**Office of the Schools
Division Superintendent**

DIVISION ADVISORY
No.____094____, s. 2021
September 10, 2021

*In compliance with DepEd Order No. 8, s. 2013,
This Advisory is issued not for endorsement as per DO No. 28, 2001
but for the information of DepEd Officials, Personnel Staff and the concerned public
(visit https://depedelsalvadorcity.net)*

FUNDAMENTALS OF STRATEGIC PLANNING WORKSHOP AND DESIGNING AND IMPLEMENTING A MONITORING AND EVALUATION WORKSHOP

The Strategic One Business Management and Consultancy Firm is inviting educators, leaders, and administrators to **FUNDAMENTALS OF STRATEGIC PLANNING WORKSHOP AND DESIGNING AND IMPLEMENTING A MONITORING AND EVALUATION WORKSHOP** via Zoom on November 10-12 and November 24-26, 2021. The STRAT One aims to democratize analytics in the Philippines.

Participation shall be subject to the *no-disruption-of-classes policy* stipulated in DepEd Order No. 09, s. 2005 entitled Instituting Measures to *Increase Engaged Time-On-Task and Ensuring Compliance Therewith.* Attached is the letter from the organizer for your inquiries.

For information and guidance.

OLGA C. ALONSABE, PhD, CESE
Assistant Schools Division Superintendent
OIC, Office of the Schools Division Superintendent

Encl:
    As stated

Reference:
Regional Advisory 102, s. 2021

To be indicated in the <u>Perpetual Index</u>
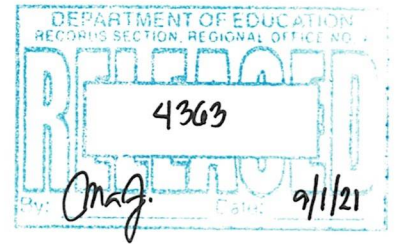   under the following subjects:
TRAINING PROGRAMS	SERVICES

SGOD/HRD/MPM

Republic of the Philippines
Department of Education
REGION X – NORTHERN MINDANAO

Office of the Regional Director

Regional Advisory No. 102, s. 2021
August 31, 2021
In compliance with DepEd Order No. 8, s. 2013,
this Advisory is issued not for endorsement per DO 28, s. 2001,
but for the information of DepEd Officials,
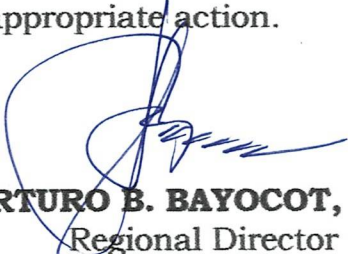personnel/staff, and the concerned public.
(Visit deped10.com)

FUNDAMENTALS OF STRATEGIC PLANNING WORKSHOP AND DESIGNING AND IMPLEMENTING A MONITORING AND EVALUATION SYSTEM WORKSHOP

STRAT One (Strategic One Business Management and Consultancy Firm) invites educators, leaders, administrators, and teachers to the **Fundamentals of Strategic Planning Workshop and Designing and Implementing a Monitoring and Evaluation System Workshop** via zoom on November 10-12 and November 24-26.

STRAT One aims to democratize analytics in the Philippines.

Attached are copies of the invitation and other documents for reference.

For information and appropriate action.

DR. ARTURO B. BAYOCOT, CESO III
Regional Director

Code: _____

/PPRD-anne

<u>Course Outline for Market Research: DO IT YOURSELF</u>

This 4-day virtual workshop was designed to adapt to the current challenges of the pandemic. Agencies/organizations slashed their funding for research. Therefore, employees must step up and help the organization in gaining market insight. This course applies to the following individuals:

- *Professors/faculties teaching market research*
- *Entrepreneurs*
- *Government employees*

This course will provide participants with an in-depth understanding of market research. Participants will be involved in a practical application of market research via a group project which will focus on a real company situation. Participants will write a research brief, determine the research methodology and conduct interviews and surveys as required. Participants will be asked to present their findings in both written and oral form to their clients.

Course Learning Outcomes

- Knowledge and Understanding.
- **Conduct market research with less than the PHP20,000.00 budget.**
- This course is designed to provide participants with a basic understanding of the market research process and the role of market research in strategic decision-making. There will be a focus on understanding the theoretical components of research design and developing practical data collection, analysis, and interpretation skills.
- Through practical application within a market research project, participants will design a research project from selecting the appropriate research design, research method, choosing the correct sampling technique, new trends in data collection, and interpreting and writing data analysis.

Learning Outcomes

1. Discuss the managerial importance of market research and its role in marketing strategy

2. Provide a detailed overview of the stages in the market research process

3. Develop a market research design that incorporates appropriate research approaches, including measurement instruments and sampling frames.

4. Use contemporary statistical packages such as **JASP and JAMOVI** (freewares) to analyze quantitative data.

5. Interpret data analysis in the context of the identified business problem.

6. Communicate research results in written and oral presentation formats.

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Course Outline

- Market Research and the Research Process
- The Nature of Qualitative Research
- The Nature of Quantitative Research
- Survey (Quantitative) Research
- Survey Design: Writing Questions
- Sampling and Data Collection
- An Overview of Statistical Analysis Techniques & Introduction to JASP & JAMOVI
- Data Analysis:
    - Tests of Differences
    - Data Analysis: Tests of Associations
    - Data Analysis: Multivariate Analysis (Regression Analysis)
    - Cluster Analysis
    - Interpretation and Report Writing

THE SPEAKERS

LIZA LORENA C. JALA, PH.D.ED.-RE

- **Consultant Statistician & Member of the Research Technical Review Committee -** Department of Internal Medicine, Vicente Sotto Memorial Medical Center

- **Consultant - Mactan** Cebu International Airport Authority, Customer Satisfaction Survey

- **Former Consultant Statistician on Customer Satisfaction -** Mandaue City Government on Business & Licensing Division

- **Doctor of Philosophy in Education major in Research and Evaluation**
    - University of San Carlos Recipient of CHED Dissertation Grant

ARTURO PATUNGAN JR.

- **Data Scientist**

- **Consultant**

- **Assistant Professor** - *University of Santo Tomas*

- **Ph.D. Mathematics Education (Candidate)** – *University of the Philippines, Diliman*

- **Master of Arts in Mathematics** - *University of the Philippines, Diliman*

2

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Tel. no: 02-8-801-5903/09984604375

- **Masters of Science Teaching major in Mathematics** - University of Cebu

REQUIRED SOFTWARE/TECHNOLOGY:

- The workshops of STRATOne are conducted virtually via Zoom.
- A **Gmail account** is required. Participants will be invited to join **Google Classroom**. Supplemental materials will be uploaded via Google Classroom. Participants are allowed to post questions and comments in the classroom; in turn, the moderator will route the query to the resource speakers.
- On days 3 and 4, participants will be using **JASP and JAMOVI** (these are freeware for data analysis).

Syllabus: FUNDAMENTALS OF STATISTICS AND PROBABILITY

Course Description:

4-DAY VIRTUAL WORKSHOP VIA ZOOM. Understanding statistics is essential to understand research in the social and behavioral sciences. In this course you will learn the basics of statistics; not just how to calculate them, but also how to evaluate them. This course will also prepare you for the next course in the specialization - the course Inferential Statistics.

The first part of the course is concerned with the basics of probability: calculating probabilities, probability distributions and sampling distributions. You need to know about these things in order to understand how inferential statistics work.

In the second part of the course we will discuss methods of descriptive statistics. You will learn what cases and variables are and how you can compute measures of central tendency (mean, median and mode) and dispersion (standard deviation and variance). Next, an introduction to methods of inferential statistics - methods that help us decide whether the patterns we see in our data are strong enough to draw conclusions about the underlying population we are interested in. We will discuss confidence intervals and significance tests.

On the final part of the course, we discuss how to assess relationships between variables, and we introduce the concepts correlation and regression.

You will not only learn about all these statistical concepts, you will also be trained to calculate and generate these statistics yourself using freely available statistical software.

Learning outcomes:

*Learn how to choose the right statistical test that will help in explaining a phenomena.

*Learn how probability works.

*Learn statistical hypothesis testing works.

*Learn how to run statistical analysis using user-friendly freeware such as JASP and JAMOVI.

Course Outline:

Probability
- Randomness
- Probability
- Sample space, event, probability of event and tree diagram
- Quantifying probabilities with tree diagram
- Basic set-theoretic concepts
- Practice with sets
- Joint and marginal probabilities

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1

- Conditional probability
- Independence between random events
- More conditional probability, decision trees and Bayes' Law

Probability Distributions
- Random variables and probability distributions
- Cumulative probability distributions
- The mean of a random variable
- Variance of a random variable
- Functional form of the normal distribution
- The normal distribution: probability calculations
- The standard normal distribution
- The binomial distribution

Sampling Distributions
- Sample and population
- Sampling
- The sampling distribution
- The central limit theorem
- Three distributions
- Sampling distribution proportion

Confidence Intervals
- Statistical inference
- CI for mean with known population
- CI for mean with unknown population
- CI for proportion
- Confidence levels
- Choosing the sample size

Exploring Data
- Cases, variables and levels of measurement
- Data matrix and frequency table
- Graphs and shapes of distributions
- Mode, median and mean
- Range, interquartile range and box plot
- Variance and standard deviation
- Z-scores

Significance Tests
- Hypotheses
- Test about proportion
- Test about mean
- Step-by-step plan
- Significance test and confidence interval

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- Type I and Type II errors

Correlation and Regression
- Crosstabs and scatterplots
- Pearson's r
- Regression - Finding the line
- Regression - Describing the line
- Regression - How good is the line?
- Correlation is not causation

THE SPEAKER:

JEROME L. BUHAY

- Researcher/Statistician/Consultant
- Professor at De La Salle University – Dasmariñas
- PhD in Mathematics Education (Ongoing)
- PhD in Statistics (with earned units)
- Master of Arts in Mathematics
- BS in Applied Mathematics maj. In Statistics

REQUIRED SOFTWARE FOR THIS WORKSHOP:

- **Zoom**
- **Jasp (Freeware Statistical Software)**
- **JAMOVI (Freeware Statistical Software)**
- **Gmail account for Google Classroom**

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QUESTIONNAIRE DESIGN AND DATA COLLECTION TECHNIQUES IN-DEPTH TRAINING WORKSHOP

Course Description:

This hands-on training course is ideal for individuals charged with the task of creating an effective survey instrument for gathering respondent data, including customer satisfaction data. In this 3-day training seminar participants will learn:

- How to avoid the common pitfalls in writing questionnaires for in-person, phone, web and mobile surveys.
- How to plan and flowchart a questionnaire to guide the overall logic and enhance the survey taking experience.
- How to phrase questions; when to use open-ended and closed-ended questions and how to choose the most appropriate rating, ranking, multiple choice, check-list or other approaches.
- How to phrase difficult questions dealing with memory, knowledge and sensitive subjects and how to measure the importance of product attributes.
- How to administer questionnaires to substantially improve response rates and improve the quality of your results by incorporating some of the industry's best practices and learnings based on R&D examples and case studies.
- How to bring all the learning together in a team-based workshop designing an online questionnaire.

Course Objectives:

1. Learn how to manage and prepare data using JASP and JAMOVI.

2. Learn how to run the statistical test using JASP and JAMOVI. Further, understand the practical application and assumptions of each statistical test.

3. Learn how to report and write the narrative on each statistical tests result.

4. Identify the right statistical test depending on the characteristics of the variables.

Course Outline

Questionnaire Construction

- *The role of questionnaires in research*
- *A workshop on survey writing*
- *Common problems in questionnaire construction and administration*
- *Basic principles of questionnaire design*
- *Understanding your role in the pro*
- *Questionnaire construction framework*
- *Determining data needs*

Selecting and Recruiting Survey Respondents

- *Decisions in selecting a sample*
- *Online panels*
- *Achieving a balanced panel*
- *Professional panelists*
- *Non-response error*
- *A comparison of panel quality*
- *Inviting sample participants*
- *Using incentives*
- *Methods of Survey Administration*

Data collection methods

- *Multimode data collection*
- *Mobile data colection and micro surveys*
- *Chunking surveys*
- *Intentional quantitative mobile*
- *Mobile research case studies*
- *Intentional vs. unintentional mobile research*
- *Organizing a Survey*

Questionnaire construction framework

- *Flowcharting a survey*
- *Determining question order*
- *Writing screener questions*
- *Writing survey instructions*
- *Workshop on survey instructions*
- *Checking the questionnaire*
- *Pretesting the questionnaire*
- *Content of Marketing Research Survey Questions*

History questions: What can consumers remember?

- *Asking knowledge questions*
- *Asking sensitive questions*
- *Measuring perceptions and attitudes*
- *Asking about future intentions*
- *Asking importance: direct and indirect methods*
- *Types of Questions*

Online research best practices do's and don'ts

- *Deciding on the best type of questions to use*

- *Open-ended vs.closed ended questions*
- *Online questions types*
- *Issues when writing dichotomous questions*
- *Issues when writing multiple choice questions*
- *Prohibiting backward navigation on surveys*

Issues With Wording Questions

- *Checklist for quality questions*
- *Mini workshop on improving question wording*
- *Checklist for choosing words*
- *Checklist for phrasing questions*
- *Asking demographic questions*
- *A review of participants' surveys*
- *Workshops on Writing Surveys*

A workshop on improving clarity and usefulness of survey questions

- *A workshop on cleaning up a flawed survey*
- *A workshop on rewriting and pretesting a flawed question*
- *Nature of Data*

Understanding different levels of measurement

- *Key considerations in scale selection*
- *Types of scales*
- *Single-item vs. multiple-item scales*
- *Psychographics*
- *Key decisions in using rating scales*
- *Checklists for choosing the right scales*
- *What is binary imputation?*
- *Changing rating scales*
- *Advanced Survey Design*

How much attention do respondents pay to survey questions?

- *A comparison of data quality from 21 different panel providers*
- *Does the type of question used impact the attention paid to surveys?*
- *Can survey takers be influenced to pay more attention?*
- *Do obvious trap questions improve data quality?*
- *Online survey length effects*
- *How to keep people engaged in long surveys*
- *Gamification of research*
- *Prediction markets in marketing research*
- *Workshop: Creating a Questionnaire*

PROGRAM OF ACTIVITIES: QUESTIONAIRE DESIGN AND DATA COLLECTION TECHNIQUES IN-DEPTH TRAINING WORKSHOP

Opening of the workshop (Doxology, National Anthem and opening remarks)	8:45AM to 9:00AM
• **Questionnaire Construction**	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
• **Selecting and Recruiting Survey Respondents** • **Data collection methods**	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
• **Questionnaire construction framework** • **History questions: What can consumers remember?** • **Online research best practices do's and don'ts**	1:01PM to 2:30PM
• **Issues With Wording Questions** • **A workshop on improving clarity and usefulness of survey questions** • **Understanding different levels of measurement** • **How much attention do respondents pay to survey questions?**	2:31PM to 4:00PM
Dismiss	

ESSENTIALS OF TECHNICAL WRITING – WORKSHOP (SEPTEMBER 23 AND 24, 2021)

Course Description: Technical writing is unique because of its specialized content. It must convey objectivity and reach both technical and non-technical audiences with exactness and clarity. Along with writing emails, letters, and reports, the technical writer must prepare definitions, physical descriptions, product specifications, procedures, test and laboratory results, and many other kinds of documents.

This seminar offers you a battery of tools and techniques to help you jumpstart the writing process on any challenging technical writing endeavor. You will learn ways to defeat writer's block, procrastination, and writer's anxiety, as well as how to develop a better understanding of readers' needs and expectations. You will also discover principles and approaches covering a broad range of industries and topics and getting hands-on experience improving your technical writing ESP—efficiency, sufficiency, and proficiency.

Methodology: Online workshop via ZOOM

Who Should Attend?

- Government
- Academe
- Private Sector

Anyone who wishes to enhance their technical writing skills to better communicate with their audiences.

Objectives:

- *Create a full range of technical documents with solid structures*
- *Use templates to start the writing process quickly*
- *Explore techniques for getting past writer's block*
- *Prepare detailed messages for both technical and non-technical readers*
- *Understand best practices for displaying visual information*
- *Edit language for precision, clarity, and conciseness*
- *Summarize complex issues with authority and clarity*

Learning Objectives

- *Distinguish Among the Elements of Technical Documents*
- *Create a Full Range of Technical Documents with a Solid Structure*
- *Use Templates to Jumpstart the Writing Process*
- *Use Techniques for Overcoming Writer's Block*
- *Evaluate Technical Data Based on the Writer's Purpose and the Reader's Concerns*
- *Prepare Detailed Messages with a Style for Technical and Non-technical Writers*
- *Structure the Format to Enhance Presentation and Ideas*
- *Use Linking Words and Phrases in Sentences and Paragraphs*
- *Apply Best Practices for Displaying Visual Information*
- *Edit Language for Precision, Clarity, and Conciseness*
- *Choose Language for Appropriateness*
- *Summarize Complex Issues with Authority*

COURSE OUTLINE:

The Landscape

- Define Technical Writing
- Identify Characteristics of Technical Writing
- Distinguish Between Two Commonly Used Technical Writing Styles
- Classify the Challenges That Technical Writers Face

The Maps

- Distinguish Among the Elements of Technical Documents
- Identify a Full Range of Technical Documents with a Solid Structure
- Use Templates to Jumpstart the Writing Process
- The Technical Writing Process

Overcome Writer's Block
- Generate Ideas Through an Efficient Writing Process

The Technical Writing Product

- Evaluate Technical Data Based on the Writer's Purpose and the Readers' Concerns
- Assess Your Writing Style Based on the Audience

Organizing Ideas

- Compose Effective Patterns of Technical Writing
- Structure the Format to Enhance Presentations and Ideas
- Use Linking Words and Phrases in Sentences and Paragraphs

Visualizing Ideas

- Apply Best Practices for Displaying Visual Information
- Use the Full Range of Illustrations in Technical Writing

Editing at the Sentence Level

- Identify Common Sentence Problems and Their Solutions
- Edit Imprecise, Unclear, or Wordy Sentences
- Combine Sentences for Fluency
- Edit Sentences for Active Voice
- Edit Sentences for Parallel Structure

Editing at the Word Level

- Choose Correct Grammar, Words, Punctuation, and Mechanics
- Summarize Complex Issues with Authority

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The Speaker

Raymond Peter D. Ibasco
Associate Professor,
De La Salle University - Dasmariñas

-Doctor of Philosophy in Reading (Candidate) - Philippine Normal University
-Master of Arts in English Language Education

The registration fee per participant is P2500.00.

Time Series and Forecasting In-depth Seminar Workshop - August 7, 14 & 21, 2021

Course Description:

Time Series consist of values of a variable recorded in an order over a period of time. Such data arise in just about every area of science and the humanities, including econometrics and finance, engineering, medicine, genetics, sociology, environmental science. What makes time series data special is the presence of dependence between observations in a series, and the fact that usually only one observation is made at any given point in time. This means that standard statistical methods are not appropriate, and special methods for statistical analysis are needed.

This course provides an introduction to time series analysis using current methodology and software. Topics covered are: descriptive methods, plots, smoothing, differencing; the autocorrelation function, the correlogram and variogram, the periodogram; estimation and elimination of trend and seasonal components; stationary processes, modelling and forecasting with autoregressive moving average (ARMA) models; spectral analysis, the fast Fourier transform, periodogram averages and other smooth estimates of the spectrum; time-invariant linear filters; non-stationary and seasonal time series models; ARIMA processes, identification, estimation and diagnostic checking, forecasting, including extrapolation of polynomial trends, exponential smoothing, and the Box-Jenkins approach.

Objectives:

1. Learn how to perform time series analysis using MS Excel and other freewares.
2. Learn how to interpret time series data.
3. Learn to forecast and read trends.

Course Learning Outcomes

1. Demonstrate advanced understanding of the concepts of time series and their application to health, climate, finance and other areas.
2. Demonstrate familiarity with a range of examples for the different topics covered in the course.
3. Demonstrate an advanced understanding the underlying concepts in the time series and frequency domains.
4. Apply ideas to real time series data and interpret outcomes of analyses.

COURSE OUTLINE

1. Examples, objectives of analysis, notation, stationarity
2. Smoothing, linear filters, moving average smoothers. serial correlation
3. Iterated smoothing, spline smoothing, autocorrelation and trend. Removing seasonality, decomposing a series, differencing
4. The autocoviance and autocorrletions functions

5. The sample autocorrelation function

6. Statistical properties of the sample autocovariance function. Mean ergodicity. Gaussian white noise

7. Tests for serial correlation. The variogram for unequally spaced data

8. Periodicity and the periodogram

9. The cumulative periodogram

10. Stationary random processes. The general linear process

11. The backward shift operator. The moving average model

12. The autoregressive process. Causality. The Yule-Walker equations

13. ARMA processes

14. Spectral analysis and the spectrum. Wold's Theorem

15. Spectral analysis, aliasing. Convergence of the spectra

16. Spectra for ARMA processes. Processes with continuous spectra

17. ARIMA models. Identification

18. The partial autocorrelation function

19. Identification of ARIMA models. The Akaike Informatio Criterion

20. Likelihood ratio tests. SARIMA models

21. Forecasting for ARMA processes

22. Minimum mean squared error prediction

23. Forecasting with SARIMA models, diagnostics and prediction.

The speaker:

Paolo G. Hilado
Data Scientist, Educator, Consultant

- **Data Scientist**
- **Director for Research and Planning - Colegio San Agustin Bacolod**
- **Certificate in Data Science and Connectivity to Artificial Intelligence - Johns Hopkins University, Baltimore Maryland**
- **Micromasters in Data Science - University of California San Diego**
- **Post Graduate Diploma in Research and Development Management - University of the Philippines Open University, Los Baños, Laguna**
- **Masters Degree in Nursing - West Negros University**

QUALITATIVE DATA ANALYSIS USING FREEWARE IN-DEPTH TRAINING WORKSHOP (AUGUST 25-27, 2021)

Course Description:

Interviews, case studies, and texts are important sources of information on environment and sustainability issues. These methods yield data about how and why people think and behave in the ways that they do, and the broader context in which people make decisions. Because these methods yield large amounts of rich, descriptive data, analysis generally follows a qualitative approach. This course will introduce participants to techniques, tools, and frameworks for qualitative data analysis.

The course will follow a combined lecture and hands-on workshop in which participantss will receive guidance on how to conduct qualitative data analysis as well as peer feedback on their own qualitative data analysis efforts. On the last day or third day of the workshop participants will learn how to use Orange (Data science freeware) on creating a word cloud, sentiment analysis and text mining.

Objectives:

• Learn about the nature and application of qualitative research in social and organizational research.

• Learn to conceptualize qualitative research and to formulate problem statements and research questions.

• Learn how to design a qualitative research study.

• Learn about qualitative data collection procedures--observation, interviews, focus group interviews, and collection and use of documents and archival data.

• Learn the power of Orange for Data Science (FREEWARE) on performing text mining, word cloud and sentiment analysis.

Learning outcomes:

1. Explain the utility of different approaches to qualitative data analysis

2. Understand how to manage qualitative data to protect confidentiality of human subjects

3. Apply key techniques, and tools in qualitative data analysis

4. Distill findings into conceptual models and matrices

5. Interpret the results of qualitative data analysis to answer a research question.

1

6. Perform text mining, word cloud and sentiment analysis using Orange for Data Science Freeware.

COURSE OUTLINE

- Overview of Qualitative Research: Defining the Research Problem
- Phenomenological Research: Purpose, Method, Analysis and Outcomes
- Ethnography: Purpose, Method, Analysis and Outcomes
- Case Study: Purpose, Method, Analysis and Outcomes
- Historical Design: Purpose, Method, Analysis and Outcomes
- Narrative Design: Purpose, Method, Analysis and Outcomes
- Action Research: Purpose, Method, Analysis and Outcomes
- Data Collection Techniques: Choosing the Right Method
- Reporting Qualitative Findings
- -Assessing Qualitative Research
- -How not to assess qualitative research
- Text Mining: Purpose, Method, Analysis and Outcomes
- Word Cloud: Purpose, Method, Analysis and Outcomes
- Sentiment Analysis: Purpose, Method, Analysis and Outcomes

The speakers:

LIZA LORENA C. JALA, PH.D.ED.-RE

- **Consultant Statistician & Member of the Research Technical Review Committee -** Department of Internal Medicine, Vicente Sotto Memorial Medical Center

- **Consultant - Mactan** Cebu International Airport Authority, Customer Satisfaction Survey

- **Former Consultant Statistician on Customer Satisfaction -** Mandaue City

Paolo Hilado

- *Data Scientist*

- *Director for Research and Planning - Colegio San Agustin Bacolod*

- *Certificate in Data Science and Connectivity to Artificial Intelligence -* Johns Hopkins University, Baltimore Maryland

- *Micromasters in Data Science -* University of California San Diego

Government on Business & Licensing Division - **Doctor of Philosophy in Education major in Research and Evaluation** - University of San Carlos Recipient of CHED Dissertation Grant - **Masters of Science Teaching major in Mathematics -** University of Cebu	- ***Post Graduate Diploma in Research and Development Management*** *- University of the Philippines Open University, Los Baños, Laguna* - ***Masters Degree in Nursing*** *- West Negros University*

Advanced Statistical Analysis using JASP & Jamovi

Course Description:

A three-day workshop via Zoom. An essential goal of this course is to approach data analysis from the perspective of understanding statistics and their relationship to research rather than focus on mathematics or memorizing formulas. The softwares that the participants will use in this workshop are FREEWARES, in other words, these are free and legitimate. JASP and JAMOVI has been in the field of academe for a decade. However, no private organizations are promoting these freeware other than STRATONE.

Course Description: Within this course, participants will study multivariate techniques, data transformation, bootstrapping, including model testing, decision theory, and advanced statistical techniques. The first day of the workshop will serve as a refresher in basic statistics.

Course Objectives:

1. Review the fundamentals of statistics.
2. Learn how and when to use bootstrapping and data transformation.
3. Learn the application of advanced statistics.

Course Outline

Day 1 (Review of Basic Statistics)

*Introduction to Jasp and JAMOVI
*Data Encoding using MS Excel
*Running and Interpreting Frequencies using JAMOVI
*Introduction to basic statistics: mean, median, mode and normal distribution
*Inferential Statistics (Chi-square of Independence, Comparison of Means, Correlation)

Day 2

*Data Transformation
*Bootstrapping
*Linear Regression (Simple and Multiple)
*Logistic Resgression

Day 3

*Two-way ANOVA
*MANOVA
*ANCOVA
*Factor Analysis

PROGRAM OF ACTIVITIES: ADVANCED STATISTICAL ANALYSIS USING JASP & JAMOVI

Day 1: Basics

Opening of the workshop (Doxology, National Anthem and opening remarks)	8:45AM to 9:00AM
Introduction to Jasp and JAMOVI	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Data Encoding using Excel	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
*Running and Interpreting Frequencies using JAMOVI *Introduction to basic statistics:mean, median, mode and normal distribution	1:01PM to 2:30PM
Inferential Statistics (Chi-square of Independence, Comparison of Means, Correlation)	2:31PM to 4:00PM
Dismiss	

Day 2: Workshop

Consultation	8:45AM to 9:00AM
Data Transformation (Theory, Application and Workshop)	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Bootstrapping (Application, Practices and Workshop)	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
Linear Regression (Simple and Multiple) - (Application, Practices and Workshop)	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Logistic Resgression (Application, Practices and Workshop)	2:46PM to 4:00PM
Dismiss	

Day 3: Workshop

Two-way ANOVA (Application, Practices and Workshop)	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
MANOVA (Application, Practices and Workshop)	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
ANCOVA (Application, Practices and Workshop)	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Factor Analysis (Application, Practices and Workshop)	2:31PM to 4:00PM

STRATONE

THE SPEAKER:

JEROME L. BUHAY

- Researcher/Statistician/Consultant
- Professor at De La Salle University – Dasmariñas
- PhD in Mathematics Education (Ongoing)
- PhD in Statistics (with earned units)
- Master of Arts in Mathematics
- BS in Applied Mathematics maj. In Statistics

REQUIRED SOFTWARE FOR THIS WORKSHOP:

- **Zoom**
- **Jasp (Freeware Statistical Software)**
- **JAMOVI (Freeware Statistical Software)**
- **Gmail account for Google Classroom**

STATISTICAL TOOLS ENABLEMENT IN-DEPTH TRAINING WORKSHOP

Course Description:

Statistical Tools Enablement in-depth Training Workshop - in this workshop participants will learn how to manage and prepare data before the statistical analysis. Further, participants will also learn and understand each statistical test aims to test(ex. relationship, causation, or difference). Participants of this course will also learn how to interpret the results and write narratives. The software that the participants will use are JAMOVI and JASP, these are freeware and user-friendly.

Course Objectives:

1. Learn how to manage and prepare data using JASP and JAMOVI.

2. Learn how to run the statistical test using JASP and JAMOVI. Further, understand the practical application and assumptions of each statistical test.

3. Learn how to report and write the narrative on each statistical tests result.

4. Identify the right statistical test depending on the characteristics of the variables.

Course Outline

Day 1

*Introduction to Jasp and JAMOVI
*Data Encoding using JAMOVI
*Running and Interpreting Frequencies using JAMOVI
*Introduction to basic statistics:mean, median, mode and normal distribution
*Identifying and treating outliers in a distribution

Day 2

*Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau
*Test of difference: Paired t-test and Wilcoxon signed-rank
*Comparison of Means (2 groups): Independent T-test and Mann-whitney U test
*Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Walis-H

Day 3

*Regression Analysis: Linear and Logistic
*ANCOVA
*Reliability

*Factor Analysis

PROGRAM OF ACTIVITIES: STATISTICAL TOOLS ENABLEMENT IN-DEPTH TRAINING WORKSHOP

Day 1: Basics

Opening of the workshop (Doxology, National Anthem and opening remarks)	8:45AM to 9:00AM
Introduction to Jasp and JAMOVI	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Data Encoding using JAMOVI	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
*Running and Interpreting Frequencies using JAMOVI *Introduction to basic statistics:mean, median, mode and normal distribution	1:01PM to 2:30PM
Identifying and treating outliers in a distribution	2:31PM to 4:00PM
Dismiss	

Day 2: Workshop

Consultation	8:45AM to 9:00AM
Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Comparison of Means (2 groups): Independent T-test and Mann-Whitney U test	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Walis-H	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Continuation of Workshop/Hands-on activities	2:46PM to 4:00PM
Dismiss	

Day 3: Workshop(Advanced Statistics)

Regression Analysis: Linear and Logistic	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Analysis of Covariates/ANCOVA	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
Reliability Test and Exploratory Factor Analysis	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Confirmatory Factor Analysis	2:31PM to 4:00PM
Dismiss	

THE SPEAKER

JEROME L. BUHAY

- Researcher/Statistician/Consultant
- Professor at De La Salle University – Dasmariñas
- PhD in Mathematics Education (Ongoing)
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- Master of Arts in Mathematics
- BS in Applied Mathematics maj. In Statistics

REQUIRED SOFTWARE FOR THIS WORKSHOP:

- **Zoom**
- **Jasp (Freeware Statistical Software)**
- **JAMOVI (Freeware Statistical Software)**
- **Gmail account for Google Classroom**

Research Writing, Sampling Techniques and Statistical Analysis In-depth Seminar Workshop - October 11 to 15, 2021

Course Description:

A five-day workshop via Zoom. Research writing has been an integral part of our daily life. Whether you are working in the public sector, private sector and academe, the research writing process is the same.In fact the whole research process is constant accross the sector. In the research writing portion of this workshop, participants will learn how to structure a research paper, write a statement of the problem, writing literatures/citation and many more. On the second part of research writing, participants will engage to a whole-day writeshop.

The third day of the workshop will deal with sampling Techniques, data collection and data preparation. On the last two days of workshop, participants will learn how to interpret data using JASP and JAMOVI (these are freewares).

Course Objectives:

1. Learn how to write a research paper.
2. Enable participants on identifying the right sampling techniques in accordance to the research problem and research design.
3. Learn how to interpret statistical data using FREEWARES (JASP and JAMOVI).

Course Outline

Day 1

• Planning Research Work
• Structuring Research Paper/ Research Work
-Title
-Abstract
-Keywords
-Introduction
-Methods
-Results & Discussion
-Conclusions
-Recommendations
-Acknowledgement
-References
-Supporting Materials
• Use of Proper Scientific Language
• How to Publish, Ethics, & Plagiarisms

Day 2 – Whole-day of Write shop

Day 3 – Sampling, Data Collection and Data Preparation

• Understanding survey design
• Basics of Sampling
-Role of Sampling in Statistical Inference
-Introduction to probabilistic sampling techniques
-Introduction to non-probabilistic sampling techniques
-Choosing the best sampling techniques
• Techniques on effective questionnaire
-Questionnaire Construction
-Pre-test
• The Cronbach's Alpha (Reliability test)
• Data Coding, Entry and checking
• Preparing Data for Analysis

Day 4 – Statistical Analysis

*Introduction to Jasp and JAMOVI
*Data Encoding using JAMOVI
*Running and Interpreting Frequencies using JAMOVI
*Introduction to basic statistics:mean, median, mode and normal distribution
*Identifying and treating outliers in a distribution

Day 5 – Statistical Analysis Part 2

*Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau
*Test of difference: Paired t-test and Wilcoxon signed-rank
*Comparison of Means (2 groups): Independent T-test and Mann-whitney U test
*Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Walis-H

PROGRAM OF ACTIVITIES: RESEARCH WRITING, SAMPLING TECHNIQUES AND STATISTICAL ANALYSIS IN-DEPTH SEMINAR WORKSHOP

Day 1: Basics

Opening of the workshop (Doxology, National Anthem and opening remarks)	8:45AM to 9:00AM
Introduction to Research	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Planning Research Work	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
• *Structuring Research Paper/ Research Work*	1:01PM to 2:30PM

-Title -Abstract -Keywords -Introduction -Methods -Results & Discussion -Conclusions -Recommendations -Acknowledgement -References -Supporting Materials • Use of Proper Scientific Language • How to Publish, Ethics, & Plagiarisms	2:31PM to 4:00PM
Dismiss	

Day 2: Workshop (Writeshop and Critiquing)

Admission to Zoom	8:45AM to 9:00AM
Writeshop and Critiquing Session 1	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Writeshop and Critiquing Session 2	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
Writeshop and Critiquing Session 3	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Writeshop and Critiquing Session 4	2:46PM to 4:00PM
Dismiss	

Day 3: Sampling, Data Collection and Data Preparation

• Understanding survey design	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
• Basics of Sampling -Role of Sampling in Statistical Inference -Introduction to probabilistic sampling techniques -Introduction to non-probabilistic sampling techniques -Choosing the best sampling techniques	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
-Techniques on effective questionnaire -Questionnaire Construction -Pre-test	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
-The Cronbach's Alpha (Reliability test) • Data Coding, Entry and checking • Preparing Data for Analysis	2:31PM to 4:00PM

Day 4: Statistical Analysis

*Introduction to Jasp and JAMOVI *Data Encoding using JAMOVI	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
*Running and Interpreting Frequencies using JAMOVI	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
*Identifying and treating outliers in a distribution	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
*Continuation of the discussion	2:31PM to 4:00PM
Dismiss	

Day 5: Workshop

*Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
*Test of difference: Paired t-test and Wilcoxon signed-rank	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
*Comparison of Means (2 groups): Independent T-test and Mann-whitney U test	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
*Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Walis-H	2:31PM to 4:00PM
Dismiss	

THE SPEAKERS:

DR. ALDRIN P. ANTIVOLA

- **Doctor of Education (Ed.D) Major in Educational Management (With Highest Distinction)** – Equivalent to Latin Honors of Summa Cum Laude Graduate School of Education, Arts and Sciences GSEAS De La Salle University-Dasmarinas, March 2004

- **Master's in Business Administration (MBA) -** Ateneo de Manila University – Regis University MBA Program of Regis University, Denver, Colorado, U.S.A. Ateneo de Manila University Graduate School of Business AGSB, June 2000

- **Twenty-five years in service to the academe as part-time faculty**

- **Consultant and Coach in the field of Business and Management**

- **Published numerous researches**

JEROME L. BUHAY

- Researcher/Statistician/Consultant
- Professor at De La Salle University – Dasmariñas
- PhD in Mathematics Education (Ongoing)
- PhD in Statistics (with earned units)
- Master of Arts in Mathematics
- BS in Applied Mathematics maj. In Statistics

REQUIRED SOFTWARE FOR THIS WORKSHOP:

- **Zoom**
- **Jasp (Freeware Statistical Software)**
- **JAMOVI (Freeware Statistical Software)**
- **Gmail account for Google Classroom**
- **Raosoft.com**

STRATONE

Fundamentals of Strategic Planning Workshop - November 10 to 12, 2021

Course Description:

The Strategic Planning In-depth Training Workshop is a foundational course for those who want to learn how to make strategic decisions realistically. This course is for managers (both public, private and academic sector) who work in every organization and face challenges daily. Managers are expected to deal with problems daily and make better strategic choices in a short amount of time. This course will teach you how to perform need analysis, problem-solving, and strategic decision-making to improve your company's value.

Participants will learn how to become an innovator, a convincing player, and a strategic decision-making champion in this Strategic Planning In-depth Training Workshop. Participants will learn how to perform a SWOT study, leverage critical possibilities for strategic opportunities, and encourage risk-taking and creativity through this course. This workshop equips participants with the skills they need to bring value to their organizations and propel their teams forward.

Course Objectives:

- Make well-informed strategic decisions
- Motivate and lead the team to greater preparedness and competitiveness
- Bring value to the company by applying creative analysis.
- Determine the potential plan of action by understanding the wishes and desires of your clients and stakeholders.
- Anticipate and develop plans to link strategic vision with core competencies.
- Recognize and form competitive partnerships to control others.
- Recognize the strengths and vulnerabilities of your team using strategic analysis.
- At all stages, encourage and promote taking risks and innovating.
- Improve your ability to persuade others to buy into your strategic ideas.

Course Outline

Day 1: The Strategic Planning Process: Preparation	Day 2: Getting the Process of Strategic Planning Started
- Establish the parameters for the strategic planning process. - Configure the parameters - Interested parties - How to Define the Process Parameters for Strategic Planning - Setting the Parameters for a Strategic Plan - Evaluation - Create a Committee - Committee on Strategic Planning - How Do I Form a Committee?	- Statement of Intent - Core Capabilities - How to Write a Mission Statement - Assessment Activity: Creating a Mission Statement - Create a mission statement. - What Is a Vision Statement and How Do I Make One? - Examine both the internal and external environments. - Scan of the Environment

1

- Creating a Committee - Evaluation Activity - Obtain operational information - Real-Life Example of Gathering Operational Data - How to Collect Operational Information - Assessment Activity: Gathering Operational Data - Questions to Ponder	- Internal/External Environments: How to Assess Them - Conducting a SWOT Analysis - SWOT Analysis: How to Do It
Day 3: Creating a Strategic Plan - Prioritize the issues that the strategic plan will address. - Make a list of your goals and objectives. - SMART Objectives - Objectives in a Rank Order - Establishing Goals and Objectives - Recommendations - Develop a Goal-Achieving Strategy - Summary of the Report - Guidelines for drafting a strategic plan - Questions to Ponder - Assign Authority and Responsibility - Responsibilities - The Strategic Alignment - Assigning Responsibilities and Authority - Create a System for Monitoring	

THE SPEAKER:

DR. ALDRIN P. ANTIVOLA

- **Doctor of Education (Ed.D) Major in Educational Management (With Highest Distinction) –** Equivalent to Latin Honors of Summa Cum Laude Graduate School of Education, Arts and Sciences GSEAS De La Salle University-Dasmarinas, March 2004

- **Master's in Business Administration (MBA) -** Ateneo de Manila University – Regis University MBA Program of Regis University, Denver, Colorado, U.S.A. Ateneo de Manila University Graduate School of Business AGSB, June 2000

- **Twenty-five years in service to the academe as part-time faculty**

- **Consultant and Coach in the field of Business and Management**

- **Published numerous researches**

REQUIRED SOFTWARE FOR THIS WORKSHOP:
- **Zoom**
- **Gmail account for Google Classroom**

Designing and Implementing a Monitoring and Evaluation System Workshop - November 24 to 26, 2021

Course Description:

A three-day workshop via Zoom. Participants will learn about the various ways in which development actors can assess their interventions and track the various activities associated with a project or program in order to become aware of its shortcomings and successes and to determine the extent to which development operations achieve the desired results. The first section of the course will explore the relevance of monitoring and evaluation, its role in the project cycle, and the relationship between various stakeholders. Additionally, it will examine the many factors that must be considered during the project's design phase in order to implement the system, such as the change theories that support development interventions, logical models, and frameworks. The second section of the course will examine the fundamental components of a monitoring, evaluation, accountability, and learning system, as well as various data collection strategies and tools and their application to baseline studies, monitoring, end-of-project evaluations, and impact assessments. The final section of the course will focus on making sense of, utilizing, and disseminating the monitoring and evaluation data.

Given the range of practices among development organizations, both indicator-based and outcome-based approaches to monitoring will be discussed, with a greater emphasis on those that are aligned with the requirements of large funders.

Objectives:

- Discuss the relevance and significance of a monitoring and evaluation system.
- Examine the roles of accountability and education in project management.
- Recognize the essential components of an M&E system.
- Justify the use of logic models.
- Distinguish the benefits and drawbacks of logical frameworks.
- Compile a list of the characteristics of an effective indicator.
- Select data gathering tools that are suited for the job.
- Determine M&E stakeholders and their appropriate involvement in the process.

COURSE OUTLINE

Introduction to M&E
- Role of M&E in project management
- M&E and the project cycle
- Distinction between M&E, evaluation and impact evaluation
- Evidence chain
- Role of logic models
- Result frameworks

1

Planning a process of change
- Stakeholders' analysis
- Inclusion, inequalities and power dynamics
- Projects' theories of change
- Developing a theory of change
- Logical frameworks
- Vertical and horizontal logic Components
- Expand the theory of change

Selecting indicators
- Types of indicators
- Characteristics of a good indicator
- Factors to consider
- Wording of indicators

Planning for M&E
- Factors to consider
- Planning tools
- Process and tasks
- Sampling
- Data management

M&E plan
- Data collection methods
- Advantages and limitations of traditional and participatory methods
- Inclusion and diversity
- Data quality
- Positionality and Ethics
- Refine and improve the M&E plan

Outcome oriented approaches to M&E
- Strengths and weaknesses
- Outcome mapping
- Most significant change
- Simulation of outcome mapping

Making sense of M&E data
- Importance of baseline
- Pros and cons of control groups
- Analyzing M&E data
- Making sense of qualitative and participatory M&E data
- Differences between monitoring and evaluation findings

Using M&E findings
- Making inferences from M&E data
- Learning and accountability
- Different types of evaluations
- Interpretation of M&E data

Communicating M&E findings
- Data visualization
- Reporting
- Formulating recommendations
- Decision making in complex environments
- Critical reflections on M&E
- Emerging evaluation perspectives
- Synthesis of the course

PROGRAM OF ACTIVITIES: DESIGNING AND IMPLEMENTING A MONITORING AND EVALUATION SYSTEM WORKSHOP

Day 1:

Opening of the workshop (Doxology, National Anthem and opening remarks)	8:45AM to 9:00AM
Introduction to M&E • Role of M&E in project management • M&E and the project cycle • Distinction between M&E, evaluation and impact evaluation • Evidence chain • Role of logic models Result frameworks	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
Planning a process of change • Stakeholders' analysis • Inclusion, inequalities and power dynamics • Projects' theories of change • Developing a theory of change • Logical frameworks • Vertical and horizontal logic Components • Expand the theory of change	10:46AM to 11:59AM

Lunch Break	12:00PM to 1:00PM

Selecting indicators
    • Types of indicators
    • Characteristics of a good indicator
    • Factors to consider
Wording of indicators
	1:01PM to 2:30PM

Continuation of the discussion	2:31PM to 4:00PM
Dismiss	

Day 2: Workshop

Consultation	8:45AM to 9:00AM

Planning for M&E
    • Factors to consider
    • Planning tools
    • Process and tasks
    • Sampling
    • Data management
	9:01AM to 10:30AM

Recess/Break	10:31AM to 10:45AM

M&E plan
    • Data collection methods
    • Advantages and limitations of traditional and participatory methods
    • Inclusion and diversity
    • Data quality
    • Positionality and Ethics
Refine and improve the M&E plan
	10:46AM to 11:59AM

Lunch Break	12:00PM to 1:00PM
Continuation of the discussion on M and E	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Continuation of Workshop/Hands-on activities	2:46PM to 4:00PM
Dismiss	

Day 3: Workshop(Advanced Statistics)

Outcome oriented approaches to M&E
    • Strengths and weaknesses
    • Outcome mapping
    • Most significant change
    • Simulation of outcome mapping
	9:01AM to 10:30AM

Recess/Break	10:31AM to 10:45AM

Making sense of M&E data
    • Importance of baseline
    • Pros and cons of control groups
	10:46AM to 11:59AM

• Analyzing M&E data • Making sense of qualitative and participatory M&E data • Differences between monitoring and evaluation findings	
Lunch Break	12:00PM to 1:00PM
Using M&E findings • Making inferences from M&E data • Learning and accountability • Different types of evaluations • Interpretation of M&E data	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
Communicating M&E findings • Data visualization • Reporting • Formulating recommendations • Decision making in complex environments • Critical reflections on M&E • Emerging evaluation perspectives • Synthesis of the course	2:31PM to 4:00PM
Dismiss	

The speaker:

Paolo G. Hilado
Data Scientist, Educator, Consultant

- **Data Scientist**
- **Director for Research and Planning - Colegio San Agustin Bacolod**
- **Certificate in Data Science and Connectivity to Artificial Intelligence - Johns Hopkins University, Baltimore Maryland**
- **Micromasters in Data Science - University of California San Diego**
- **Post Graduate Diploma in Research and Development Management - University of the Philippines Open University, Los Baños, Laguna**
- **Masters Degree in Nursing - West Negros University**