Instabright
International Journal of Multidisciplinary Research

RESEARCH ARTICLE

Modular Distance Learning: The Problem and Its Background

Diosdora L. Rodriguez
Gregorio Paradero Elementary School

Corresponding Author Email: diosdora.rodriguez@deped.gov.ph
Phone: 09169492256

INTRODUCTION

Modular Distance Learning involves individualized instruction that allows learners to use self-learning modules (SLMs) in print or digital format/electronic copy, whichever is applicable in the context of the learner, and other learning resources like Learner's Materials, textbooks, activity sheets, study guides and other study materials. Learners access electronic copies of learning materials on a computer, tablet PC, or smartphone. CDs, DVDs, USB storage and computer-based applications can all be used to deliver e-learning materials, including offline E-books. The teacher takes the responsibility of monitoring the progress of the learners. The learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging. Where possible, the teacher shall do home visits to learners needing remediation or assistance. Any member of the family or other stakeholder in the community needs to serve as para-teachers.

Modular teaching is more effective in teaching learning process as compared to ordinary teaching methods. Because in this modular approach the students learn at their own pace. It is free self-learning style in which immediate reinforcement, feedback is provided to practice exercise, which motivate the students and create interest in them. Modular approach helps to maximize the chances of student participation in classroom in respect to fulfill the given tasks at the spot. So, the students feel free to learn in their own style (Sadiq, 2014).

The public health emergency brought about by COVID-10 calls for the Department of Education (DepEd) to be innovative and resourceful in delivering quality assessable, relevant and liberating education. In response to this emergency DepEd developed the Basic Education Learning Continuity Plan (BE-LCP) to ensure that learning opportunities are provided to our learners in a safe manner, through different learning delivery. In line with this, the Department, through its Regional and Schools Division Offices undertake the urgent and necessary development, production and provision of learning resources, in accordance with its mandate. (DepEd Order No. 18 s. 2020).

Problems in Tuy district have arisen as to how the public elementary teachers in the said district reach pupils who do not have stable internet connectivity will have access to education amidst this pandemic. Educators, parents, and pupils have different views on this issue, but the Department of Education proposed different modalities of learning.

One of which is the modular distance learning. This mode of learning is a response to the call for education among students who prefer the traditional way of learning. Teachers hand over the printed modules to the parents or guardians of students once a week. These contain different activities, discussions, and performance tasks which the students need to accomplish on their own.

The benefits of modular distance learning are; Flexible. Students can set their own schedule in finishing the tasks in the module. Student-centered. Students have their own way of learning that would work for them. Since the accomplishment of tasks is self-paced, students learn to have a sense of responsibility. Accessibility. Resources within the locality are available not always in the form of online resources, but the help from the community. In this way, they become inquisitive and creative in looking for answers to their questions prior to the activities. The contents of the module are easier to grasps than those in the books. Key points are included as supplements to the books as reference. cost-efficient. Parents and guardians can save a lot of transportation and accommodation. The only expense is in the printing of modules which are shouldered by schools.

In this light, this study was conducted as an attempt to design an action plan that can serve as an input for enhancement program of modular distance learning.

STATEMENT OF THE PROBLEM

This study aimed to analyze the factors that affect the Modular Distance Learning (MDL) to public elementary teachers in Tuy District, Tuy Batangas.

Specifically, this study sought answers to the following questions:

1. What is the profile of the respondents in terms of:
    1.1. age;
    1.2. gender;
    1.3. civil status;
    1.4. educational attainment;
    1.5. length of service; and
    1.6. position?

2. What is the perception of the respondents on the factors that affect the Modular Distance Learning (MDL) in terms of:
    2.1. parent-teacher linkages;
    2.2. utilization of modules; and
    2.3. local government support?

3. What are the challenges experienced by the respondents on the factors that affect the Modular Distance Learning?

4. How significant is the difference on the perceptions of the respondents on the factors that affect the Modular Distance Learning when profile is considered?

5. How significant is the difference on the challenges experienced by the respondents on the factors that affect the Modular Distance Learning when profile is considered?

6. How significant is the relationship between the factors that affect the Modular Distance Learning and the challenge they experience on it?

7. What experiential-based teaching activities can be prepared to serve as an input for enhancement program of modular distance learning?

HYPOTHESES

The following null hypotheses were tested at $p < 0.05$ level of significance.

1. There is no significant difference between the perceptions of the respondents on the factors that affect the Modular Distance Learning and the profile of the respondents.

2. There is no significant difference between the challenges experienced by the respondents on the factors that affect the Modular Distance Learning and the profile of the respondents.

3. There is no significant relationship between the factors that affect the Modular Distance Learning and the challenge they experience on it.

SCOPE AND LIMITATION

The study focused on the factors that affect the Modular Distance Learning (MDL) to public elementary teachers. It covered the profile of the respondents such as age, gender, civil status, educational attainment, length of service, and position. It also covered the perception of the respondents on the factors that affect the Modular Distance Learning (MDL) such as parent-teacher linkages, utilization of modules, and local government support. Also included were the challenges experienced by the

respondents on the factors that affect the Modular Distance Learning. It also determined the significant difference on the perceptions of the respondents on the that affect the Modular Distance Learning when profile was considered, significant in the difference on the challenges experienced by the respondents on the factors that affect the Modular Distance Learning when profile was considered and the significant was the relationship between the factors that affect the Modular Distance Learning and the challenge, they experience on it. Based on the results of the study the researcher designed an experiential-based teaching activities that can serve as an input to enhance the modular distance learning.

The study was limited only on the perception of the respondents on the factors that affect the modular distance learning and the challenges experienced by the respondents on the factors that affect the Modular Distance Learning. This study was delimited to the private elementary teachers of the locale of the study.

RESEARCH METHODS AND PROCEDURES

This chapter presents the research method used in the study. It also includes the locale of the study, description of the respondents, research instrument, construction and validation of the instrument, data gathering procedure and statistical treatment of data.

Research Method Used

The study utilized the descriptive quantitative method of research which made use of the questionnaire in gathering the necessary data. Descriptive method is applicable to the study because the aim was to determine the factors that affect the Modular Distance Learning (MDL) to public elementary teachers in Tuy District, Tuy Batangas.

According to Gay (2016) descriptive research method is significant as surveys abound in educational research and are utilized by many researchers as an investigative tool to collect data in order to address educational questions. Also, this method applies prominently because the present study aimed to determine the relationship and differences between among the variables covered.

Descriptive evaluative was used to perceive the factors that affect the modular distance learning and the challenges experienced by the respondents on it.

Descriptive comparison was used to compare the responses of the respondents in the factors that affect the modular distance learning when profile was considered and to compare the challenges experienced by the respondents in the factors that affect the modular distance learning when profile was considered

Descriptive correlation was used to find the significant relationship between the responses of the respondents in the factors that affect the modular distance learning and the challenges experienced by the respondents on it.

As cited by Creswell (2016), it aimed to describe and measure the relationship between two or more variables. The correlational approach will determine whether a significant relationship exists between the variables or when their subcomponents are taken individually.

Locale of the Study

The study was conducted in public elementary schools in the District of Tuy, Batangas. There are eighteen (18) public elementary schools in the Tuy, district. There were two hundred (200) public elementary teachers who served as respondents of this study from the following schools like; Bayudbud Elementary School, Bolbok Elementary School, Dalima Elementary School, Dao Elementary School, Eulogio G. Cerrado Elementary School, Gregorio Agoncillo Elementary School, Gregorio Paradero Elementary School, Guinhawa Elementary School, Gumapac Barangay School, Jose Zabarte Elementary School, Julian Castillo Memorial Elementary School, Lumbangan – Talon Elementary School, Luntal Elementary School, Magahis Elementary School, Mataywanac Elementary School, San Jose Elementary School, Santiago De Guzman Elementary School and Toong Elementary School.

Respondents of the Study

The respondents of this study were two hundred (200) public elementary teachers from the population of elementary school teachers in Tuy District. Purposive sampling was utilized in the study following the criteria (1) at least one year in the teaching profession, (2) teacher in public elementary schools within Tuy district.

Research Instrument

The main instrument used in this study was questionnaire. The questionnaire was composed of three parts: Part I dealt with the profile of the respondents. Part II was the questionnaire regarding the factors that affect the modular distance learning such as parent-teacher linkages, utilization of modules and local government support.   Part III   was the questionnaire about the challenges experienced by the respondents in the factors that affect the modular distance learning. The questionnaire was

administered to the public elementary school teachers within Tuy, district.

Construction and Validation of Instrument

The researcher's construction of her questionnaire was on her extensive reading of different studies and other survey tools to give substance to her questionnaire. Through the assistance of the researcher's adviser, she prepared the first draft of the questionnaire. After the revision, it was given to three (3) teachers for the content validation. They were guidance counselor, psychologist and principal. To test the reliability of the questionnaire, the researcher used Cronbach alpha statistics to determine the reliability of the items in the questionnaires. The parent-teacher linkages received a value of 0.91, for the utilization of modules 0.93, and for local government support 0.92. For the challenges a value of 0.92 was computed. Statistically the prepared questionnaire of the researcher was valid and reliable at 0.92 or 92 percent.

Ethical Consideration

This study was subjected to Ethics Review by the School Ethics Review by the Institutional Ethics Review Committee (IERC) of Dr. Francisco L. Calingasan Memorial Colleges Foundation Inc. This study passed the ethical standards of the School Research Ethics Board.

Part of the ethical consideration of this study was to secure the consent of the respondents to voluntarily participate (Appendix D). Before the respondents participated in the study each participant was given a copy of a consent. The researcher made sure that the consent from was carefully explained to each respondent. It was further emphasized to the respondents that participation in the study was voluntarily and that they have option not to participate in the study.

Ethical principles were considered to preserve the integrity and dignity of the respondents. This study was also subjected to similarity testing using Turnitin with similarity index of _____% (Appendix E) to ensure that no part of this study has been copied or plagiarized.

Data Gathering Procedure

The researcher secured permission from the Public Schools District Supervisor (PSDS) of Tuy District in the form of letter. After the approval, the researcher sent another letter asking permission for the Principals of the Public Elementary Schools within the District. Then right after the permission was granted, the researcher conducted the survey proper using Google form. The questionnaires were distributed and received personally by the respondents. All questionnaires floated by the researcher were retrieved.

Statistical Treatment of Data

To process the data, the researcher used the Statistical Package Program.

Problem 1. The Profile of the Respondents.

1. Frequency and percentage were used to describe the profile of the respondents.

Problem 2. Perception of the respondents on the factors that affect the Modular Distance Learning (MDL).

2. Weighted mean and standard deviation were used to describe the factors that affect the Modular Distance Learning (MDL).

Problem 3. Challenges experienced by the respondents on the factors that affect the Modular Distance Learning.

3. Weighted mean and standard deviation were used to describe the challenges experienced by the respondents on the factors that affect the Modular Distance Learning Problem

Problem 4. Test of difference on the perceptions of the respondents on the factors that affect the Modular Distance Learning when profile is considered.

4. T-test/F-test were used to determine difference on the perceptions of the respondents on the factors that effect on Modular Distance Learning when profile is considered

Problem 5. Test of difference on the challenges experienced by the respondents on the factors that affect the Modular Distance Learning when profile is considered.

5. T-test/ F-test were used to determine difference on the challenges experienced by the respondents on the factors that affect the Modular Distance Learning when profile is considered.

Problem 6. Test of relationship on the Perception of the respondents on the factors that affect the Modular Distance Learning (MDL) and challenges experienced on it.

6. Pearson r was used to determine relationship on the Perception of the respondents on the factors that affect the Modular Distance Learning (MDL) and challenges experienced on it.

CONCLUSIONS

Based on the aforementioned findings, the following conclusions were drawn:

1. Most of the teachers have an age ranging from 31-40, female, married, with MA/ MS units, 11-15 years of teaching experience, and Teacher III.

2. The teachers strongly agree with factors that affect the Modular Distance Learning (MDL) in terms of parent-teacher linkages, utilization of modules and local government support.

3. The teachers agree that they experienced challenges on the factors that affect the modular distance learning.

4. There is no significant difference on the perceptions of the respondents on the factors that affect the Modular Distance Learning when profile is considered.

5. There is no significant difference on the challenges experienced by the respondents on the factors that affect the Modular Distance Learning when profile is considered.

6. There is a significant relationship between the perception of respondents on the factors that affect the Modular Distance Learning (MDL) and challenges experienced on it.

RECOMMENDATIONS

Based on the conclusions of the study, the following recommendations are hereby endorsed:

1. School administrators should consider the factors that affect the Modular Distance Learning (MDL) in terms of parent-teacher linkages, utilization of modules and local government support, regardless of their profiles.

2. School administrators should keep supporting the Modular Distance Learning (MDL) in order to keep it in terms of parent-teacher linkages, utilization of modules and local government support.

3. School administrators should consider the different challenges experienced in Modular Distance Learning in order to overcome those challenges.

4. Future studies should be done to address the differential perspectives on the perceptions of the respondents on the factors that affect the Modular Distance Learning when profile is considered

5. School Administrators and teachers should work together to provide remedies suggest different strategies to overcome the challenges experienced on the factors that affect the Modular Distance Learning.

6. For future research, a similar study can be conducted on other districts utilizing the same variables, methodologies and statistical techniques. The results of such study could then be utilized and compared to the results of this study. This is done to confirm the theories and plan of action that is generated out of this study.

7. The prepared experiential-based teaching activities by the researcher is hereby recommended to enhance the modular distance learning to all public elementary school within the Tuy district.

BIBLIOGRAPHY
Books

Creswell, J.W. (2016) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed. Thousand Oaks, California: SAGE Publications

Keles, M. K., Özel, S. A. (2016) *A Review of Distance Learning and Learning Management Systems*, IntechOpen

Mahlangu, V. P., (2019) *The Good, the Bad, and the Ugly of Distance Learning in Higher Education,* IntechOpen

Maile, C. A., Cooper M. S., (2018) *Curriculum and Instructional Materials Center a Division of the Oklahoma Department of Career and Technology Education*, Oklahoma Department of Career and Technology Education Stillwater, Oklahoma

Moore, M. G. (2019) *The Theory of Transactional Distance, Handbook of Distance Education*, Routledge

Rotas, E. (2020) *Parents' Distance Learning Modality Preferences for their Children in the New Normal Post-COVID-19 Era: A Survey Report*

Theses, Dissertations

Abuhassna, H., Yahaya, N., (2018*) Students' Utilization of Distance Learning through an Interventional Online Module Based, Instruction* Master's Thesis, University of Austria, Europe

Azhar, M., Tariq Mahmood, S., Allah, B., Malik, (2018) *A comparative study of student satisfaction level in distance learning and live classroom at higher education level,*Undergraduate Thesis, University of Turkey. Ankara, Turkey.

Baig, M. (2017) *A Critical Study Of Effectiveness Of Online Learning On Students' Achievement*, Master's Thesis, University of Oklahoma , USA.

Cabardo, J.R. (2015) *Effectiveness of Enhanced Learning Materials in Science for the Open High School Program* Master' s

Thesis, University of East

Cabrera, F. (2014) *Modular Cooperative Learning: A Designed Mathematics Instruction for 21st Century Education*, Master's Thesis, Isabela State University - Cauayan Campus

Garcia, M. (2017) *E-Learning Technology Adoption in the Philippines: An Investigation of Factors Affecting Filipino College Students' Acceptance of Learning Management Systems*, Master's Thesis, University of the Philippines

Goyal, A. (2018) *Role of Online Education in Modern Education System*, Master's Thesis, University of Chicago, USA.

Guido, R.M. (2014) *Evaluation of a Modular Teaching Approach in Materials Science and Engineering, Master's Thesis*, University of East.

Halawachy, H.and Doghonadze, N., Ulaine, U. (2020) *The Degree of Readiness to Total Distance Learning in the Face of COVID-19 - Teachers' View*, Master's Thesis, University of California, USA.

Khan, M. Kim, B., Shukat H., Faitma, Z. (2010) *Effectiveness of Modular Teaching in Biology at Secondary Level*, Ungraduate Thesis, University of California, USA.

Lim, E.J. A., (2016) *Effectiveness of Modular Instruction in Word Problem Solving of BEED Students*, Master's Thesis, Samar State University, Philippines.

Matanluk, O., Mohammad, B., Imbug, M. (2013) *The Effectiveness of Using Teaching Module based on Radical Constructivism toward Students Learning Process*, Master's Thesis, Sabah University.

Muego, M. (2019) *Inclusive Education in the Philippines: Through the Eyes of Teachers, Administrators, and Parents of Children with Special Needs*, Master's Thesis, Philippine Normal University.

Ni, A. (2013) *Comparing the Effectiveness of Classroom and Module Learning: Teaching Research Methods*, Master's Thesis, Arellano University Manila.

Nguyen, T. (2015) *The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons*, Master's Thesis, University of Malaysia, Malaysia.

Oz, G., Demirkol O and Baihr, S. (2018) *An Evaluation of Modular Teaching in The Preparatory English Program: A Quantitative Case Study*, Master's Thesis, University of Bahrain.

Sabado G. and Mobo F. (2019) *An Assessment of the Effectiveness of E-Learning in AMA Olongapo Campus*, Undergraduate Thesis, AMA Olongapo.

Sapungan, G. (2014*) Parental Involvement in Child's Education: Importance, Barriers and Benefits*, Master's Thesis, Philippine Women University.

Sun, A. and Chen, X. (2016) *Online Education and Its Effective Practice: A Research Review*, Master's Thesis, Rowan University, USA.

Tria, J. (2020) *The COVID-19 Pandemic through the Lens of Education in the Philippines: The New Normal, University of Baguio*, Master's Thesis, University of Baguio, Baguio City.

Journal, Magazines, Periodicals and Other References

Ambayon, C. M., (2020) Modular-Based Approach and Students' Achievement in Literature, College of Teacher Education, Sultan Kudarat State University, Mindanao, Philippines, *International Journal of Education & Literacy Studies,* ISSN: 2202-9478

Arinto, P., (2016) Issues and Challenges in Open and Distance e-Learning: Perspectives from the Philippines, University of the Philippines, *International Review of Research in Open and Distributed Learning,* Volume 17, Number 2

Aspinwall, N., (2020) Philippines Scrambles to Open Schools Despite Calls for Postponement, *The Diplomat*

Capulso, L. B., (2020) Braving The K-12 Education in The Philippines Amidst The COVID-19 Pandemic, Philippines, *K12 Digest*

Ciriaco, C. M., (2020) Modular Learning Top Choice of Enrollees so far, DepEd, *BM News*

Codamon, D. B., (2020) Understanding the Distance Learning Delivery Modalities, *Philippine Information Agency*

Cornford, I.R. (2020) Ensuring effective learning from modular courses: a cognitive, Journal of Vocational Education and Training, 49:2, 237-251, DOI: 10.1080/13636829700200014

Croft, N., Dalton A., Grant M. (2015) Overcoming Isolation in Distance Learning: Building a Learning Community through Time and Space, *Journal for Education in the Built Environment*, 5:1, 27-64, DOI: 10.11120/jebe.2010.05010027

Dziuban, C., Graham, C., Moskal, P., Norberg, A. Sicilia, N., (2018), Blended Learning: The New Normal and Emerging

Technologies, *International Journal of Educational Technology in Higher Education*, Volume 15, 10.1186/s41239-017-0087-5

Earle, L. (2019) Social Context Theory, *South Pacific Journal of Psychology,* Northern Territory University, Australia11 (2)

Fidalgo, P., Thormann, J., Kulyk O., Lencastre J. A. (2020) Students' Perceptions on Distance Education: A Multinational Study, *International Journal of Educational Technology in Higher Education*, volume 17, Article number: 18 (2020)

Gay, G. H. (2016) An assessment of online instructor e-learning readiness before, during and after course delivery. *Journal of Computing in Higher Education*, 28(2), 199-220

Karal, H. and Cebi, A. (2012) Views on Modular Assessment and Evaluation Process in Distance Education, *Procedia - Social and Behavioral Sciences* Volume 46, 2012, Pages 2073-2077

Kayode, B. K., (2018) Effect of Communication Management on Distance Learners' Cognitive Engagement in Malaysian Institutions of Higher Learning, Al-Madinah International University (MEDIU) *International Review of Research in Open and Distributed Learning* Volume 19, Number 4

Kintu, M.J., Zhu, C. & Kagambe, E. (2017) Blended learning effectiveness: the relationship between student characteristics, design features and outcomes. Int J Educ Technol High Educ 14, 7

Lapada, A. (2020) Teachers' Covid-19 Awareness, Distance Learning Education Experiences and Perceptions towards Institutional Readiness and Challenges, *International Journal of Learning, Teaching and Educational Research*, Volume 19, DO - 10.26803/ijlter.19.6.8

Rotter, J. B. (2019) Generalized Expectancies for Internal Versus External Control of Reinforement, *Psyhologycal Monographs, General and Applied,* 80 (1), 1, Harvard T.H. Chan School of Public Health

Saavedra, J., (2020), Supporting the continuation of teaching and learning during the COVID-19 Pandemic, Fernando Reimers, Global Education Innovation Initiative, Harvard University, Andreas Schleicher, *Organisation for Economic Co-operation and Development*

Sadiq, S. (2014) Effectiveness of Modular Approach in Teaching at University Level, National University of Modern Languages, Islamabad, *Journal of Education and Practice*, ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Vol.5, No.17

San Antonio, D.M., Morales, N. S., & Moral L. S., (2011) Module- based Professional Development for Teachers: A Cost-effective Philippine Experiment, *Teacher Development*, 15:2, 157-169, DOI: 10.1080/13664530.2011.571496

Sejpal, K. (2017) Modular Method of Teaching, Haribapa Arts & Commerce College, Jasdan. Gujarat (India), RET Academy for International Journals of Multidisciplinary Research (RAIJMR), *International Journal for Research in Education*, Vol. 2, Issue:2

Toquero, C. M., (2020) Emergency remote education amid COVID-19 pandemic in learning institutions in the Philippines, 10.46661/ijeri.5113

Valderama, J. S., (2012), The Effect of Online-Modular Instruction to Mathematics Achievement of High and Low Math Ability Group of Students, *IAMURE International Journal of Mathematics, Engineering and Technology*, Vol. 4 No. 1