department of Education particularly Region VIII with the end-view of proposing program strategies for improvement.

In connection with above-mentioned statement, the undersigned would like to request permission to conduct her survey questionnaire using google forms to the remaining schools in Northern Samar Division.

Rest assured that all responses or information will solely be used for research and will be treated with high confidentiality.

Thank you very much in advance for the favorable action you will be extending on this request.

Very truly yours,

(SGD.) RITA R. DIMAKILING
Researcher

Approved:

(SGD.) CARMELA R. TAMAYO, Ed.D., CESO V
Schools Division Superintendent
Northern Samar Division
Catarman, Northern Samar

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. PEDRO T. ESCOBARTE, JR., CESO V
Schools Division Superintendent
Biliran Division

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Biliran is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph.D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) PEDRO T. ESCOBARTE, JR., Ed.D., CESO V
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. GORGONIO G. DIAZ, JR., CESO VI
Schools Division Superintendent
Borongan City Division
Borongan City

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Borongan City is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) GORGONIO G. DIAZ, JR., Ed.D., CESO VI
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. RAUL D. AGBAN
Schools Division Superintendent
Division of Calbayog City
Calbayog City

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Calbayog City is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) RAUL D. AGBAN, Ed.D.
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

MR. CRISTITO A. ECO, CESO VI
Schools Division Superintendent
Catbalogan City Division
Catbalogan City

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Catbalogan City is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) CRISTITO A. ECO, CESO VI
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. JUDITH C. BOCO
Schools Division Superintendent
Eastern Samar Division

MADAM:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Eastern Samar is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) JUDITH C. BOCO, Ed. D.
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. RONEL AL K. FIRMO, CESO V
Schools Division Superintendent
Leyte Division

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Leyte is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) RONELO AL K. FIRMO, Ed.D., CESO V
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. CARMELINO P. BERNADAS, CESO VI
Schools Division Superintendent
Maasin City Division

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Maasin City is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) CARMELINO P. BERNADAS, Ed.D., CESO VI
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

MR. BERNARDO A. ADINA, CESO VI
Schools Division Superintendent
Northern Samar Division

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Northern Samar is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) BERNARDO A. ADINA, CESO VI
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. MANUEL P. ALBANO, CESO V
Schools Division Superintendent
Ormoc City Division
Ormoc City

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Ormoc City is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) MANUEL P. ALBANO, Ed.D., CESO V
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. MARIZA S. MAGAN, CESO V
Schools Division Superintendent
Samar Division
Catbalogan City, Samar

MADAM:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Samar is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) MARIZA S. MAGAN, Ed.D., CESO V
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

MR. GENIS S. MURALLOS, CESO V
Schools Division Superintendent
Southern Leyte Division

SIR:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Southern Leyte is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) GENIS S. MURALLIOS, CESO V
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 24, 2018

DR. THELMA CABADSAN-QUITALIG, CESO V
Schools Division Superintendent
Tacloban City Division

MADAM:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the distribution and retrieval of the survey questionnaire through google forms to the identified respondents of the study particularly the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Division Planning Officer, selected elementary and secondary School Heads and ICT or EBEIS Coordinators in the Division of Tacloban City is earnestly requested.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) THELMA CABADSAN-QUITALIG, Ph.D., CESO V
Schools Division Superintendent

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City, Samar

January 17, 2018

DR. CARMELA R. TAMAYO, CESO V
Schools Division Superintendent
Baybay City Division
Baybay City

MADAM:

Greetings of Peace!

The undersigned is pleased to inform your good office that she is currently conducting her doctoral dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES."

In this regard, your approval in the validation of the survey questionnaire on January 19, 2018 to the Schools Division Superintendent, Chief Education Supervisor of the School Governance and Operations Division (SGOD), Planning Officer, selected school heads (6) elementary and (2) secondary with their respective ICT or EBEIS school coordinators in the Division of Baybay City, is earnestly requested. The purpose of this validation is to make possible revisions and refinements of the survey questionnaire to make the items suitable enough for the study.

Thank you very much in advance for the favorable action you will be extending on this regard.

Very truly yours,

(SGD.) RITA REYES-DIMAKILING
Researcher

Recommending Approval:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Adviser

(SGD.) FELISA E. GOMBA, Ph.D.
Acting Dean, Graduate and Post Graduate Studies

Approved:

(SGD.) CARMELA R. TAMAYO, Ph.D., CESO V
Schools Division Superintendent

APPENDIX B

QUESTIONNAIRE

THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES

SURVEY QUESTIONNAIRE

PART I - PROFILE OF THE RESPONDENTS

Direction: Please provide the appropriate information asked by writing your answer on the spaces provided or by checking the column which will correspond to your answer.

1. Name (Optional)_____

2. Position/Designation:_____

3. Age:_____

4. Educational Background:

   _____ Bachelor's Degree Holder
   _____ Bachelor's Degree with Master's Units
   _____ Master's Degree Holder
   _____ Master's Degree with Doctoral Units
   _____ Doctoral Degree Holder

5. Length of Service (in years):_____

6. Number of ICT related seminars/trainings/workshops attended:_____

7. Computer Literate

   _____ Yes

   _____ No

8. Division:_____

9. Work Station: Please specify the complete name of your School or Office.

   _____

Part II - STATUS OF IMPLEMENTATION OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES

Direction: Please check the column that corresponds to your assessment on the status of implementation of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII using the 5-point Likert scale.

Numerical Value		Interpretation
5	-	Very Highly Implemented (VHI)
4	-	Highly Implemented (HI)
3	-	Moderately Implemented (MI)
2	-	Least Implemented (LI)
1	-	Not Implemented (NI)

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
A. ON EBEIS OBJECTIVES					
1. The objectives of the EBEIS are clearly defined and well disseminated.					
2. The following objectives of the EBEIS are well carried out or met:					
2.1 engaged in school for encoding of school statistics in the EBEIS system.					
2.2 strengthened the validation of data for accuracy purposes.					
2.3 generated reports to support budget and plan formulation.					
2.4 identified necessary adjustments and institutional support requirements to enhance EBEIS system effectiveness, efficiency, relevance and sustainability.					
2.5 established an accurate and reliable data of schools which are vital on its planning, budgeting, allocation of resources and setting operational targets.					

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
3. The objectives of the EBEIS are disseminated to the clientele schools.					
4. Varied modes of dissemination are utilized					
4.1 EBEIS Orientation					
4.2 Conferences					
4.3 Issuance of Memorandum					
4.4 Are there other mode of dissemination? If there is, please specify.					
B. ON EBEIS PROGRAMS/PROJECTS/ ACTIVITIES					
The following programs/projects/activities are done at the given governance level.					
School Level Programs/Projects/Activities					
1. Collection of basic statistics data					
2. Validation of school data					
3. Implementation of Beginning of the School Year (BOSY) and the End of School Year (EOSY)					
4. Updating of the BOSY 2017-2018 and other data encoding requires EOSY 2016-2017 status					
5. Updating school information in the EBEIS					
6. Encoding of school data in the EBEIS					
7. Submission of school statistics in the EBEIS					
8. Are there other programs/projects/activities implemented in the school level? If there is, please specify.					
Division Level Programs/Projects/Activities					
9. EBEIS Orientation to school heads and ICT/EBEIS coordinators					
10. Creation of a Division Validation Team/Focal Persons					
11. Division validation by the team/focal persons					
12. On-line division validation of EBEIS data					
13. Monitoring and evaluation of EBEIS activities					
14. Provision of technical assistance					
15. Are there other programs/projects/activities implemented in the division level? If there is, please specify.					
Regional Level Programs/Projects/Activities					
16. EBEIS Orientation to the Region and Division					
17. On-line EBEIS monitoring and evaluation					
18. Provision of technical assistance					

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
19. Are there other programs/projects/activities implemented in the regional level? If there is, please specify.					
C. ON EBEIS PERSONNEL					
1. Sufficient number of personnel to carry-out the activities of EBEIS have been provided.					
2. The personnel involved is provided with relevant seminars/trainings/workshops/orientation to implement the EBEIS.					
3. The personnel has been capacitated to develop their skills and competence in relation to his/her assignment.					
4. A mechanism has been put in place to ensure that personnel perform the given roles and functions assigned to them.					
5. Personnel's commitment and dedication to the assigned tasks have been developed or recognized.					
6. The personnel, at the specific governance level, perform the specified tasks:					
School Level Personnel					
6.1 The school head utilizes the data gathering forms, which are vital in the collection of data.					
6.2 The school head properly updates the school profile.					
6.3 The school head ensures that the data submitted and maintained in the EBEIS are accurate and timely.					
6.4 The school head designates a School EBEIS coordinator/ICT Coordinator.					
6.5 The school head monitors the progress of updating in the Leaner Information System (LIS).					
6.6 The school head ensures that data on learners in the LIS and in any form of storage are kept secured and protected from any unauthorized access.					
Division Level Personnel					
6.7 The division planning officer ensures the quality of data and smooth implementation of information systems.					
6.8 The Division IT Officer or designated ICT coordinator provides technical assistance.					

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
6.9 The Division Office, through the Schools Division Superintendent, creates a validation team/focal persons.					
6.10 The Division Office through the Schools Division Superintendent creates a monitoring and evaluation team in the implementation of EBEIS activities.					
Regional Level Personnel					
6.11 The Regional Planning Officer ensures the quality of EBEIS implementation in the Region.					
6.12 The Regional IT Officer or designated ICT coordinator provides technical assistance.					
6.13 The Policy, Planning and Research Division (PPRD) personnel provide technical assistance (on-line/on-site) to schools divisions during EBEIS activity.					
6.14 The Regional Office creates a monitoring and evaluation team during the EBEIS activity of the schools divisions.					
6.15 The Regional Planning Officer and the Regional ICT Coordinator create a system access for a newly created division.					
7. All the personnel involved in the Learner Information System (LIS) and EBEIS in all the schools, divisions, and regional office are allowed to render overtime (OR) services to meet the target schedule.					
8. Are there other activities/concerns related to personnel? If there is, please specify.					
D. ON EBEIS BUDGET					
1. The funds are downloaded by the Central Office directly to the Division Offices for implementation of LIS/EBEIS and other planning activities and are utilized in accordance with its guidelines.					
2. The funds that are downloaded by the Central Office is sufficient to finance the different EBEIS activities (orientation, coaching and mentoring, benchmarking and others).					

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
3. The school head uses the Maintenance and Other Operating Expenses (MOOE) in financing the EBEIS activities.					
4. Funds have been allocated for the overtime services of the persons involved in the EBEIS activities.					
5. Other sources of funds utilized in the implementation of EBEIS activities have been sourced out and utilized.					
6. Communication allowance is provided to planning officer to follow-up the on-line submission of the school to meet the target date set by the Central Office.					
7. Sufficient budget for the reproduction of the data gathering forms has been provided.					
8. Liquidation reports are prepared for the expenses incurred in EBEIS implementation.					
9. Are there other activities or concerns pertaining to Budget? If there is, please specify.					
E. ON EBEIS EQUIPMENT AND FACILITIES					
1. Computers, laptops and audio-visual materials are provided/made available during the EBEIS orientation.					
2. Computers or laptops are made available for the EBEIS activities particularly during on-line encoding and submission at the school level.					
3. Computers or laptops are made available during the on-line validation.					
4. The equipment and facilities are ensured to be functional and usable.					
5. Maintenance of IT software is regularly scheduled.					
6. Sufficient number of IT facilities and equipment are made available.					
7. Internet access is made available in the school in doing the on-line encoding and submission of data and information to the EBEIS.					
8. The EBEIS activities like encoding, submission and validation is usually done at the:					
8.1 School					
8.2 Division					

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
8.3 Home					
8.4 Internet Cafe					
8.5 Cellphone/Mobile data					
9. Are there other ways wherein EBEIS activities are done? If there is, please specify.					
F. ON EBEIS ICT INFRASTRUCTURE SUPPORT					
1. A room for gadgets and equipment is provided.					
2. Internet connection is made available in the following areas:					
2.1 Division					
2.2 School					
2.3 Community					
2.3.1 Free wifi					
2.3.2 Internet cafe					
2.3.3 Other internet access					
3. Technical support acts as a liaison on technical matters.					
4. The Region/Division Office have ICT Hubs to conduct ICT based systems/initiatives.					
5. The following equipment and connectivity mechanisms are provided:					
5.1 Desktop or laptop					
5.2 Tablet or Smartphone					
5.3 Internet Modem or Wi-Fi facility					
5.4 Funds to pay the monthly Internet Service Provider (ISP) subscription or reimbursement for internet usage.					
5.5 IT Hub or ICT equipped center or working station.					
6. Are there other ICT Infrastructure support in your area? If there is, please specify.					
G. ON EBEIES MONITORING AND EVALUATION					
1. The Region/Division Offices provide monitoring tool to be utilized by the monitoring and evaluation team for EBEIS activities					
2. The Division Office creates a monitoring team or focal persons to monitor the conduct of the EBEIS orientation to school heads and ICT coordinators					
3. The Division Planning Officer conducts on-line monitoring on the status of submission of the school to EBEIS as basis for the provision of technical assistance.					

PROGRAM COMPONENTS	Rating Scale				
	5	4	3	2	1
	VHI	HI	MI	LI	NI
4. The Policy, Planning and Research Division through the Regional Planning Officer conducts on-line monitoring as to the status of submission and validation of the schools divisions, as basis for the provision of technical assistance.					
5. The monitoring team reports the findings as basis for problem-resolution and policy recommendations.					
6. Are there other monitoring and evaluation activities done in your area? If there is, please specify.					

Part III - RESPONDENTS' ASSESSMENT OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS)

Direction: Please check the appropriate column that corresponds to your assessment of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII using the 5-point Likert scale.

Numerical Value		Interpretation	
5	-	Strongly Agree.	(SA)
4	-	Agree	(A)
3	-	Neutral	(N)
2	-	Disagree	(D)
1	-	Strongly Disagree	(SD)

INDICATOR	5	4	3	2	1
	SA	A	N	D	SD
A. USER FRIENDLINESS					
1. The instructions and steps can be easily remembered and followed.					
2. The messages and instructions are easy to understand and learn.					
3. The response time is acceptable as long as the internet connection and device are of standard quality.					
4. The user interface is intuitive.					

INDICATOR	5 SA	4 A	3 N	2 D	1 SD
5. The EBEIS system is user-friendly/easy to use.					
6. The EBEIS software is easy to learn and flexible/adjustable.					
7. The system provides the precise information needed.					
8. Are there other indicator of EBEIS in terms of user friendliness? If there is, please specify.					
B. ACCESSIBILITY					
1. There is a restriction in the accessibility of the EBEIS.					
2. The username and password are required by the accountable person in accessing data and information from the EBEIS.					
3. The school head is the accountable person to open and encode the data and information in the EBEIS.					
4. The school head is required to use his/her username and password in order to access the EBEIS.					
5. The school head has the access in the school level data and information in the EBEIS.					
6. The ICT/EBEIS coordinator has the access to open the account of the school.					
7. The Division Planning Officer has the access to open the account of the division and the school in the EBEIS.					
8. The internal and external stakeholders can only view the data and information in the EBEIS.					
9. Are there other indicator of EBEIS in terms of accessibility? If there is, please specify.					
C. REPORT ACCURACY					
1. The system generates verifiable reports.					
2. The output generated often satisfies the EBEIS user.					
3. The generated data, through the EBEIS is consistent with the actual data.					
4. The EBEIS provides reports that seem to be just about exactly what is needed.					
5. Data and information generated through the EBEIS is reliable					
6. Are there other indicator of EBEIS in terms of accuracy? If there is, please specify.					

Part IV - THE IMPACT OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII

Direction: Please give your honest assessment on the impact of EBEIS in the Department of Education, Region VIII. Please check the appropriate column that corresponds to your assessment. Rate according to the following, using the 5-point Likert Scale:

Numerical Value		Interpretation
5	-	Strongly Agree (SA)
4	-	Agree (A)
3	-	Neutral (N)
2	-	Disagree (D)
1	-	Strongly Disagree (SD)

INDICATORS	5 SA	4 A	3 N	2 D	1 SD
A. EFFICIENCY					
1. EBEIS data and information are the basis for fast decision-making of the managers					
2. EBEIS data and information are readily available					
3. Historical data are always available.					
4. EBEIS data and information are regularly updated.					
5. EBEIS data are accessible when needed.					
6. EBEIS data generate accurate reports.					
7. Data being collected are always attuned to present needs					
8. Are there other impact of EBEIS related to its efficiency? If there is, please specify.					
B. EFFECTIVENESS					
1. Information from the EBEIS meet user's needs.					
2. EBEIS provides relevant and necessary information.					
3. EBEIS data ensure prompt, complete and accurate information needed.					
4. EBEIS is equipped with useful features and functions.					

INDICATORS	5 SA	4 A	3 N	2 D	1 SD
5. Data and information generated through EBEIS are the bases for the following:					
5.1 appropriate data-driven decisions of the managers					
5.2 relevant decision-making of the managers					
5.3 reliable decision-making of the managers					
6. EBEIS conforms to user's feedback and requirement					
7. EBEIS eliminates manual consolidation of data					
8. Are there other impact of EBEIS pertaining to its effectiveness? If there is please specify.					
C. RELEVANCE					
1. Reports generated through the EBEIS are bases for the following:					
1.1 planning					
1.2 budgeting					
1.3 resources allocation					
1.4 policy recommendation					
1.5 reliable and appropriate data-driven decision making					
1.6 provision of technical assistance					
1.7 stakeholders reference					
2. Are there other impact of EBEIS pertaining to its relevance? If there is, please specify.					
D. TIMELINESS					
1. Data and information in the EBEIS are up-to-date.					
2. EBEIS facilitates promptness for data generation.					
3. EBEIS data like performance indicators and education statistics are timely generated.					
4. EBEIS data is submitted and validated within the scheduled time-frame.					
5. EBEIS data are made available and verifiable when needed/opportune time.					
6. Are there other impact of EBEIS pertaining to its timeliness? If there is, please specify.					

PART V - PROBLEMS ENCOUNTERED BY THE EBEIS IMPLEMENTERS

Direction: Please check the appropriate column that corresponds to your perception as to the problems you encountered in the implementation of EBEIS in your school/division using the 5-point Likert scale.

Numerical Value		Interpretation	
5	-	Most Serious Problem	(MoSP)
4	-	More Serious Problem	(MSP)
3	-	Serious Problem	(SP)
2	-	Less Serious Problem	(LSP)
1	-	Not a Serious Problem at all	(NSP)

Assessment Criteria	5 MoSP	4 MSP	3 SP	2 LSP	1 NSP
Problems encountered at SCHOOL Level:					
1. No internet connection.					
2. Poor or weak internet access.					
3. Presence of system problems during on-line encoding.					
4. Lack of time of the school ICT/EBEIS coordinators in encoding and submission of reports.					
5. Over-loaded school ICT/EBEIS coordinator of additional assignments/loads.					
6. Lack if not absence of IT technical know-how of school head.					
7. Indifference of some School Heads to the EBEIS Program.					
8. Manipulation of EBEIS school data.					
9. Insufficient funds for internet expenses.					
10. Data from the EBEIS like School Report Card cannot be downloaded immediately or not available.					
11. Are there other problems encountered at the school level by the EBEIS implementers? If there is, please specify.					

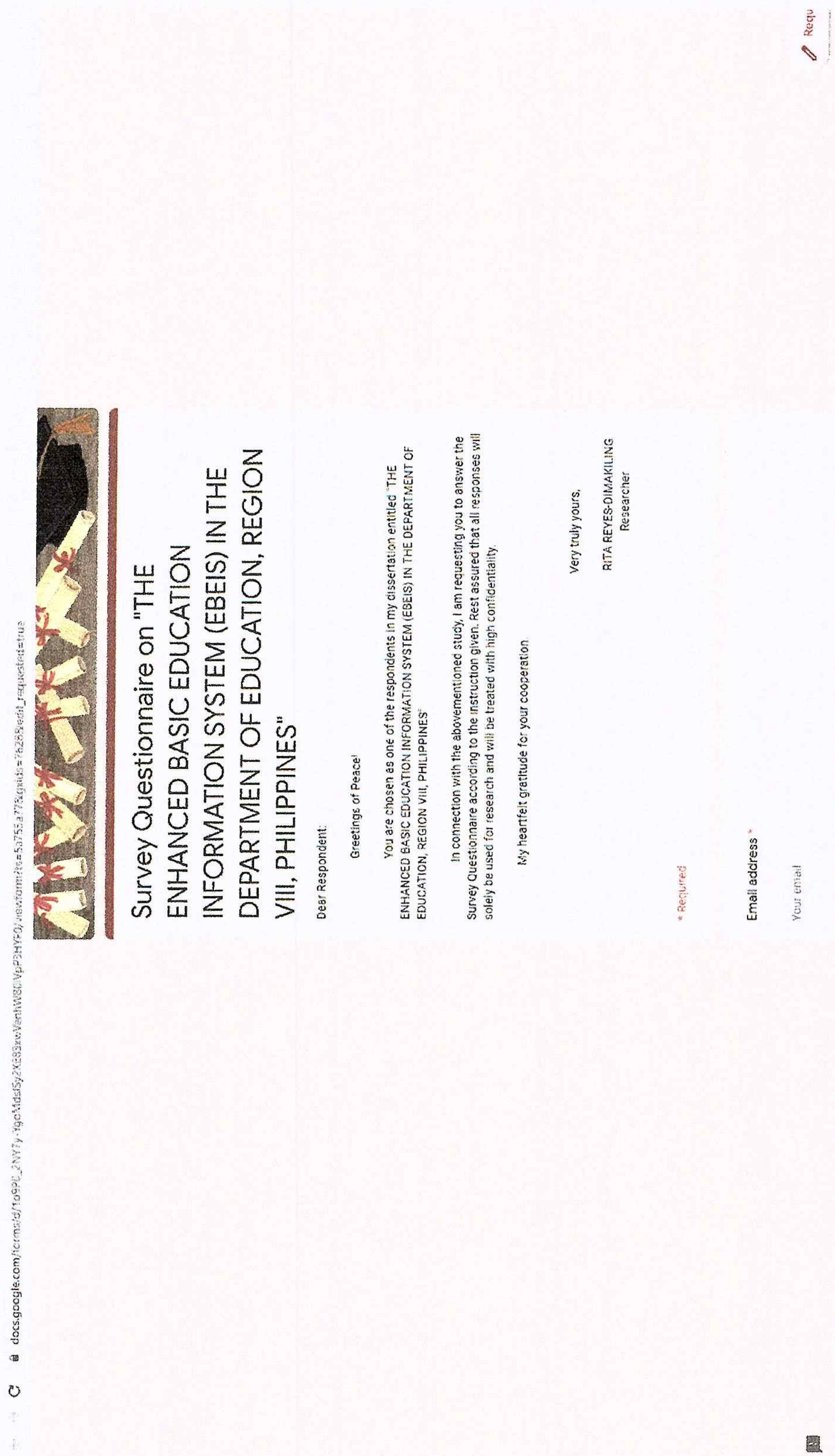
Assessment Criteria	5 MoSP	4 MSP	3 SP	2 LSP	1 NSP
Problems encountered at the DIVISION Level:					
12. Lack of time of the Planning Officer to analyse data due to other tasks assigned or overlapping work.					
13. Lack of manpower of the Planning and Research Unit to validate the data submitted by the school					
14. Inadequate knowledge and skill of the planning officer to manipulate the EBEIS					
15. Erroneous or incomplete data submitted by some of the school heads.					
16. Delayed submission of reports in hardcopies and on-line by the school					
17. Low internet access hinders on-line validation at the division level					
18. Presence of system problem					
19. Are there other problems encountered at the Division Level by the implementers? If there is, please specify.					
Problems encountered at the REGIONAL Level:					
20. Lack of time in the provision of technical assistance to the Schools Divisions.					
21. Passive attitude of some division planning officer to monitor and follow-up the EBEIS status of schools submission.					
22. Late downloading of funds from the central office intended for EBEIS regional activities.					
23. Internet traffic during simultaneous encoding in the EBEIS.					
24. Are there other problems encountered by the implementers? If there is, please specify.					

Thank you very much for your cooperation. Your effort is greatly appreciated.

RITA R. DIMAKILING
Researcher

APPENDIX C

QUESTIONNAIRE IN GOOGLE FORMS



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

Dear Respondent:

Greetings of Peace!

You are chosen as one of the respondents in my dissertation entitled "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

In connection with the abovementioned study, I am requesting you to answer the Survey Questionnaire according to the instruction given. Rest assured that all responses will solely be used for research and will be treated with high confidentiality.

My heartfelt gratitude for your cooperation.

Very truly yours,

RITA REYES-DIMAKILING
Researcher

* Required

Email address *

Your email

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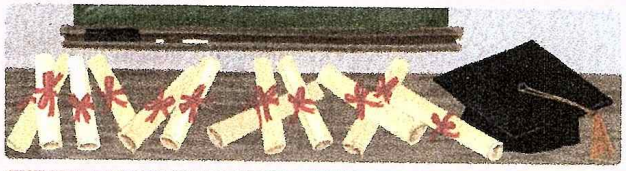

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

Part I. PROFILE OF RESPONDENTS

Please provide appropriate information

1. Name (Optional):

Your answer

Back Next Page 2 of 41

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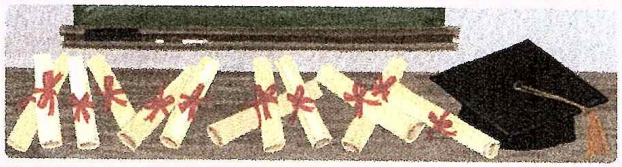


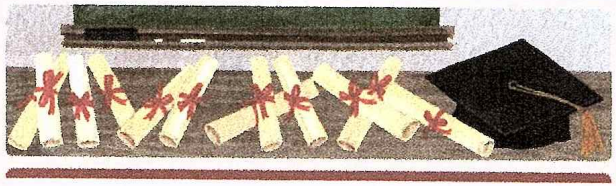
Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

2. Position/Designation: *

- ◯ Schools Division Superintendent
- ◯ Chief Education Supervisor of the School Governance and Operations Division (SGOD)
- ◯ Regional Planning Officer
- ◯ Division Planning Officer
- ◯ Elementary School Head
- ◯ Secondary School Head
- ◯ Elementary ICT/EBEIS Coordinator
- ◯ Secondary ICT/EBEIS Coordinator

Back Next Page 3 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

3. Age:

Your answer

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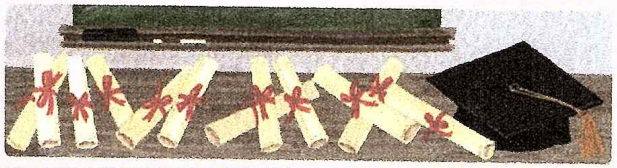

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

4. Educational Background: *

- ◯ Bachelor's Degree Holder
- ◯ Bachelor's Degree with Master's Units
- ◯ Master's Degree Holder
- ◯ Master's Degree with Doctoral Units
- ◯ Doctoral Degree Holder

Back Next Page 5 of 41

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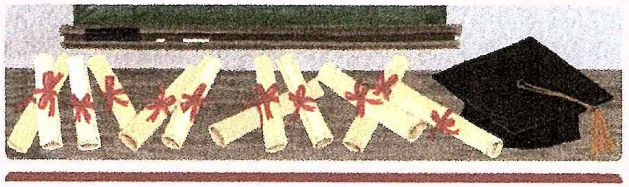

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

5. Length of service (in years): *

Your answer

Back Next Page 6 of 41

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Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

6. Have you attended relevant ICT seminars/trainings/workshops? *

- ◯ Yes
- ◯ No

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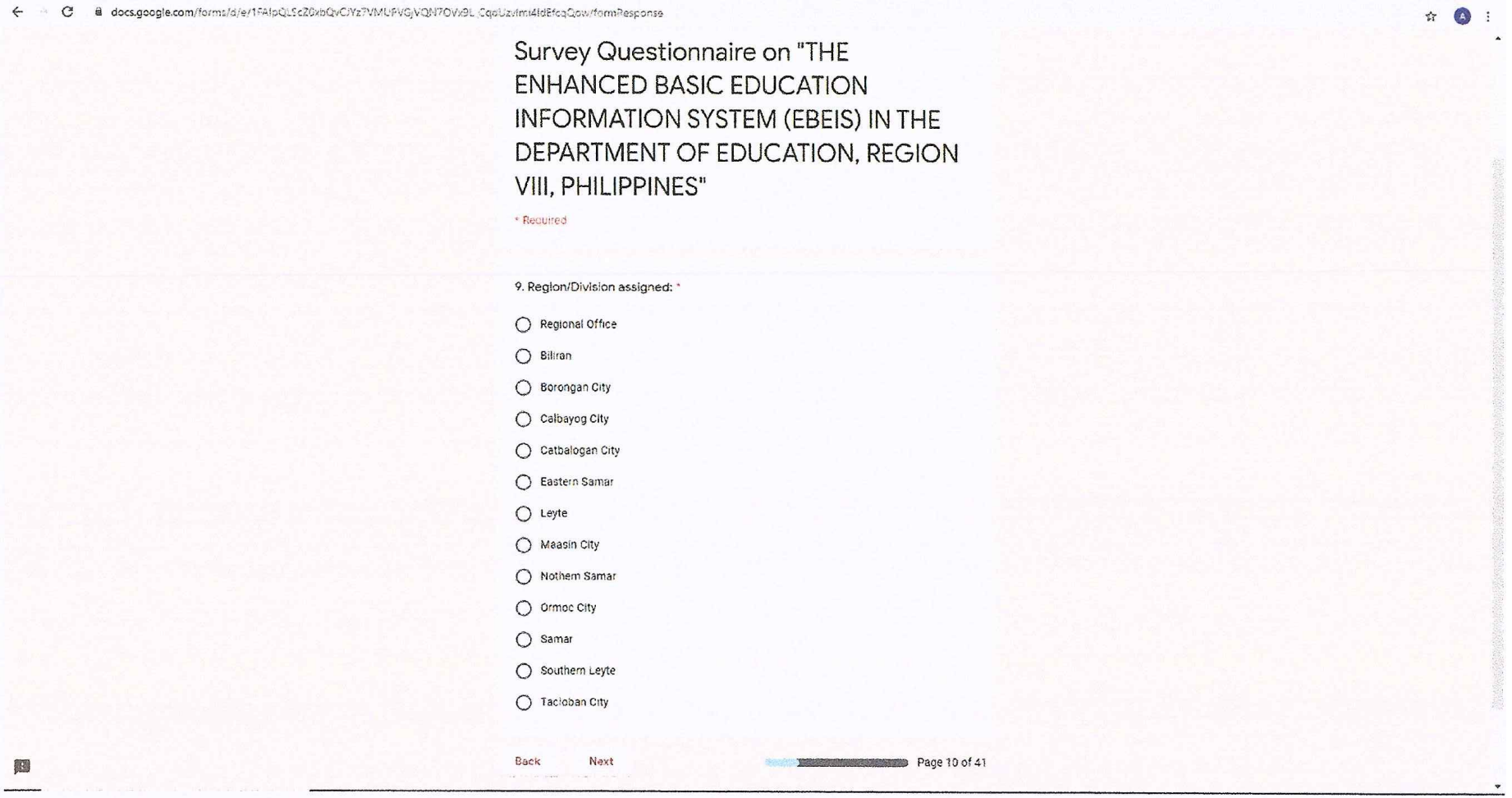
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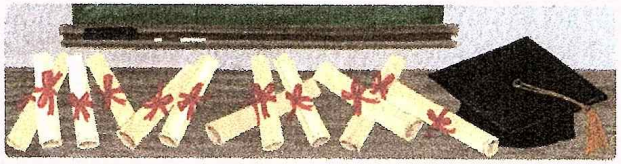
Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"
* Required
9. Region/Division assigned: *
Regional Office
Biliran
Borongan City
Calbayog City
Catbalogan City
Eastern Samar
Leyte
Maasin City
Nothern Samar
Ormoc City
Samar
Southern Leyte
Tacloban City
Back
Next
Page 10 of 41



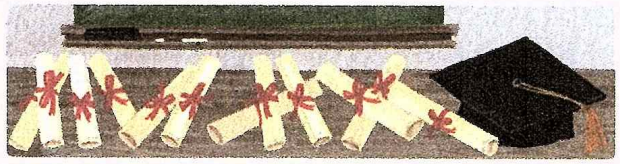
Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

10. Work Station: Please specify the complete name of your school/office. *

Your answer

Back Next Page 11 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

Part II. STATUS OF IMPLEMENTATION OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES

Please tick the circle under each number that corresponds to your assessment on the status of implementation of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII

Rate from 1 to 5 where

5 - Very Highly Implemented
4- Highly Implemented
3- Moderately Implemented
2 - Least Implemented
1 - Not Implemented

Back Next Page 12 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

A. ON EBEIS OBJECTIVES:

1. The objectives of the EBEIS are clearly defined and well disseminated.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.1 The objective that it engaged in school for encoding of school statistics in the EBEIS system is well carried out/met.

	1	2	3	4	5	
Not Implemented *	○	○	○	○	○	Very Highly Implemented

2.2 The objective that it strengthened the validation of data for accuracy purposes is carried out/met.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.3 The objective that it generated reports to support budget and plan formulation is carried out/met.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.4 The objective that it identified necessary adjustments and institutional support requirements to enhance EBEIS system effectiveness, efficiency, relevance and sustainability is carried out/met.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.5 The objective that it established an accurate and reliable data of schools which are vital on its planning, budgeting, allocation of resources and setting operational targets is carried out/met.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

3. The objectives of the EBEIS are disseminated to the clientele schools.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4.1 Mode of dissemination such as EBEIS Orientation is utilized.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

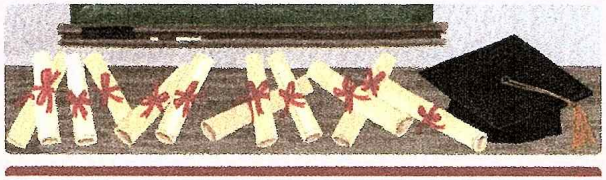
4.2 Mode of dissemination such as conduct of conference is utilized.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4.3 Mode of dissemination such as issuance of memorandum is utilized. *

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

Back Next Page 13 of 41

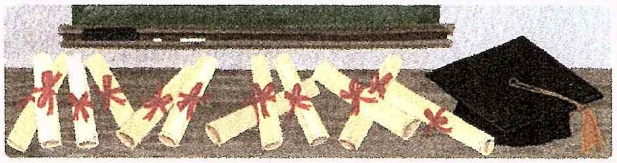


Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

4.4 Are there other mode of dissemination? If there is, please specify.

Your answer

Back Next Page 14 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

B. ON PROGRAMS/PROJECTS/ACTIVITIES. SCHOOL Level programs/projects/activities:

1. Collection of basic statistics data.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2. Validation of school data.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

3. Implementation of Beginning of the School Year (BOSY) and End of School Year (EOSY).

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4. Updating of the BOSY 2017-2018 and other data encoding requires EOSY 2016-2017 status.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5. Updating school information in the EBEIS.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6. Encoding of school data in the EBEIS.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

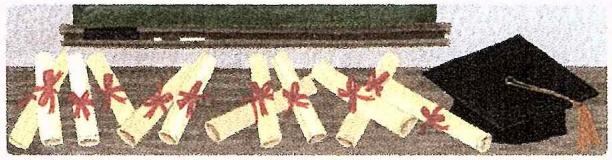
7. Submission of school statistics in the EBEIS.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8. Are there other programs/projects/activities implemented in the school level? If there is, please specify. *

Your answer

Back Next Page 15 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

DIVISION Level programs/projects/activities:

9. EBEIS Orientation to School Heads and ICT/EBEIS Coordinators.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

10. Creation of a Division Validation Team/Focal Persons

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

11. Division validation by the team/focal persons.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

12. On-line division validation of the EBEIS data.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

13. Monitoring and evaluation of EBEIS activities.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

14. Provision of technical assistance.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

15. Are there other programs/projects/activities implemented in the division level? If there is, please specify. *

Your answer

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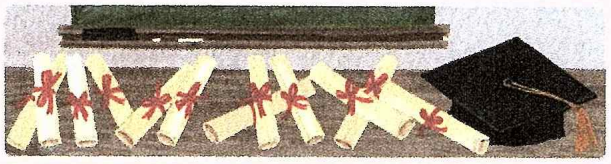

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

For the next option:

Are you one of the following? *

- ◯ School Head or ICT/EBEIS Coordinator
- ◯ SDS, SGOD or Region/Division Planning Officer

Back Next Page 17 of 41

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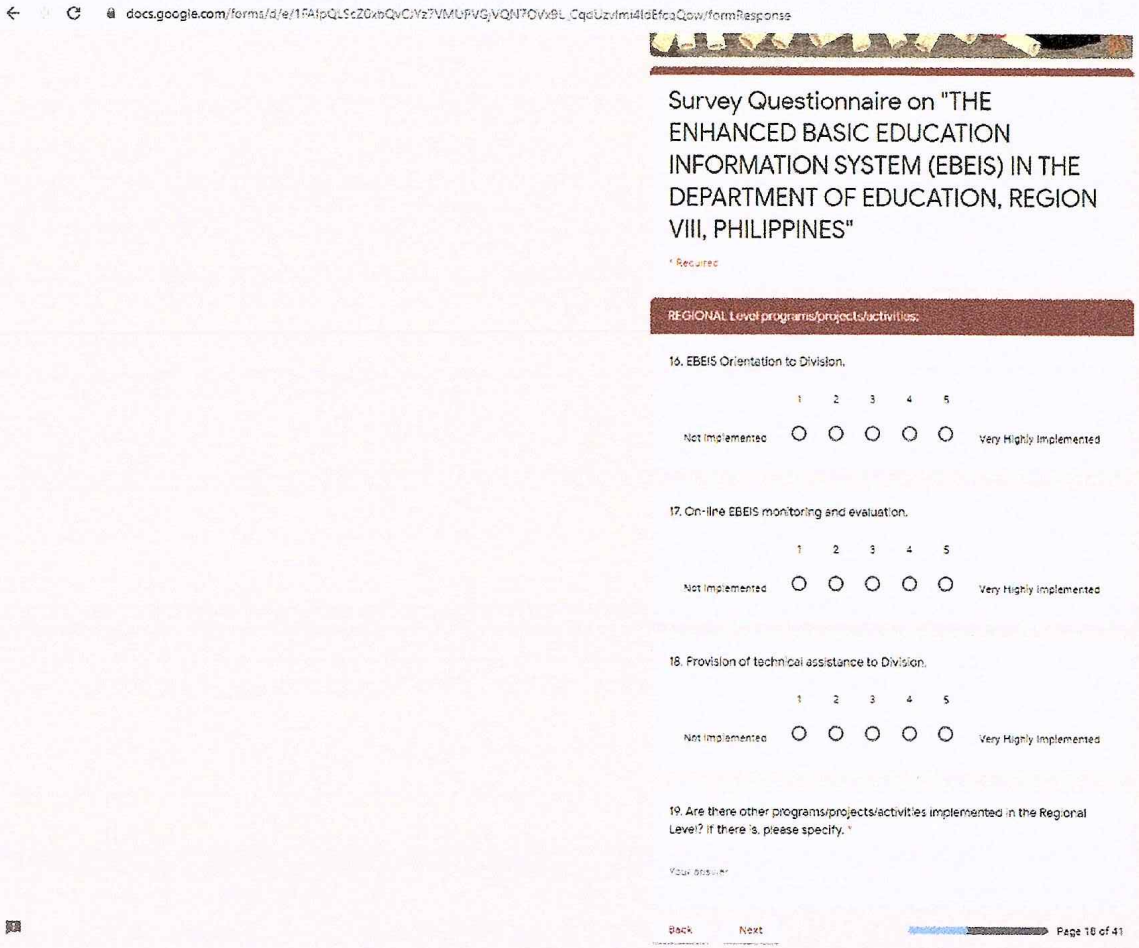

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

REGIONAL Level programs/projects/activities:

16. EBEIS Orientation to Division.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

17. On-line EBEIS monitoring and evaluation.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

18. Provision of technical assistance to Division.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

19. Are there other programs/projects/activities implemented in the Regional Level? If there is, please specify. *

Your answer

Back Next

Page 18 of 41

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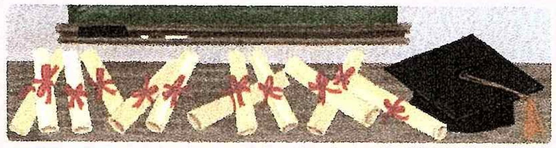


Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

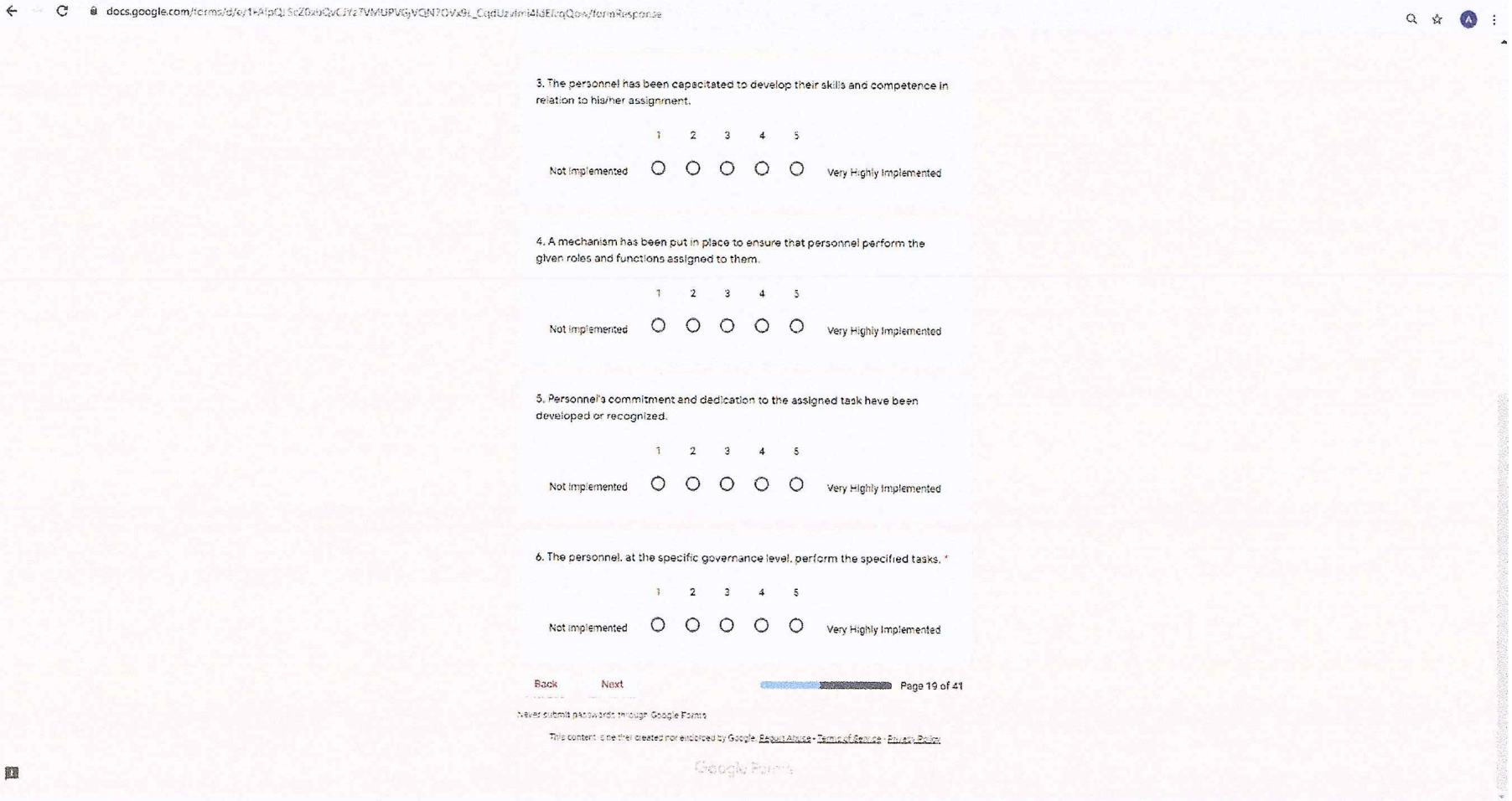
C. ON EBEIS PERSONNEL:

1. Sufficient number of personnel to carry-out the activities of EBEIS have been provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2. The personnel involved is provided with relevant seminars/trainings/workshops/orientation to implement the EBEIS.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented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3. The personnel has been capacitated to develop their skills and competence in relation to his/her assignment.
1 2 3 4 5
Not Implemented
Very Highly Implemented
4. A mechanism has been put in place to ensure that personnel perform the given roles and functions assigned to them.
1 2 3 4 5
Not Implemented
Very Highly Implemented
5. Personnel's commitment and dedication to the assigned task have been developed or recognized.
1 2 3 4 5
Not Implemented
Very Highly Implemented
6. The personnel, at the specific governance level, perform the specified tasks. *
1 2 3 4 5
Not Implemented
Very Highly Implemented
Back
Next
Page 19 of 41
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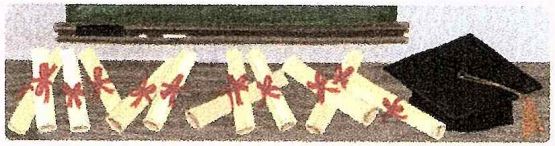


Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

School Level Personnel:

6.1 The school head utilizes the data gathering forms, which are vital in the collection of data.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.2 The school head properly updates the school profile.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.3 The school head ensures that the data submitted and maintained in the EBEIS are accurate and timely.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.4 The school head designates a School EBEIS Coordinator/ICT Coordinator.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

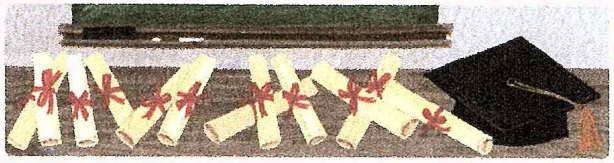
6.5 The school head monitors the progress of updating in the Learner Information System (LIS).

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.6 The school head ensures that data on learners in the LIS and in any form of storage are kept secured and protected from any unauthorized access. *

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

Back Next Page 20 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

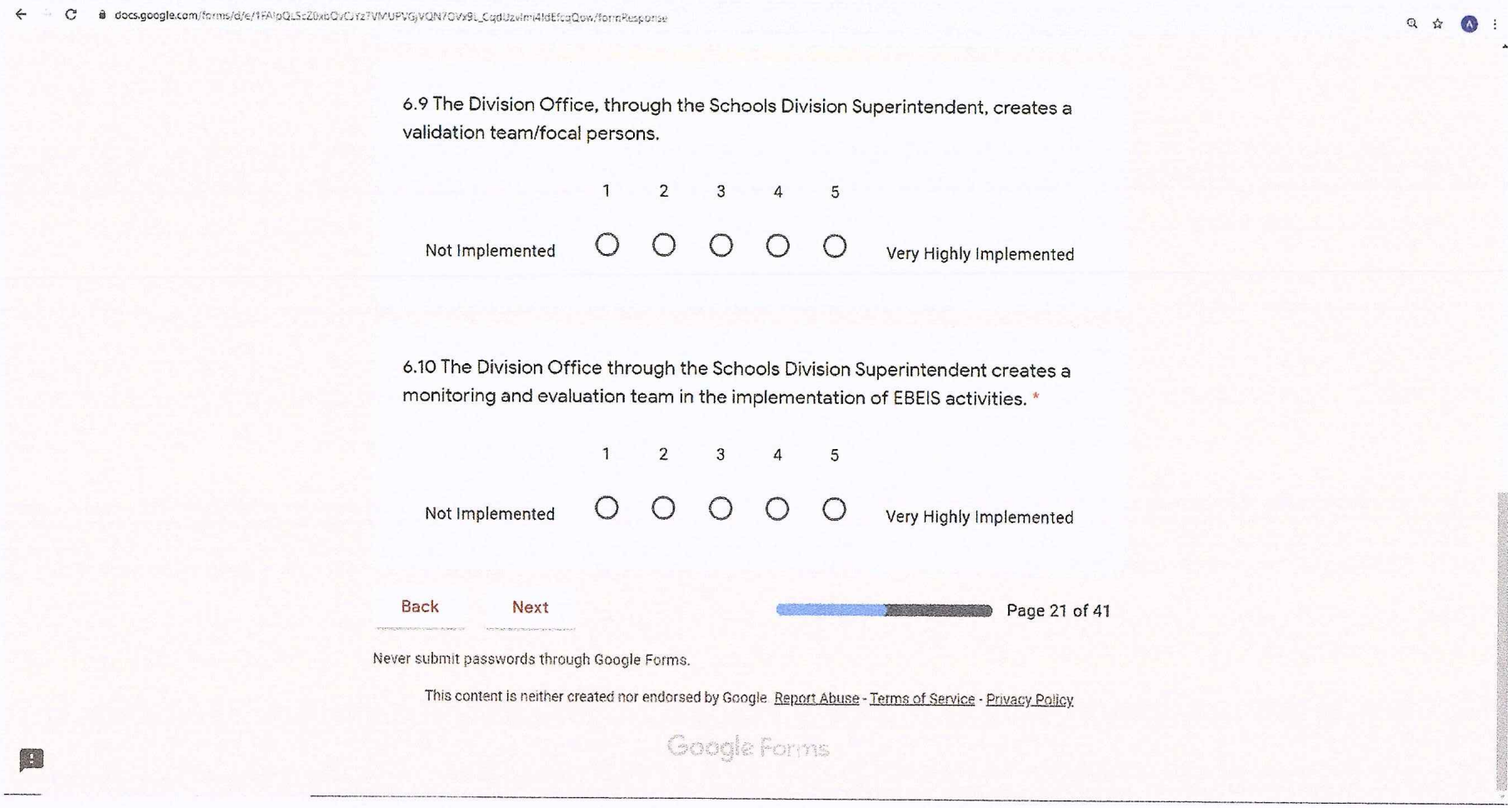
Division Level Personnel:

6.7 The Division Planning Officer ensures the quality of data and smooth implementation of information systems.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.8 The Division IT Officer or designated ICT coordinator provides technical assistance.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented



6.9 The Division Office, through the Schools Division Superintendent, creates a validation team/focal persons.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.10 The Division Office through the Schools Division Superintendent creates a monitoring and evaluation team in the implementation of EBEIS activities. *

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

Back Next Page 21 of 41

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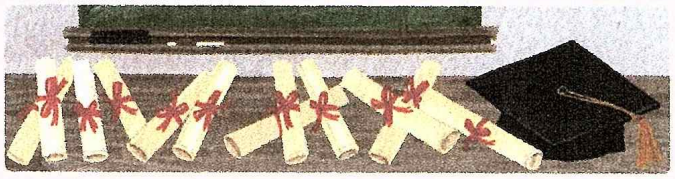


Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

For the next option:

Are you one of the following? *

- ◯ School Head or ICT/EBEIS Coordinator
- ◯ SDS, SGOD or Regional/Division Planning Officer

Back Next Page 22 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

Regional Level Personnel:

6.11 The Regional Planning Officer ensures the quality of EBEIS implementation in the region.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.12 The Regional IT Officer or designated ICT coordinator provides technical assistance.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.13 The Policy, Planning and Research Division (PPRD) personnel provide technical assistance (on-line/on-site) to school divisions during EBEIS activities.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

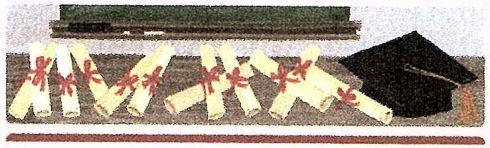
6.14 The Regional Office creates a monitoring and evaluation team during the EBEIS activity of the schools divisions.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6.15 The Regional Planning Officer and the Regional ICT Coordinator create a system access for a newly created division. *

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

Back Next Page 23 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

7. All the personnel involved in the Learner Information System (LIS) and EBEIS in all the schools, divisions, and regional office are allowed to render overtime (OR) services to meet the target schedule.

	1	2	3	4	5	
Not implemented	○	○	○	○	○	Very Highly Implemented

8. Service credits have been provided for the overtime services of the personnel involved during the EBEIS activity (encoding and submission).

	1	2	3	4	5	
Not implemented	○	○	○	○	○	Very Highly Implemented

9. Are there other activities/ concerns related to personnel? If there is, please specify. *

Your answer

Back Next Page 24 of 41

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ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

D. ON EBEIS BUDGET:

1. The funds are downloaded by the Central Office directly to the Division offices for implementation of LIS/EBEIS and other planning activities are utilized in accordance with its guidelines.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2. The funds that are downloaded by the Central Office is sufficient to finance the different EBEIS activities (orientation, coaching and mentoring, benchmarking and others)

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

3. The school head uses the Maintenance and Other Operating Expenses (MOOE) in financing the EBEIS activities.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4. Funds have been allocated for the overtime services of the persons involved in the EBEIS activities.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5. Other sources of funds utilized in the implementation of the EBEIS activities have been sourced out and utilized.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6. Communication allowance is provided to planning officer to follow-up the on-line submission of the school to meet the target date set by the Central Office.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemeted

7. Sufficient budget for the reproduction of the data gathering forms has been provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8. Liquidation reports are prepared for the expenses incurred in the EBEIS implementation.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

9. Are there other activities or concerns pertaining to Budget? If there is, please specify. *

Your answer

Back Next Page 25 of 41

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Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

E. ON EBEIS EQUIPMENT AND FACILITIES:

1. Computers, laptops and audio-visual materials are provided/made available during the EBEIS orientation.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2. Computers or laptops are made available for the EBEIS activities particularly during on-line encoding and submission at the school level.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

3. Computers or laptops are made available during on-line validation.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4. The equipment and facilities are ensured to be functional and usable.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5. Maintenance of IT software is regularly scheduled.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6. Sufficient number of IT facilities and equipment are made available.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

7. Internet access is made available in the school in doing the on-line encoding and submission of data and information in the EBEIS.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8.1 The EBEIS activities like encoding, submission and validation is usually done at the SCHOOL.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8.2 The EBEIS activities like encoding, submission and validation is usually done at the DIVISION.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8.3 The EBEIS activities like encoding, submission and validation is usually done at HOME.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8.4 The EBEIS activities like encoding, submission and validation is usually done at the INTERNET CAFE.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

8.5 The EBEIS activities like encoding, submission and validation is usually done using a CELLPHONE/MOBILE DATA.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

9. Are there other ways wherein EBEIS activities are done? If there is, please specify. *

Your answer

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

F. ON EBEIS ICT INFRASTRUCTURE SUPPORT:

1. A room for gadgets and equipment is provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.1 Internet connection is made available in the DIVISION.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.2 Internet connection is made available at the SCHOOL.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.3.1 Internet connection is made available in the COMMUNITY like a free Wi-Fi.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.3.2 Internet connection is made available in the COMMUNITY like an Internet Cafe

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2.3.3 Internet connection is made available in the COMMUNITY like other Internet access.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

3. Technical support acts as a liaison on technical matters.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4. The Division Office have ICT Hubs to conduct ICT based systems/initiatives.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5.1 Equipment and connectivity mechanism such as desktop or laptop is provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5.2 Equipment and connectivity mechanism such as tablet or smartphone is provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5.3 Equipment and connectivity mechanism such as internet modem or Wi-Fi facility is provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5.4 Equipment and connectivity mechanism such as funds to pay monthly Internet Service Provider (ISP) subscription or reimbursement for internet usage is provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

5.5 Equipment and connectivity mechanism such as IT Hub or ICT equipped centerworking station is provided.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6. Are there other ICT infrastructure support in your area? If there is, please specify. *

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

Back Next Page 27 of 41

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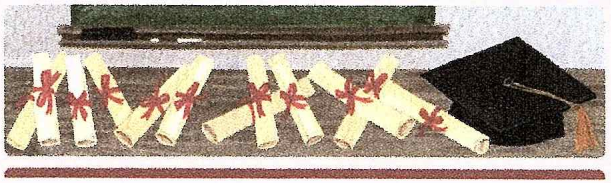


Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

G. ON EBEIS MONITORING AND EVALUATION:

1. The Division Office provides monitoring tool to be utilized by the monitoring and evaluation team for EBEIS activities.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

2. The Division Office creates a monitoring and evaluation team or focal persons to monitor the conduct of the EBEIS orientation to school heads and ICT coordinators.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

3. The Division Planning Officer conducts on-line monitoring on the status of submission of the schools, as basis for the provision of technical assistance.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

4. The Policy, Planning and Research Division through the Regional Planning Officer conducts on-line monitoring as to the status of submission and validation of the schools divisions, as basis for the provision of technical assistance.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

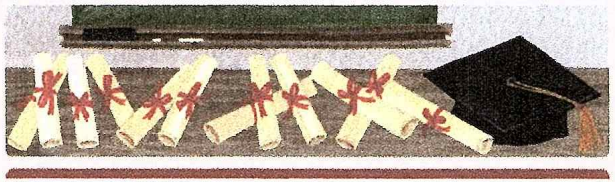
5. The monitoring team reports the findings as basis for the problem-resolution and policy recommendations.

	1	2	3	4	5	
Not Implemented	○	○	○	○	○	Very Highly Implemented

6. Are there other monitoring and evaluation activities done in your area? If there is, please specify. *

Your answer

Back Next Page 28 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

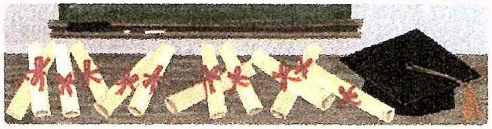
Part III. RESPONDENTS' ASSESSMENT OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS)

Please tick the circle under each number that corresponds to your assessment of the Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII

Rate from 1 to 5 where

5 Strongly Agree
4 Agree
3 Neutral
2 Disagree
1 Strongly Disagree

Back Next Page 29 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

A. USER FRIENDLINESS:

1. The instructions and steps can be easily remembered and followed.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. The messages and instructions are easy to understand and learn.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. The response time is acceptable as long as internet connection and device are of standard quality.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. The user interface is intuitive.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5. The EBEIS is user-friendlyeasy to use.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

6. The EBEIS software is easy to learn and flexibleadjustable.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

7. The system provides the precise information needed.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

8. Are there other indicator of EBEIS in terms of its user-friendliness? If there is, please specify *

Your answer

Back Next Page 30 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

B. ACCESSIBILITY:

1. There is a restriction in the accessibility of the EBEIS.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. The username and password are required by the accountable person in accessing data and information from the EBEIS.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. The school head is the accountable person to open and encode the data and information in the EBEIS.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. The school head is required to use his/her username and password in order to access the EBEIS

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5. The school head has the access in the school level data and information in the EBEIS.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

6. The ICT/EBEIS Coordinator has the access to open the account of the school.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

7. The Division Planning Officer has the access to open the account of the division and the school in the EBEIS.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

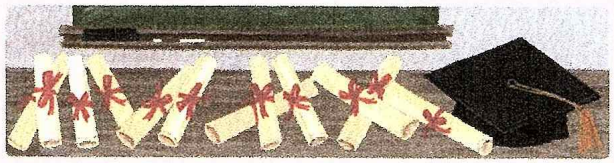
8. The internal and external stakeholders can only view the data and information in the EBEIS.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

9. Are there other indicator of EBEIS in terms of accessibility? If there is, please specify *

Your answer

Back Next Page 31 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

C. REPORT ACCURACY:

1. The system generates verifiable reports.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. The output generated often satisfies the EBEIS user.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. The generated data, through the EBEIS is consistent with the actual data.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. The EBEIS provides reports that seem to be just about exactly what is needed.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

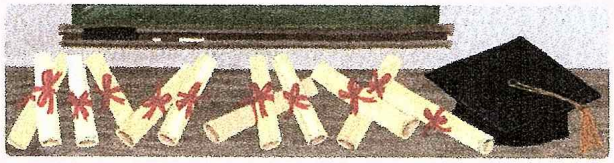
5. Data and information generated through the EBEIS is reliable.

	1	2	3	4	5	
Strong Disagree	○	○	○	○	○	Strongly Agree

6. Are there other Indicator of EBEIS pertaining to report accuracy? If there is, please specify. *

Your answer

Back Next Page 32 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

PART IV. THE IMPACT OF THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII

Please give your honest assessment on the impact of EBEIS in DepED Region VIII. Please tick the circle under each number that corresponds to your assessment. Rate according to the following:

5 Strongly Agree
4 Agree
3 Neutral
2 Disagree
1 Strongly Disagree

Back Next Page 33 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

A. EFFICIENCY:

1. EBEIS data and information are the basis for fast decision-making of the managers.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. EBEIS data and information are readily available.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. Historical data are always available.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. EBEIS data and information are regularly updated.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5. EBEIS data are accessible when needed.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

6. EBEIS data generate accurate reports

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

7. Data being collected are always attuned to present needs.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

8. Are there other impact of EBEIS related to its Efficiency? If there is, please specify. *

Your answer

Back Next Page 34 of 41

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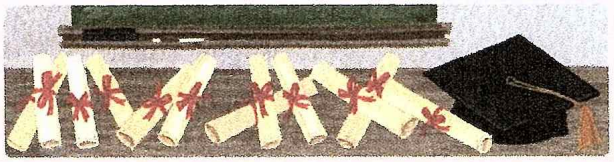


Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

B. EFFECTIVENESS:

1. Information from the EBEIS meets user's needs.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. EBEIS provides relevant and necessary information.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. EBEIS data ensure prompt, complete and accurate information needed.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. EBEIS is equipped with useful features and functions.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5.1 Data and information generated through the EBEIS are bases for appropriate data-driven decisions of managers.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5.2 Data and information generated through the EBEIS are bases for relevant decision-making of the managers.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5.3 Data and information generated through the EBEIS are bases for reliable decision-making of the managers.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

6. EBEIS conforms the user's feedback and requirement.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

7. EBEIS eliminates manual consolidation of data.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

8. Are there other impact of EBEIS pertaining to its effectiveness? If there is, please specify. *

Your answer

Back Next Page 35 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

C. RELEVANCE:

1.1 Reports generated through the EBEIS are bases for PLANNING.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

1.2 Reports generated through the EBEIS are bases for BUDGETING.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

1.3 Reports generated through the EBEIS are bases for RESOURCES ALLOCATION.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

1.4 Reports generated through the EBEIS are bases for POLICY RECOMMENDATION.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

1.5 Reports generated through the EBEIS are bases for RELIABLE AND APPROPRIATE DATA-DRIVEN DECISION MAKING.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

1.6 Reports generated through the EBEIS are bases for PROVISION OF TECHNICAL ASSISTANCE.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

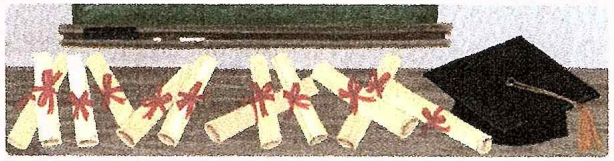
1.7 Reports generated through the EBEIS are bases for STAKEHOLDER'S REFERENCE.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

1.8 Are there other impact of EBEIS pertaining to its relevance?If there is, please specify. *

Your answer

Back Next Page 36 of 41



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

D. TIMELINESS:

1. Data and information in the EBEIS are up-to-date.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. EBEIS facilitates promptness for data generation.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. EBEIS data like performance indicators and education statistics are timely generated.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. EBEIS data is submitted and validated within the scheduled time-frame

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

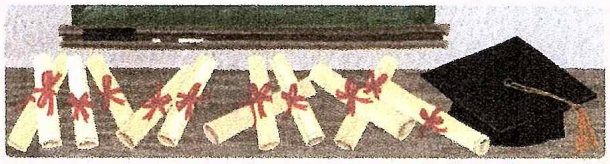
5. EBEIS data are made available and verifiable when needed/opportune time.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

6. Are there other impact of EBEIS pertaining to its timeliness? If there is, please specify. *

Your answer

Back Next Page 37 of 41



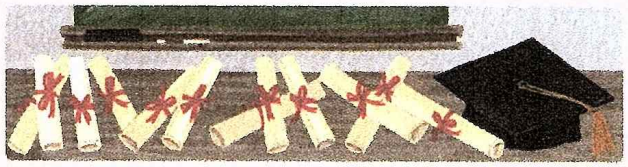
Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

PART V. PROBLEMS ENCOUNTERED BY THE EBEIS IMPLEMENTERS

Please give your perception as to the problems you encountered in the implementation of EBEIS in your school/division.
Rate the problems according to the following:

5 - Most Serious Problem
4 - More Serious Problem
3 - Serious Problem
2 - Less Serious Problem
1 - Not a Serious Problem at all

Back Next



Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

Problems encountered at SCHOOL Level:

1. No internet connection.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

2. Poor or weak internet access.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

3. Presence of system problems during on-line encoding.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

4. Lack of time of the school ICT/EBEIS coordinator in encoding and submission of reports.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

5. Over-loaded school ICT/EBEIS coordinator of additional assignments/loads

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

6. Lack if not absence of IT technical know-how of school head.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

7. Indifference of some School Heads to the EBEIS Program.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

8. Manipulation of EBEIS school data.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

9. Insufficient funds for internet expenses.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

10. Data from the EBEIS like School Report Card cannot be downloaded immediately or not available.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

11. Are there other problems encountered at the SCHOOL Level by the EBEIS Implementers? If there is, please specify. *

Your answer

Back Next Page 39 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

Problems encountered at DIVISION Level:

12. Lack of time of the Planning Officer to analyze data due to other tasks assigned or overlapping work.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

13. Lack of manpower of the Planning and Research Unit to validate the data submitted by the school.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

14. Inadequate knowledge and skill of the Planning Officer to manipulate the EBEIS.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

15. Erroneous or incomplete data submitted by some of the schools or school heads.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

16. Delayed submission of reports in hard copies and on-line by the school.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

17. Low Internet access hinders on-line validation at the division level.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

18. Presence of system problem.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

19. Are there other problems encountered at the Division Level by the EBEIS implementers? If there is, please specify. *

Your answer

Back Next Page 40 of 41

Survey Questionnaire on "THE ENHANCED BASIC EDUCATION INFORMATION SYSTEM (EBEIS) IN THE DEPARTMENT OF EDUCATION, REGION VIII, PHILIPPINES"

* Required

Problems encountered at the REGIONAL Level:

20. Lack of time in the provision of technical assistance to the Schools Divisions.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

21. Passive attitude of some division planning officer to monitor and follow-up the EBEIS status of schools submission.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

22. Late downloading of funds from the central office intended for EBEIS regional activities.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most serious Problem

23. Internet traffic during simultaneous encoding in the EBEIS.

	1	2	3	4	5	
Not a Serious Problem at all	○	○	○	○	○	Most Serious Problem

24. Are there other problems encountered by EBEIS implementers at the regional level? If there is, please specify? *

Your answer

Send me a copy of my responses.

Back Submit Page 41 of 41

APPENDIX D

FOCUS GROUP DISCUSSION (FGD) GUIDE FOR TOP MANAGERS AND IMPLEMENTERS

Part I. Facilitator's Welcome, Introduction and Instructions to participants.

Welcome and thank you for being part in this focus group discussion. You have been asked to participate as your point of view is very important. I realize that you are busy and I appreciate your time.

My name is Rita Reyes-Dimakiling. I am a doctoral student of Samar State University, Catbalogan City, Samar and I am presently writing my dissertation entitled, "The Enhanced Basic Education Information System (EBEIS) in the Department of Education, Region VIII, Philippines." Assisting me is Ms. Carol C. Ocenar, A Senior High School Teacher of Hinabangan National High School.

Part II. Participants' Introduction

First, I'd like everyone to introduce themselves. Can you tell us your name, your school assignment, position and the grade level you are teaching? Or if you are assigned in DepEd Division Office, tell us your name and position.

Part III. Introduction

This focus group discussion is designed to assess your current thoughts and feelings on the implementation of the "Enhanced Basic Education Information System (EBEIS) in Region VIII." The focus group discussion will take no more than two hours. May I record the discussion to facilitate the collection of data or information? (if yes, switch on the recorder).

Anonymity: Despite being recorded, I would like to assure you that the discussion will be anonymous. The recorder will be kept safely in a locked facility until they are transcribed word for word, then they will be destroyed. The transcribed notes of the focus discussion will contain no information that would allow individual subjects to be linked to specific statements.

You should try to answer and comment as accurately and truthfully as possible.

I and the other focus group discussion participants would appreciate it if you would refrain from discussing the comments of other group members outside the focus group. If there are any questions or discussions that you do not wish to answer or participate in the discussion you do not have to do so; however please try to answer and be as involved as possible.

Ground Rules:

- The most important rule is that only one person speaks at a time.
- There may be a temptation to jump in when someone is talking but please wait until they have finished.
- There are no right or wrong answers.
- Do not have to speak in any particular order.
- When you do have something to say, please do so. There are many of you in the group and it is important that I obtain the views of each of you.
- You do not have to agree with the views of other people in the group.
- Does anyone have any questions? Answer.
- Ok, let's begin.

Part IV. Introductory Question

I am just going to give you couple of minutes to think about your experience in the implementation of the EBEIS in the Division or School.

FGD Guide Questions:

1. What is your idea on the Enhanced Basic Education Information System (EBEIS)? Can you explain your answer?
2. Do you believe that EBEIS is an absolute necessity in managing your school? Is it a necessity in school? Why? Or Why not?
3. When you were hired as Planning Officer what support did you expect from the top management? Do you think you will be supported by your head?
4. When were given tasks as ICT or EBEIS coordinator as an additional tasks or assignment did you find it difficult or burden in your part?
5. Have you conducted overtime activities for EBEIS? What did you do?
6. Where do you get the funds for the overtime pay of personnel who are involved in the EBEIS activities? How did you get it?
7. Does your ICT or EBEIS coordinator assist you in your EBEIS activities? In what ways?
8. What problems have you encountered in the implementation of EBEIS? In what ways?
9. Do you have internet access in your School? Division Office?
10. How do you assess the quality of data generated in the EBEIS in terms accuracy and timeliness?
11. What possible strategies would you suggest or recommend in order to improve the EBEIS implementation?

Part V. Concluding Statement

Thank you for participating. This has been a very successful discussion. Your opinions will be a valuable asset to the study. We hope you have found the discussion interesting.

I would like to remind you that any comments featuring in this report will be anonymous.

Before you leave, please hand in your completed personal details questionnaire.

That ends our discussion. Thank you for your wholehearted cooperation.

RITA R. DIMAKILING
Researcher

APPENDIX E

FOCUS GROUP DISCUSSION TRANSCRIPTION

GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
1. What is your idea on the Enhanced Basic Education Information System (EBEIS)? Can you explain your answer?	**Participant A** *In my idea, EBEIS was created in order to come up with a more accurate and honest reporting of data in every institution. Before, we cannot depend the report on enrollment data of a particular school or institution because in the past some report was incorrect and some school heads are not reporting the correct data.*	
	Participant B *I do believe that EBEIS is a system that can generate accurate data, access school data such as performance indicators of the school or institution and the division. I'd like also to focus on the word enhanced because of its fastest and easiest way of sending the data from the school or institution to the district, division, region and even in the central office.*	
	Participant C *My idea on EBEIS, it is a system that monitors and evaluate in terms of access, quality and governance. It is also the basis for planning and budgeting purposes. The content in the EBEIS shows in the different levels of governance.*	
	Participant D *EBEIS is a storage of all the data in the specific school or institution. It keeps all the records of the school.*	
2. Do you believe that EBEIS is an absolute necessity in	**Participant A**	

GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
managing your school? Is it a necessity in school? Why? Or Why not?	*Yes, EBEIS is really a necessity for us school heads in managing our school because we can easily generate data. It is a source of almost all the data regarding our school that can really help in decision-making.*	
	Participant B *Yes, I agree that EBEIS is an absolute necessity in terms of data retrieval and school heads can easily grasp the performance of the school with the help of the data generated from the system.*	
3. When you were hired as Planning Officer what support did you expect from the top management? Do you think you will be supported by your head?	**Participant A** *Yes, 100% support were given by the management, we don't have problem with EBEIS activities or trainings and we were trusted by the top management.*	
	Participant B *Yes, we were given full support by the top management particularly the Schools Division Superintendent and Assistant Schools Division Superintendent. Everyone supported us in terms of EBEIS trainings.*	
4. When were given tasks as ICT or EBEIS coordinator as an additional tasks or assignment did you find it difficult or burden in your part?	**Participant A** *It's not a burden being an ICT or EBEIS coordinator as an additional tasks or assignment but the problem is our location wherein very far and no network or signal. So, we are having problem with accessibility of internet connection particularly during EBEIS encoding and submission to meet the deadline set by the central office.*	

GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
	Participant B *Not a burden, because on my part, my school head is the first one to enter the needed data in a hard copy template then he will give it to me then I will be the one to enter into the system. I'm pretty sure that the data that I encoded are all accurate.*	
	Participant C *I don't consider being an ICT or EBEIS coordinator a burden but the only problem is, there are some teachers when it comes to data gathering and submission, they are having problems in meeting the deadline. This is the reason that we could hardly meet the deadline set by the central office.*	
	Participant D *Also, another problem was the late submission of the teachers who own the data for EBEIS encoding.*	
	Participant E *An Office Order must be issued by the school head specifying the roles and accountabilities of the teachers in the implementation of the EBEIS.*	
5. Have you conducted overtime activities for EBEIS? What did you do?	**Participant A** *Yes, most of the time we conducted overtime EBEIS activities particularly during Beginning of School Year (BOSY) and the End of School Year (EOSY) to meet the deadline set by DepEd Central Office.*	
	Participant B *Yes, we conducted overtime EBEIS activity specially when globe has poor internet access during day time.*	

GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
	Participant C *Internet only gets fast transmission during early morning or 12 midnight. So, we need to be awake during night time just to have our encoding on-line.*	
	Participant D *"Error 505" appeared in the desktop of the computer indicating that there is system problem.*	
	Participant E *It's about time for the DepEd Central Office to increase the MBPS capacity of the system because the connection is very low particularly if there is simultaneous encoding in the system that resulted to internet traffic or system problem.*	
6. Where do you get the funds for the overtime pay of personnel who are involved in the EBEIS activities? How did you get it?	**Participant A** *We get from the DepEd Central Office downloaded funds charge to LIS or EBEIS fund per DepEd Order issuance for the overtime pay of personnel who are involved in the EBEIS activities. However, the fund is only for the division personnel only.*	
	Participant B *As school head, I give compensatory time off (CTO) and internal arrangement are being made and I always make memorandum in the school level or I request from the division office whenever I will be issuing service credit to teachers who will render overtime activities.*	
	Participant C *To the management, there is a need to request to the Division Office compensatory time off (CTO) or*	

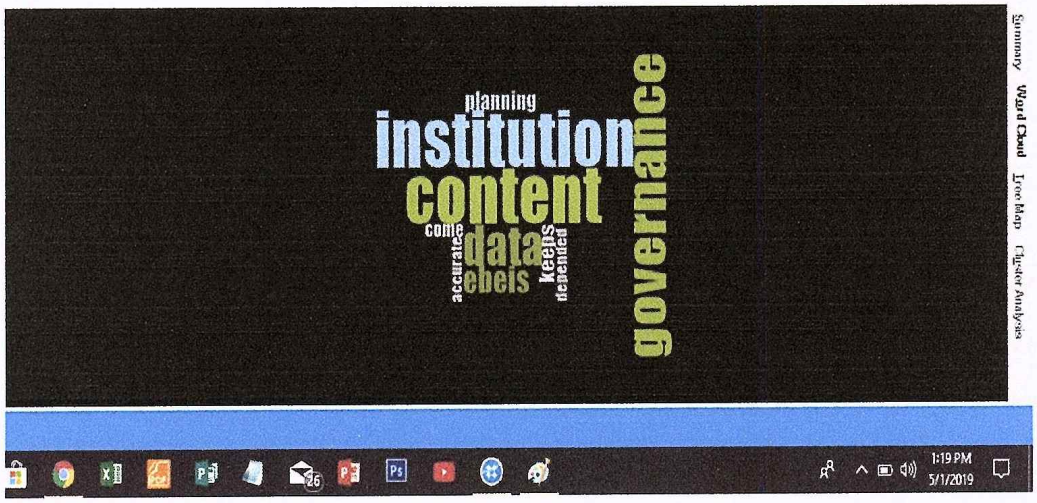
GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
	service credit to those who will render overtime EBEIS activities.	
7. Does your ICT or EBEIS coordinator assist you in your EBEIS activities? In what ways?	***Participant A*** *Yes, our ICT coordinator provided technical assistance during EBEIS activities or as needed.*	
	Participant B *Our ICT or EBEIS coordinator gives or provides technical assistance when needed and even 24/7 duty. One call or chat away, immediately they provided technical assistance.*	
8. What problems have you encountered in the implementation of EBEIS? In what ways?	**Participant A** *Mostly, accessibility of internet connection is our problem. The very reason for having hard time in sending the data on-line so we opt to visit the internet café to send the data.*	
	Participant B *We encountered system error 401, 501 and 599. So even though there is internet connection but the system cannot be opened due to system problem. Also, it causes delays in the on-line encoding and submission and it is beyond our control.*	
9. Do you have internet access in your School? Division Office?	**Participant A** Our school doesn't have internet connection and there is no available internet connection in our area or location. We have pocket Wi-Fi but the connection is very slow so we just go to Division Office to access the internet during weekend.	

GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
	Participant B Yes, we have internet access in the Division Office but sometimes we encountered system problems.	
10. How do you assess the quality of data generated in the EBEIS in terms accuracy and timeliness?	**Participant A** *In terms of data accuracy generated from EBEIS, yes it is 100% accurate because when you input a correct data you will also generate an accurate data. The theory of Garbage IN-Garbage OUT is also applied. Before you encode the data in the system, you need to screen or validate it in order to generate accurate data.*	
	Participant B *We are disappointed that the performance indicators that is generated from the system is sometimes not available due to system problem or late. This will affect the late decision-making of the managers.*	
11. What possible strategies would you suggest or recommend in order to improve the EBEIS implementation?	**Participant A** *We need to tap knowledgeable person on EBEIS to lead in the conduct of division level capability building.*	
	Participant B *We demand that the school should initiate in the conduct of school-level capability building specially if there is additional or new feature in the system. This is the responsibility of the school head. There is also a need to tap knowledgeable person in the conduct of capability building.*	

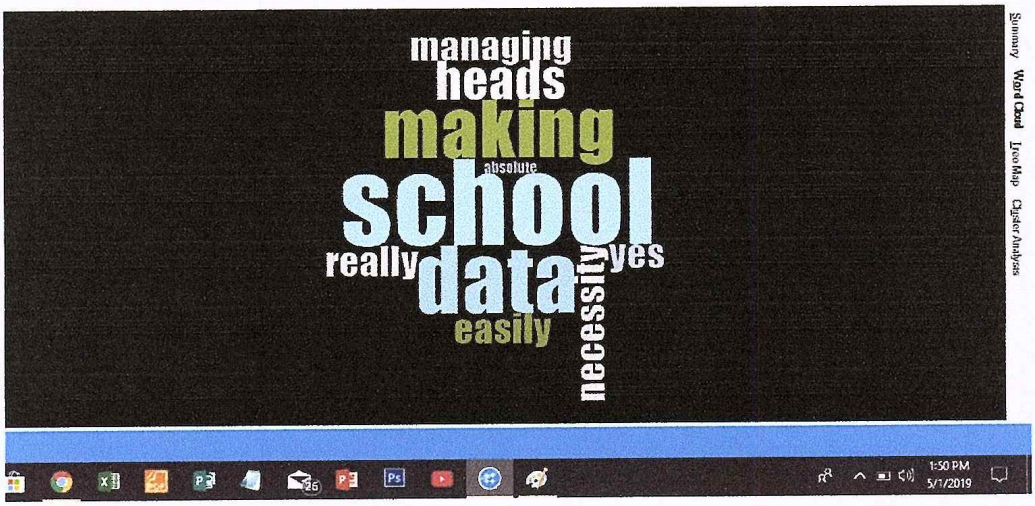
GUIDE QUESTIONS	ANSWER OF THE FGD PARTICIPANTS	REMARKS
	Participant C *School heads need to tap network internet service provider during EBEIS activity and for easy access so work will not be affected.*	

APPENDIX F

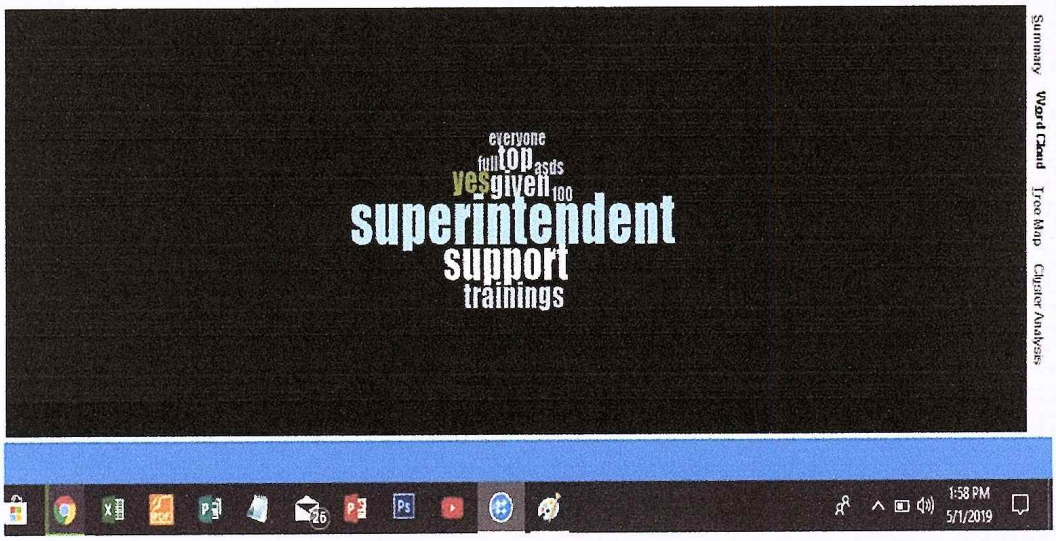
WORD CLOUD AND CLUSTER ANALYSIS RESULTS FOR THE FOCUS GROUP DISCUSSION (FGD)



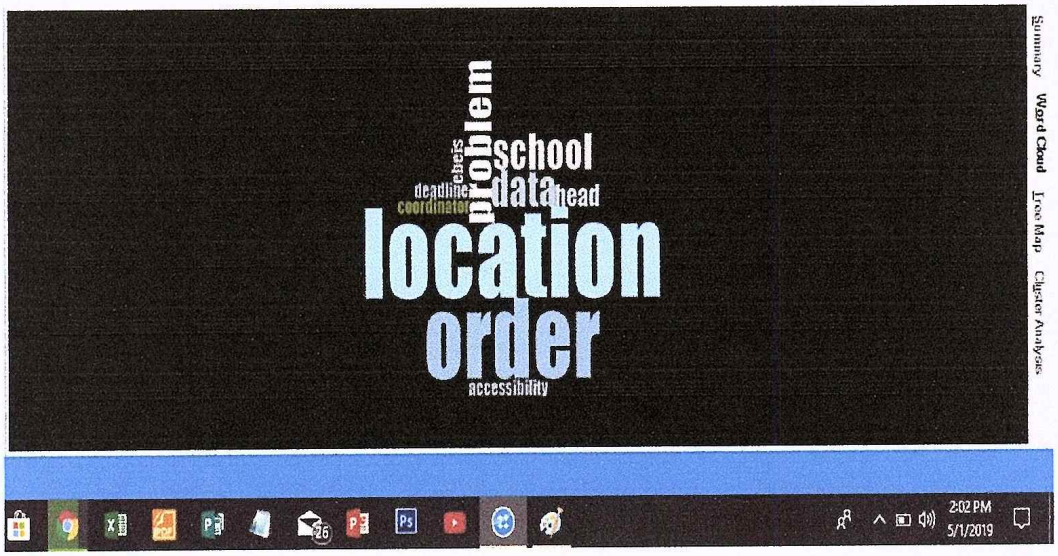
Question No. 1 What is your idea on the Enhanced Basic Education Information System (EBEIS)? Can you explain your answer?



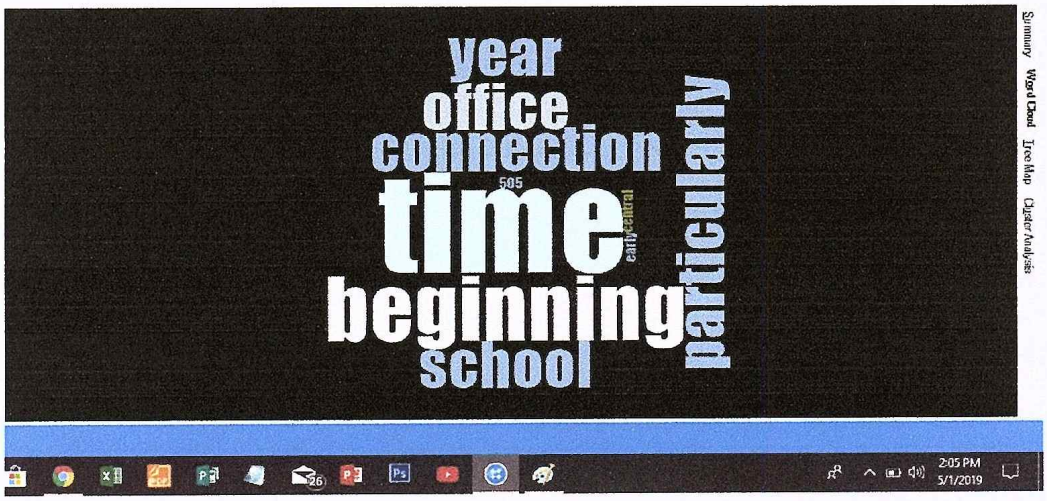
Question No. 2 Do you believe that EBEIS is an absolute necessity in managing your school? Is it a necessity in school? Why? or Why not?



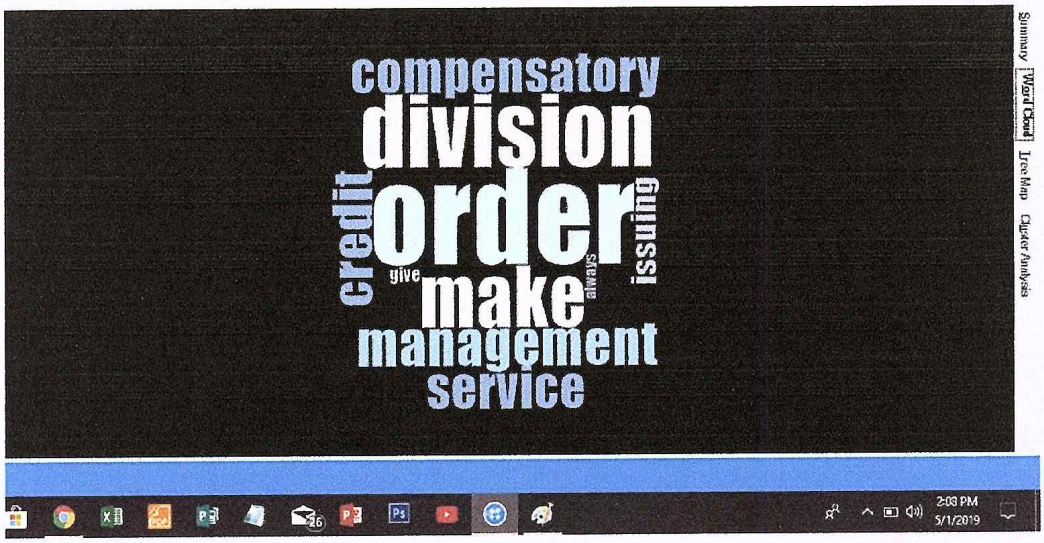
Question No. 3 When you were hired as Planning Officer what support did you expect from the top management? Do you think you will be supported by your head?



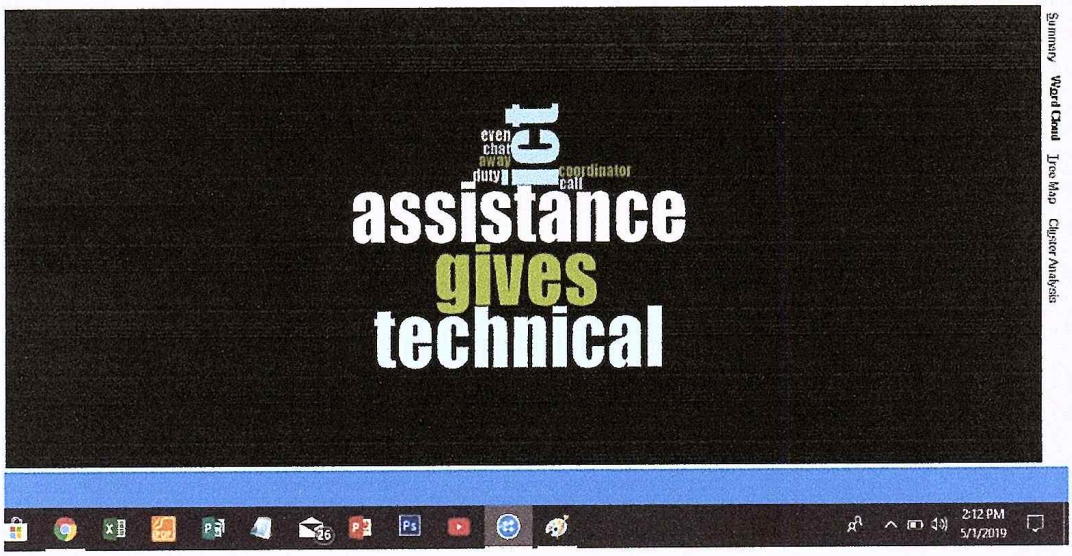
Question No. 4 When were given tasks as ICT or EBEIS coordinator as an additional tasks or assignment did you find it difficult or burden in your part?



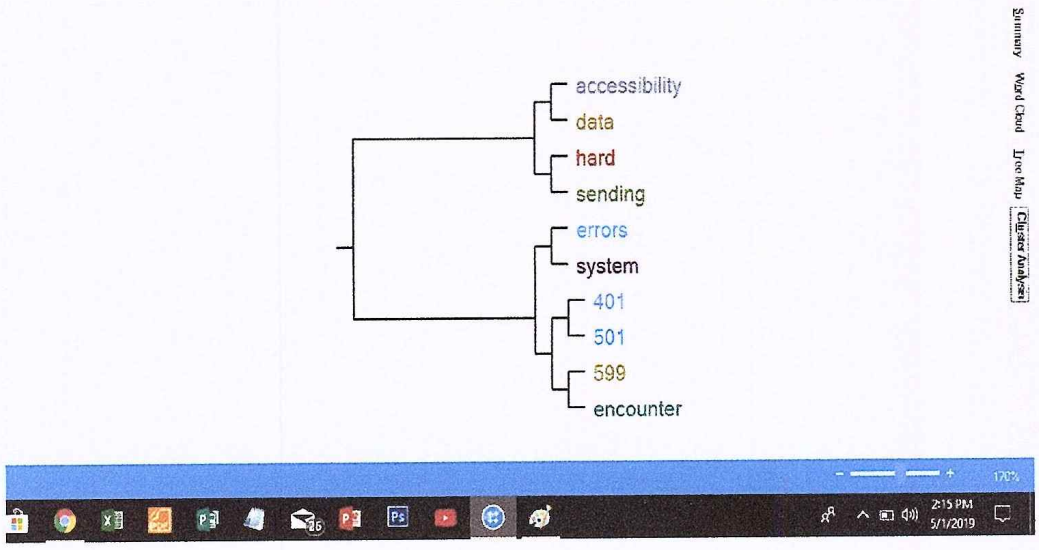
Question No. 5 Have you conducted overtime activities for EBEIS? What did you do?



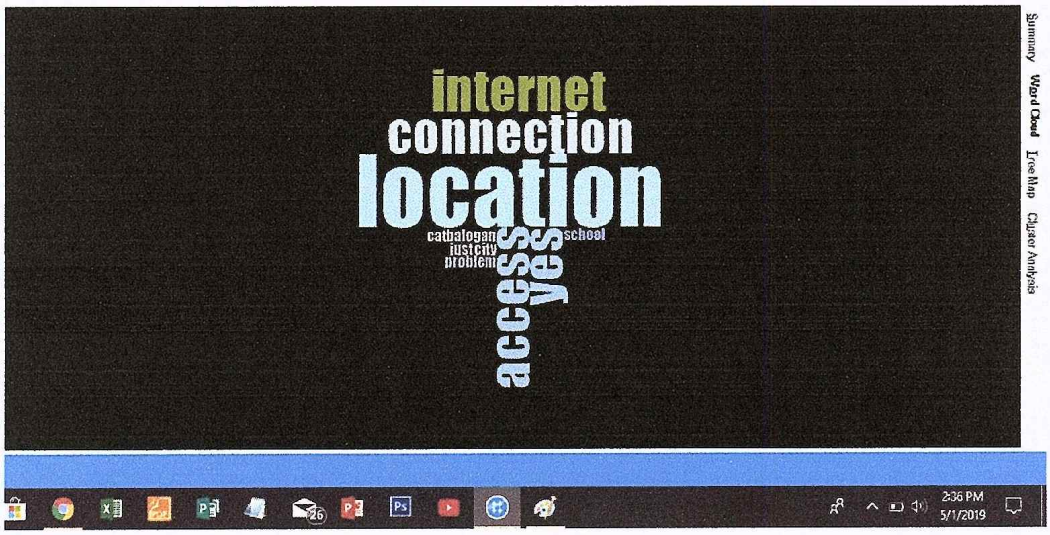
Question No. 6 Where do you get the funds for the overtime pay of personnel who are involved in the EBEIS activities? How did you get it?



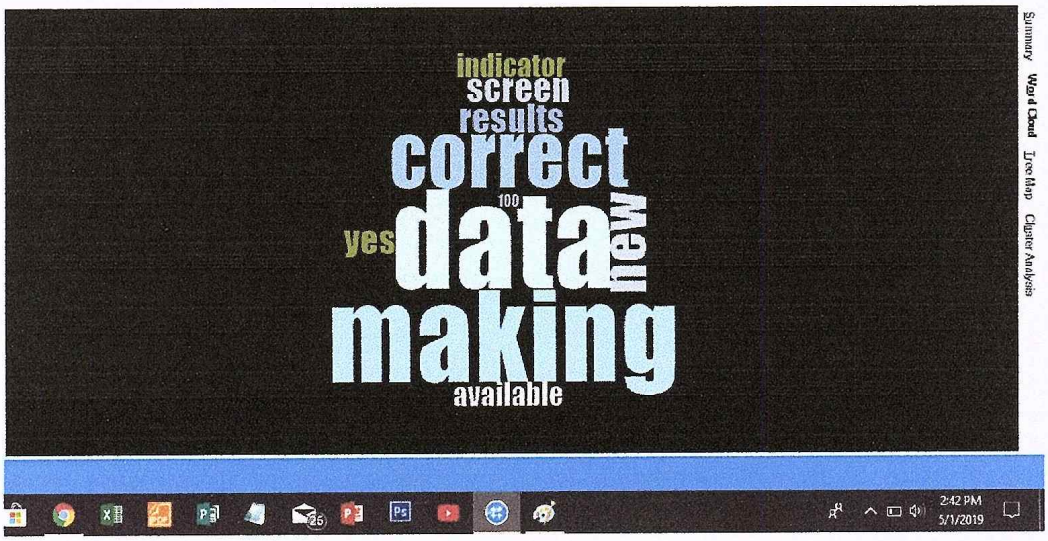
Question No. 7 Does your ICT or EBEIS coordinator assist you in your EBEIS activities? In what ways?



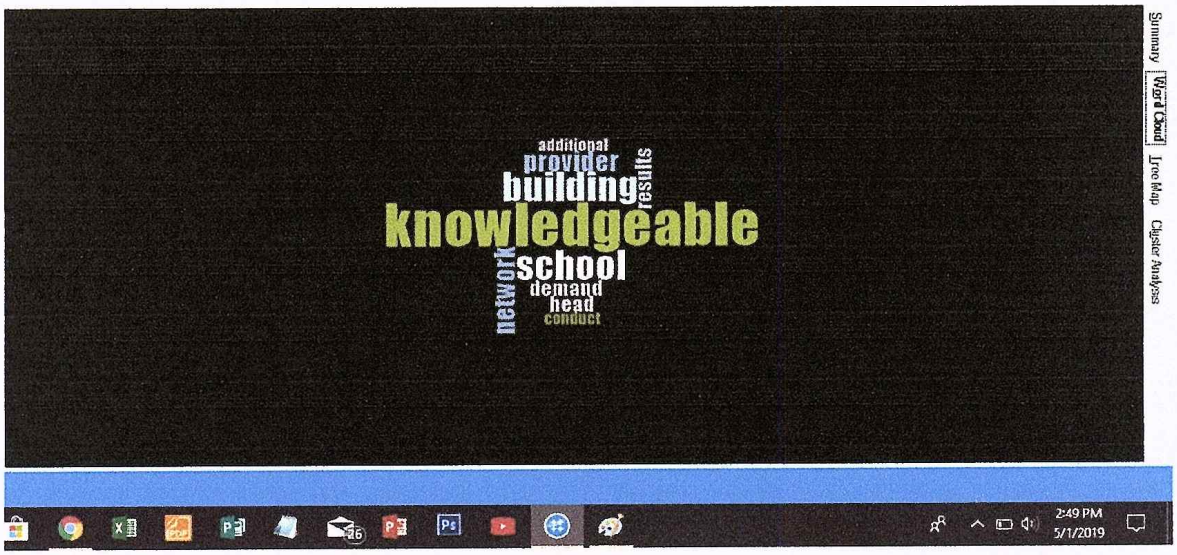
Question No. 8 What problems have you encountered in the implementation of EBEIS? In what ways?



Question No. 9 Do you have internet access in your School? Division Office?



Question No. 10 How do you assess the quality of data generated in the EBEIS in terms accuracy and timeliness?



Question No. 11 What possible strategies would you suggest or recommend in order to improve the EBEIS implementation?

CURRICULUM VITAE

CURRICULUM VITAE

Name	:	**RITA REYES-DIMAKILING**
Date of Birth	:	March 20, 1964
Place of Birth	:	Project 4, Quezon City
Citizenship	:	Filipino
Address	:	Fulgencio Subdivision Brgy. Dagum Calbayog City
Civil Status	:	Married
Height	:	5'1"
Weight	:	57 kg
Name of Spouse	:	Ernesto Aguirre Dimakiling
Name of Children	:	Ernest, Ma. Clare, Alfred, Riene and Daniel Joshua (Deceased)
Name of Father	:	Alfredo C. Reyes (Deceased)
Name of Mother	:	Reperata P. Reyes (Deceased)

EDUCATION

Post Graduate Studies	:	**Doctor of Philosophy** **Major in Educational Management** **Samar State University (SSU)** **Catbalogan City** **2019**
Graduate Studies	:	**Master of Arts in Education** **Major in Administration and Supervision** **Samar State Polytechnic College (SSPC)** **Catbalogan, Samar** **1998**

Undergraduate Studies	:	**Bachelor of Science in Industrial Education** **Major in Home Technology** **Minor in Chemistry** **Tiburcio Tancinco Memorial Institute of Science and Technology (TTMIST)** **Calbayog City** **1987-1991**
Secondary Education	:	**Tiburcio Tancinco Memorial Institute of Science and Technology (TTMIST)** **Calbayog City** **1979-1983**
Elementary Education	:	**Jacinto Zamora Elementary School** **Pandacan, Manila** **Grade I – Grade II** **1971-1973** **Balocawe Elementary School** **Balocawe, Tagapul-an, Samar** **Grade III – Grade VI** **1973-1977**

ELIGIBILITY

Professional Board Examination for Teachers (PBET), 1992

Presidential Decree No. 907, as amended by Presidential Decree No. 993
(Eligibility given to Honor Graduate)

POSITION HELD

Chief Education Supervisor
Policy, Planning and Research Division (PPRD)
Department of Education
Regional Office No. VIII
Government Center, Candahug, Palo, Leyte
May 20, 2015 – Present

Officer-In-Charge
Policy, Planning and Research Division (PPRD)
Department of Education
Regional Office No. VIII
Government Center, Candahug, Palo, Leyte
October 21, 2013-May 19, 2015

Education Program Supervisor II
Policy, Planning and Research Division (PPRD)
Department of Education
Regional Office No. VIII
Government Center, Candahug, Palo, Leyte
November 3, 2009-October 20, 2013

Education Supervisor I
Department of Education
Division of Calbayog City
Calbayog City
May 22, 2006-November 2, 2009

Principal I
Tarabucan National High School
Calbayog City
April 11, 2003-May 21, 2006

Head Teacher III
Tarabucan National High School
Calbayog City
December 13, 2000-April 10, 2003

Teacher In-Charge
Tarabucan National High School
Calbayog City

Teacher II
Tarabucan National High School
Calbayog City
October 15, 1998-December 12, 2000

Teacher I
Tarabucan National High School
Calbayog City
July 25, 1995-October 14, 1998

Secondary School Teacher
La Milagrosa Academy
Calbayog City
May 5, 1991-July 24, 1995

SCHOLARSHIP AVAILED

DepEd – PNU Short-Term Scholarship Program in Non-Traditional Assessment Strategies
Philippine Normal University (PNU)
Center for Continuing Education and Educational Leadership
Taft Avenue, Manila, Philippine
May 5-31, 2003

HONORS/AWARDS RECEIVED

Cum Laude
Bachelor of Science in Industrial Education (BSIE)
Major in Home Technology
Minor in Chemistry
Tiburcio Tancinco Memorial Institute of Science and Technology (TTMIST)
Calbayog City
School Year 1990-1991

Special Awards
Outstanding College Student
Leadership Awardee
Certificate of Recognition as Editor-In-Chief
Tiburcio Tancinco Memorial Institute of Science and Technology (TTMIST)
Calbayog City
School Year 1990-1991

OUTSTANDING ACCOMPLISHMENTS

Outstanding Education Program Supervisor
Department of Education
Regional Office No.VIII
Awarded December 14, 2012

Most Effective School Administrator

Awarded 2002

Outstanding Secondary School Head
Division of Calbayog City
School Year 2002-2003

Outstanding Secondary School Head
Division of Calbayog City
School Year 2001-2002

CERTIFICATE OF RECOGNITION RECEIVED AS RESOURCE SPEAKER

Regional Orientation and Training on Program Management Information System (PMIS)
Oriental Leyte, Baras, Palo, Leyte
November 26-28, 2018 and December 3-5, 2018

National Research Management Conference
Brentwood Apartelle, Brentwood Village, Baguio City
November 23, 2016

National Trainer on the conduct of the Results-Based Performance Management System (RPMS) Performance Planning and Evaluation Training (Batch 5-Region VII, VIII and IX)
ECOTECH Center, Lahug, Cebu City
July 4-6, 2016

Training-Workshop for the Formulation of the Regional Basic Education Development Plan (REDP)
RELC NEAP XI-LDC, Quirino Avenue, Davao City
May 13-15, 2015

Preparation of Annual Implementation Plan (AIP) during the conduct of the Training-Workshop on the Preparation of AIP and Accomplishment Reports
Almont Hotel's Inland Resort, Butuan City
April 23-24, 2014

Formulation and Crafting of the Regional Education Development Plan (REDP)
Almont Inland Resort, Lipata, Surigao City
November 26-27, 2012

National Roll-Out Level 2 Training on the Enhanced Basic Education Information System (EBEIS)
- Costa Palmera Resort, Sto. Domingo Albay, Region V
  July 19-21, 2011
- Sun City Suites General Santos City, Region XII
  July 12-16, 2011

Training on the Appropriate Implementing Strategy and Utilization of the Enhanced Basic Education Information System (EBEIS) Level 1
DAP Convention Center, Tagaytay City
June 6-10, 2011

CERTIFICATE OF COMPLETION

Coaching and Mentoring on Investment Planning and Risks Assessment and Management
Ace Hotel and Suites, Pasig City
January 16-18, 2019

Training on Midterm and Operations Planning
Ace Suites and Hotel, Pasig City
October 1-5, 2018

Regional Consultation on Demographic Dividend and Training of Regional Implementers
Golden Prince Hotel and Suites, Cebu City
June 19-22, 2018

Supervisory Development Course Tracks 2 and 3 (Forty [40] training hours)
Civil Service Commission Regional Office No. VIII Training Room, Palo, Leyte October 26-30, 2015

Public Policy Analysis and Managing Policy Research: A Training Course for the Department of Education
Tagbilaran City, Bohol, Philippines
November 12-16, 2012

CERTIFICATE OF RECOGNITION AS GUEST SPEAKER

Honoring of Northwest Samar State University (NwSSU)-College of Education 2017 Licensure Examination for Teachers (LET) Passers
RSU Socio Cultural Center, NwSSU, Main Campus, Calbayog City
February 16, 2018

2nd Graduation Rites
Oquendo National High School, Calbayog City
April 01, 2019

CERTIFICATE OF RECOGNITION AS WRITER

Workshop on the Finalization of the Manual of Operation for Special Interest Program (SIP)
Deped Ecotech Center, Sudlon, Lahug, Cebu City
January 15-20, 2017

TRAININGS/SEMINARS/CONFERENCES/WORKSHOPS ATTENDED

INTERNATIONAL

A Professional Development Session at: 17th Thought Leading Conference on Emerging Trends in Learning and Working
Sir Stamford Hotel, Sydney, Australia
August 03, 2016

NATIONAL

National Training of Trainers (NTOT) on Basic Inputs and System Enhancement
Samba Bluewater Resort, Olongapo City
April 24-26, 2019

Central-Regional Office (CO-RO) Interface for FY 2020-2021 Planning and Budgeting
Ace Hotel and Suites, Pasig City
March 20-22, 2019

Technical Review of the Action Research Toolkit
Department of Education Central Office, Pasig City
January 29-31, 2019

Year-End Assessment and Synchronization of FY 2019 Plans with Regional Offices and Selected Schools Division Offices
Bohol Plaza, Panglao Island, Dayo Hill, Mayacabac, Dauis, Bohol

December 19-21, 2018

CO-RO Interface for FY 2018 Program Implementation Review and FY 2019 Post-Planning
Great Eastern Hotel, Quezon City
November 6-8, 2018

2018 National Planning Conference
L'Fisher Hotel, Bacolod City, Philippines
October 17-19, 2018

National Assembly of Education Leaders: Hold IT in Trust: LEADING in the Time of Industry 4.0
Manila Marriott Hotel, Pasay City
September 25-27, 2018

National Training of Trainers on Program Management Information System (PMIS)
Millenia Suites, Ortigas Center, Pasig City
August 28-31, 2018

National Training of Trainers (TOT)-Phase 2 Content (Planning and Budget Strategy Policy)
Ace Hotel and Suites, United St. cor Brixton St., Pasig City
April 23-27, 2018

National Training of Trainers (TOT) on Planning and Budget Strategy Policy: Phase 1-Facilitation Skills
Ace Hotel and Suites, United St. cor Brixton St., Pasig City
April 10-12, 2018

Conference on 2018 Budget Execution and 2019 Budget Preparation
Crown Regency Hotel, Cebu City
March 21-24, 2018

National Research Management Conference
Greenleaf Hotel, Jose Catolico Sr. Avenue, General Santos City
March 6-8, 2018

Central and Regional Office Interface for FY 2019-2022 Planning and Budgeting
Ace Hotel and Suites, Brixton Street, Pasig City
February 20-23, 2018

Validation Workshop of the Competency-Based Learning and Development (CBLD) on Plan Research Management
Linden Suites, San Miguel Avenue, Ortigas Center, Pasig City
February 6-8, 2018

Orientation and Preparation for the Research Management Guidelines Regional Caravan
Quest Hotel, Archbishop Reyes Avenue, Cebu City, Philippines
March 27-28, 2017

National Research Management Conference
Brentwood Apartelle, Brentwood Village, Brgy. M. Roxas, Baguio City
November 23-25, 2016

National Planning Officers Conference
Crown Regency Residences Cebu, Cebu City
August 16-18, 2016

Business Process Analysis Workshop
Microtel Technohub, Quezon City
May 3-5, 2016

Results-Based Performance Management System (RPMS) Trainers Training Quest Hotel, Cebu City, Philippines
April 27-29, 2016

Orientation-Workshop on Senior High School (SHS) Staffing
ACE Hotel and Suites, Brixton Street, Pasig City
March 17-18, 2016

Training of the Schools Division Selection Committee (DSC) on the Hiring of Senior High School Teachers for School Year 2016-2017
DepEd Ecotech Center, Sudlon, Lahug, Cebu City
February 4-5, 2016

CY 2016 Updates on Republic Act 9184 and its Implementing Rules and Regulations (IRR) for DepEd regional Office HOPE, BAC Members and BAC Secretariat
Eurotel Hotel, Makati City
February 1-3, 2016

Orientation Cum Training Workshop on Program Management Information System (PMIS)

Regional-National Educators Academy of the Philippines (R-NEAP), DepEd Regional Office No. VIII, Government Center, Candahug, Palo, Leyte on February 3-5, 2015

National Orientation Workshop on the Abot-Alam Program
DepEd Ecotech Center, Cebu City
August 12-14, 2014
Data Management and Information Technology Meeting
Ecotech, Lahug, Cebu City
June 10-11, 2014

Orientation cum Training-Workshop on Program Management Information System (PMIS)
Crown Regency Cebu, City
June 24-25, 2014

Regional Leaders Strategic Planning Course
Eugenio Lopez Center, Antipolo City
February 22-23, 2014

Reconciliation cum Validation of Physical and Financial report for Activities Funded under Project SPHERE and EPIP
RELC in Malvar, Batangas
December 5-7, 2012

Strengthening the Planning and Budgeting Process and Hearing of FY 2013 Plans and Budget
Cebu Business Hotel, Cebu City
November 5-9, 2012

Impact Evaluation
Ecotech Center, Cebu City
September 17-21, 2012

Synchronized Planning and Budgeting Workshop
Montevista Villas, Mimosa, Clarkfield, Pampanga
April 17-20, 2012

FY 2013 Planning and Budgeting Cum Regional Budget Hearing
Casablanca Hotel, Legaspi City
February 28-March 2, 2012

Workshop on Planning and Budgeting Process, Planning Standards, and Assumptions Cum Orientation on Preparation of Regional Education Development Plan (REDP)
DAP, Tagaytay City
February 22-24, 2012

REGIONAL

Orientation on Learning and Development Governance and Enabling Mechanism (L&DGEM) of the Personnel Development Committee
Hotel Alejandro, Tacloban City
February 18-20, 2019

Training Modules on Understanding the ISO Standards and Internal Quality Audit, Control of Documented Information, 5S/Housekeeping for the Installation of Quality Management System (QMS) Certifiable to International Organization for Standardization (ISO) 9001:2015
RELC-NEAP-R8, Government Center, Candahug, Palo, Leyte
March 12-16, 2018

Training Modules on Defining Standards (Performance Management) and Managing Resources and Risks for the Installation of Quality Management System (QMS) Certifiable to International Organization for Standardization (ISO) 9001:2015
RELC-NEAP-R8, Government Center, Candahug, Palo, Leyte
February 26-March 2, 2018

Training Modules on Defining Standards (Quality Management) for the Installation of Quality Management System (QMS) Certifiable to International Organization for Standardization (ISO) 9001:2015
RELC-NEAP-R8, Government Center, Candahug, Palo, Leyte
February 12-16, 2018

Training Modules on Understanding the Process (Process Management) for the Installation of Quality Management System (QMS) Certifiable to International Organization for Standardization (ISO) 9001:2015
RELC-NEAP-R8, Government Center, Candahug, Palo, Leyte
January 29-February 2, 2018

Training Modules on Understanding the Process (Process Management) for the Installation of Quality Management System (QMS) Certifiable to International Organization for Standardization (ISO) 9001:2015
Ocean View Hotel, Tolosa, Leyte
December 18-22, 2017

Communication Planning Workshop of UNICEF Projects in DepEd Region VIII
Division Conference Hall, DepEd Division of Leyte, Government Center, Candahug, Palo, Leyte, Philippines
January 25-26, 2017

Workshop on the Development of the Regional Basic Education Plan (RBEP)
Alto Suites Hotel and Restaurant, Maharlika Highway, Pawing, Palo, Leyte
November 14-18, 2016

Training/Workshop on Government Procurement Reform Act (GPRA) Updates as contained in 2012 Handbook
Leyte Park Hotel, Tacloban City on RA 9184 and its revised IRR (6th Edition)
October 23-25, 2014

Supervisory Development Course Track I (Batch 1)
Mess Hall, RELC-NEAP, DepEd Compound, Government Center, Candahug, Palo, Leyte
October 13-15, 2014

Field Testing of the Enhanced School Improvement Planning Process and Tools
Hill Crest Tourist Inn, Brgy. Urdaneta, Lavezares, Northern Samar
September 9-13, 2013

Two-Day Training on EBEIS Data Validation, Analysis, Utilization and Evaluation
RELC-NEAP Region VIII, DepEd Regional Office No. VIII, Government Center, Palo, Leyte
September 9-10, 2012

MANAGEMENT COURSE

Basic School Management Course (BSMC)
Conducted by the National Educators Academy of the Philippines (NEAP)

and the Staff Development Division, Human Resource Development Service
Hotel Alejandro, Tacloban City
November 23-December 2, 1999

LIST OF TABLES

LIST OF TABLES

Table | Page

Table | Page

Table | Page

LIST OF FIGURES

LIST OF FIGURES