

Republic of the Philippines  
**DAVAO DEL SUR STATE COLLEGE**  
Research Publication Office

**Institute of Graduate  
and Professional Education**

# **BOOK OF ABSTRACTS**

**A.Y. 2020-2021**



**BOOK of ABSTRACTS A.Y. 2020-2021**  
**Institute of Graduate and Professional Education**

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The Book of Abstracts A.Y. 2020-2021 Institute of Graduate and Professional Education is an annual publication of Davao del Sur State College that showcases a selection of research studies conducted by students. This publication offers valuable insights into the wealth of knowledge and innovative ideas emerging from the academic work of both students and their mentors.

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*MESSAGE FROM THE OFFICE OF THE PRESIDENT*



The Davao del Sur State College (DSSC) is committed to delivering quality education and fostering impactful research that contributes to community development and improves quality of life. Our research initiatives create opportunities for growth, innovation, and progress.

I congratulate our students for their impactful research and our faculty members for their dedication to mentoring students to become future researchers of integrity and excellence. I also extend my gratitude to Dr. Cherry Ann P. Roxas, RDI Director, and Asst. Prof. Jayson R. Pucot, Head of the Research Publication Office, for their hard work in compiling and documenting our graduate students' thesis abstracts. May this Book of Abstracts inspire future researchers for years to come.

*Congratulations to all involved in this achievement!*

**AUGIE E. FUENTES, Ph.D.**

President

*MESSAGE FROM THE OFFICE OF THE DIRECTOR FOR  
RESEARCH, DEVELOPMENT AND INNOVATION*



Research is a cornerstone of academic excellence, driving students to engage with global challenges and contribute to the creation of new knowledge. It is with great pleasure that I present the Book of Abstracts, highlighting the outstanding theses of graduate students from the Institute of Graduate and Professional Education.

I would like to express my sincere appreciation to our dedicated faculty and Dean, Dr. Amelie Trinidad, for her leadership and support in guiding our students. To the graduates, congratulations on your achievements! May this research experience inspire you to continue exploring, learning, and contributing to the world of knowledge.

**CHERRY ANN P. ROXAS, DBA**

RDI Director

*MESSAGE FROM THE DEAN*



As the Dean of the Institute of Graduate and Professional Education, it is my pleasure to present the Book of Abstracts, showcasing the outstanding research and academic achievements of our graduate students. This collection reflects the dedication, creativity, and intellectual rigor that define our institution. The diverse topics explored demonstrate the breadth and depth of knowledge our students are contributing to their respective fields, while also addressing the challenges and opportunities of a rapidly changing world.

I congratulate the Institute Research Coordinator, Asst. Prof. Jayson R. Pucot and staff, Ms. Emerose Estodillo, for successfully compiling these theses' abstracts. I also extend my heartfelt congratulation to all our students for their hard work and commitment to advancing knowledge, and I extend my deepest thanks to their mentors, faculty, and families for their unwavering support. We are proud of their accomplishments and excited to see the impact of their work in the years to come.

**AMELIE E. TRINIDAD, Ed.D.**

Dean, IGPE

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# **Master of Arts in Education (Educational Management)**

# **TEACHER'S PERSONALITY AND EDUCATIONAL ACHIEVEMENT OF GRADE V STUDENTS**

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Author: Jenelyn A. Abella

Year: 2021

Adviser: Siverlyn M. Caposano, PhD

Personal qualities affect achievement. In the past decades many have tried to measure the influence of one's personality to educational achievement. Thus, this quantitative descriptive correlational survey research design was conducted. Moreover, this study was inspired with this perspective knowing if the teaching personality of Grade five teachers in Jose Abad Santos, both in District 1 and 2, educational achievement of their pupils. This study has measured two variables namely teacher's personality which was composed of physical appearance, intellectual, social and emotional. On the other hand, the basis of the educational achievement was the general weigh average during the fourth grading period. The results showed that the teacher's personality was 4.50 which means they have very high teaching personality. Thus, he four indicators namely physical, intellectual, social and emotional, and educational achievement has also indicated a very high indicator. Second was the educational achievement which was 82.40 which means satisfactory. The performance level of the learner has developed the fundamental of knowledge and core understanding, and, with little guidance from the teachers and/or with some assistance from peers. Learner has reached an average of 79.96% to 60.04%. Lastly, the result of the two variable had neglected the hypothesis having the conclusion that educational achievement has proved to be highly influenced by the in dependent variable which was the teachers' personality.

## **IMPLEMENTATION OF GENDER-RESPONSIVE EDUCATION IN THE NEW NORMAL: A MIXED METHOD STUDY**

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Author: Leo Mae L. Azarcon

Year: 2021

Adviser: Amelie T. Bello, Ed,D., RGC

The main objective of this convergent parallel mixed methods study was to determine the level of implementation of gender and development by different teachers and then explore the experiences of teachers in the implementation of gender-responsive education in the new normal in selected schools in Sta. Cruz South District, Division of Davao del Sur for the School Year 2020-2021. There were six school heads and 109 teachers who served as respondents of the study while eight research participants underwent in-depth interview (IDI) from March to June 2021. Quantitative data were analyzed using frequency count and percentage, mean, and analysis of variance while qualitative data were analyzed employing data reduction, data display, and conclusion drawing and verification.

Results of the study showed that majority of the teachers were having units in masters, serving DepEd for about 6 to 10 years, mostly occupying the Teacher I position, and do not have any trainings related to gender and development. The level of implementation of gender and development (GAD) among teachers in Sta. Cruz South District was very high. However, there was no significant difference on the level of implementation of gender and development (GAD) among teachers when grouped according to educational attainment, teaching experience, teaching position, and trainings related to GAD.

Gender-sensitive module production; gender issue on performance; and challenges in the chosen modality were the experiences and challenges of teachers in the implementation of gender-responsive education in the new normal while the provision of gender fair learning opportunity; development of gender-neutral assessments; and maintaining safe and gender sensitive environment were the mechanisms utilized to overcome the challenges encountered in its implementation. Hence, it can be said that new challenges and opportunities are open with respect to the implementation of gender and development in this new normal. With this, it is recommended to ensure the effective implementation of GAD despite COVID-19 pandemic through various forms and media.

*Keywords: Gender responsive education, teacher's experience, new normal, phenomenology, Philippines.*

# **FINANCIAL RESOURCE MOBILIZATION AND FUND UTILIZATION OF PUBLIC ELEMENTARY SCHOOLS: AN APPLICATION OF KENDALL TAU'S ANALYSIS**

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Author: Mebe Jean D. Cuadra

Year: 2021

Adviser: Zandro P. Ibañez, Ed.D.

The primary objective of this study was to determine the financial resource mobilization and fund utilization of public elementary schools in Digos Occidental District in the Division of Digos City. The descriptive method was accustomed in this study and Kendall's tau-b correlation coefficient was used to determine the association of the two variables. Stratified random sampling with proportional allocation was used in the study. This was conducted among public elementary school teachers on February up to March 2021.

Data disclosed on the level of financial resource mobilization of public elementary schools, indicators have different descriptive interpretations. School-based microenterprise obtained a mean of 4.28 with a standard deviation of 0.28 which rated as high. This was followed with parents and family support (3.52, 0.36) and fund raising and income generation (2.73, 0.30) which shares the same interpretation of moderate. Alumni philanthropy obtained the lowest mean of 2.05 and SD of 0.56 which described as low. The overall financial resource mobilization is manifested, implemented, and observed in some occasions. In the extent of fund utilization, data disclosed that all indicators were rated as high except for the School Projects which rated as very high. Result indicated that the fund utilization when assessed according to: school projects, infrastructure and equipment, teacher's honorarium and program implementation, and safety, security and utensils acquisition were oftentimes manifested. Finally, with the use of Kendall's tau correlation coefficient, result revealed value of 0.032 which can be interpreted as very weak positive association with a p-value of 0.273 which higher than 0.05 level of significance. This means that there is no significant association between the two variables.

## **FOURTH INDUSTRIAL REVOLUTION (FIRE 4.0) SKILLS: AN INCEPTION OF DIGITALLY SKILLED 21ST CENTURY TEACHERS**

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Author: Analou A. Tecson

Year: 2021

Adviser: Zandro P. Ibañez, Ed.D.

This study was conducted to investigate the fourth industrial revolution skills (FIRE) of teachers teaching public elementary school in Digos Occidental District, Division of Digos City and provide an inception program to the digitally skilled 21st century teachers. Descriptive correlational method was employed in the study with the use of adapted questionnaire on Fourth Industrial Revolution skills survey from the study of Nelson et al. (2011) to determine the level of fourth industrial revolution skills of teachers. Stratified random sampling with proportional allocation technique was applied in the study. This study was realized on April to May 2021. Respondents of the study were the teachers among public elementary schools in Digos Occidental District.

Results indicated that majority of the public school teachers were female (91.2%) and fewer were male (8.8%). Mostly of the teachers' age gone to the age ranging from 30-40 years old with a relative frequency of 41.6%. Majority of the respondents were college graduate (75.9%) which they never pursue post-graduate education. Majority of the teachers were bisaya (92.7%) which most of them have a length of service in 11-15 years (27.7%). Public elementary school teachers have high Fourth Industrial Revolution (FIRE) Skills in terms of learning resources (4.02), social responsibility (4.10), systems design (3.92) and computer hardware and software selection (3.74) with an overall mean of 3.95. In the relationship between demographic profile and Fourth Industrial Revolution (FIRE) Skills, result indicated that significant influence was not found between age, sex, educational attainment, and length of service profile obtained smaller Chi-Square values with p-values higher than 0.05 level of significance. However, ethnicity profile of teacher and their Fourth Industrial Revolution Skills (FIRE) has a significant relationship.

# **Master of Arts in Education (Language Teaching)**

## **DEALING WITH LANGUAGE ANXIETIES: IP LEARNERS IN FOCUS**

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Author: Ma. Soraya P. Basalan  
Adviser: Cindy B. Rosil, Ed.D.

Year: 2021

This study is qualitative-phenomenological research explored on English language anxieties with the college IP Freshmen as the key informants who respectively enrolled during the S.Y. 2020-2021 at Davao del Sur State College, UM Digos College, Polytechnic School of Davao del Sur and Cor Jesu College, under blended instruction due to the pandemic -COVID 19. In order to follow the health protocols mandated by the IATF (Inter-Agency Task Force), telephone interviews were used to gather data on experiences of IP learners in dealing with language anxieties, coping mechanism with their language anxieties and educational insights can be learned that will contribute to language teaching and learning. The IP learners' experiences with language anxieties are classified into four major themes such as, psychological debilitating anxiety, language-culture anxiety, cognitive test anxiety and learners' facilitative learning anxiety. On the other hand, four major thematic categories found out for the IPs' coping mechanism, are the problem-focused techniques, relaxation techniques, automatic reaction techniques and cognitive reframing techniques. It is highly recommended that the school administrator, must implement the CMO #02 Series of 2019, The Integration of Indigenous Peoples' (IP) studies/education into the relevant higher education curricula particularly the Section 1 to wit: (1) Integrate as topics, contexts, concepts such as history, social sciences, political science, sociology and humanities; and (2) Include readings about the Indigenous People and Muslims in the New General Education Curriculum, in particular, Philippine History.

*Keywords: COVID 19 pandemic, blended instruction, IP college freshmen, English language anxieties*

# **LANGUAGE CONTENT OF MODULES AND STUDENT ENGAGEMENT**

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Author: Ruschelle L. Cossid

Year: 2021

Adviser: Tito M. Endrina, Ph.D

Modular distance learning has been widely implemented across the country to ensure students' continuous learning despite the pandemic. This study aimed to determine the significance of the relationship between students learning engagement and the language content of modules used during the new normal education. The study was conducted in one of the public secondary schools in the Division of Davao del Sur with a total of two hundred fifty-eight respondents. Descriptive-correlation method was used and the researcher utilized adopted test questionnaires. The results revealed that the overall level of language content of the modules in English evaluated by students in terms of content, style of communication, presentation, and evaluation of the modules was high, that the overall degree of students' engagement in terms of behavioral, emotional and cognitive engagement towards modules was highly engaged, and that the relationship between the level of language content of the modules and engagement of students was significant. Furthermore, the language content of the modules was found to be positively correlated to students' engagement.

*Keywords: language content, modules, behavioral engagement, emotional engagement, cognitive engagement*

## **SCHOOL LEARNING ACTION CELL AMONG SECONDARY SCHOOL TEACHERS UNDER NEW NORMAL**

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Author: Fegil C. Floreno

Year: 2021

Adviser: Aristotle P. Carandang, Ph.D

The study determined the relationship among the demographic profile, level of management skills, and level of implementation of School

Learning Action Cell (SLAC) in seven (7) public secondary schools in the Division of Digos City, Davao del Sur; using complete enumeration with respondents totaling to 105. Conducted in May 2021, the study employed Descriptive-Correlational Research Design and used Demographic Profile Survey and Standardized Questionnaire patterned after the School Learning Action Cell (SLAC) implementing guidelines as tools. The researcher identified the respondents as SLAC leaders, facilitators, documenters, resources persons, and all teachers handling English as SLAC members.

Results showed that most of the respondents' average age was 37, mostly female, and serving the Department of Education for 11 years and above. In the SLAC, meanwhile, respondents have been serving as members for two to three years. The level of management skills of those

serving the SLAC and SLACs in terms of Topic and Implementation Process were described as very much ready. As regards to the relationship of respondent's demographic profile and the level of SLAC Implementation, the age and years rendered in SLAC have influenced its implementation. Moreover, there was a very strong relationship between the level of management skills and SLAC implementation.

Although the result does not show the entire situation in the country, the conduct of SLAC sessions can be sustained as well as its monitoring and evaluation to keep everyone updated in the new teaching pedagogy that might help address the challenges in the teaching-learning process.

*Keywords: collaboration, professional growth, student's outcome*

## **TEACHERS REFLECTIVE PRACTICES AND THE STUDENTS SATISFACTION TO DISTANCE LEARNING.**

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Author: Rosalie D. Panlaan

Year: 2021

Adviser: Ruben F. Asan, Ed.D.

Modular distance learning has been considered as the global strategy in terms of education at this time. The teachers thought of methodologies and pedagogies in teaching to cope with the student's diverse needs.

The purpose of this study was to determine the significant relationship between the extent of the teachers' reflective practices and the extent of students' satisfaction to distance learning. Respondents of the study consisted of all English teachers and Grade 7-10 students of Davao del Sur School of Fisheries and Bolton National High School for S.Y. 2020-2021. Slovin's formula was used in determining the sample size of the respondents. The study used the descriptive-correlation method as it discussed the significant relationship of the variables. Pearson r was used to determine the significant relationship between the extent of the teachers' reflective practices and the extent of students' satisfaction to distance learning. Two kinds of survey instruments were used in this study. An adapted questionnaire from the study of Akbari, et al. (2010) and from the study of Gray and DiLoreto (2016).

Results indicated that the extent of the teachers' reflective practices and the extent of the students' satisfaction to distance learning are highly manifested. Moreover, there is no significant relationship between the extent of the reflective practices of teachers and the extent of students' satisfaction to distance learning. The result implied that despite the high level of teachers' reflective practices, the students have not manifested and observed it directly because it focused on the teacher's own professionalism and the focus of the students was just to finish their learning task on time.

Keywords: *distance learning, reflective practices, students' satisfaction*

## **A CLOSER LOOK ON THE MODULAR-BASED INSTRUCTION MANAGEMENT STYLES OF LANGUAGE TEACHERS AMID COVID-19 PANDEMIC**

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Author: Rhizter M. Rafaela

Year: 2021

Adviser: Aristotle P. Carandang, Ph.D.

This study described the perspectives and management styles of language teachers in managing modular-based instruction during the pandemic in the four secondary schools in Sulop District, Division of Davao del Sur for the School Year 2020-2021 using a Descriptive Case Study design. Seventeen (17) language teachers participated as participants of the study and underwent in-depth interviews conducted within May 2021 while following health protocols. Data gathered were audio-recorded, transcribed, coded, tabulated, and analyzed using thematic analysis by Braun and Clarke (2006).

Results of the study through emergent codes generated concepts, categories, and themes. Two themes about perspectives in managing modular-based instruction were created. These are "New Normal

Communities" and "Educational Endeavors." An emergent theme in language teachers' description of management styles modular-based instruction was formulated, named "Changing Roles." All in all, the study is the window of opportunity understanding the role of the key persons not only the teachers involved in the students' learning process as well as the new notion of community during the new normal. Based from the themes, this can be recommended to DepEd Officials from the Department of Education (DepEd) in focusing on understanding the notion of an educator's role in normal learning as well as the transactional way of management adopting the current learning modality to achieve sustainability in education amid pandemic.

Keywords: *new normal communities, educational endeavors, changing roles, language teacher's management styles, modular-based instruction*

# **Master of Arts in Education (Mathematics Teaching)**

## **FLEXIBLE LEARNING STRATEGIES OF MATHEMATICS TEACHERS IN HIGHER EDUCATION INSTITUTIONS**

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Author: Elvie Jane R. Amion

Year: 2021

Adviser: Jem Boy B. Cabrella, Ph.D

This embedded mixed method research study was aimed to determine the flexible learning strategies of mathematics teachers in higher education institutions in Davao del Sur. This study used survey questionnaires and in-depth interviews (IDI) to gather quantitative and qualitative data, respectively. Quantitative data was analyzed using frequency, relative frequency, and percent of cases, while qualitative data was analyzed using theme analysis. The survey included 24 Mathematics teachers from higher education institutions, as well as 8 teachers who underwent IDI. In the quantitative phase, it was found that majority of the Mathematics teachers in the identified higher education institutions aged 21 to 25 years old, have 4 years, and have below in teaching experience with bachelor's degree holder as highest educational attainment. They are mostly classified as lecturer, instructor, college instructor or faculty and their employment status are permanent/regular with 3 relevant attended trainings or less. Most of the Mathematics teachers utilized messenger, FB page, google meet and google classroom as the platform and used electronic modular instruction.

In the qualitative phase, results experiences of Mathematics teachers in utilizing the flexible learning strategies: (1) teacher's teaching strategies (2) teacher's convenience, (3) teacher's challenges, and (4) student's favor.

These are the major suggestions Mathematics teachers could offer in teaching the subject: (1) Request to Commission of Higher Education for collaboration (2) provision of trainings and resources, and (3) module development and quality assurance. Recommendations were offered in this study.

*Keywords: flexible learning, strategies, mathematics teachers, higher education institutions*

## **QUALITY OF STUDENT PERFORMANCE USING CONTEXTUALIZED MODULE**

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Author: Alcel Grace O. Asuque

Year: 2022

Adviser: Mark Jude F. Trondillo, Ph.D

The main objective of this study was to measure the quality of Grade 7 students' Mathematics performance in one of the selected secondary schools employing contextualized modules. The pretest-posttest nonequivalent groups design was used in the study.

In the pre-test findings, the experimental and control groups performed at a similar level of quality. The study found no significant differences statistically between the pretest mean score evaluations on the quality of Grade 7 students' Mathematics performance utilizing the DepEd Module and the contextualized module. The students who used the contextualized module earned higher posttest scores and acquired greater learning than students who used the DepEd self-learning module, according to posttest results. The study found that contextualized modules had a substantial impact on students' performance. and showed a significant difference in the mean posttest and the quality of students' Mathematics performance compared to DepEd Module. In view of the study's findings, the researcher suggests that Mathematics teachers conduct enrichment activities to help students enhance their academic performance.

Keywords: *contextualized modules, contextualization, DepEd selflearning modules, student performance, Mathematics*

# **ADAPTING IN THE NEW NORMAL: EXPERIENCES AND VIEWPOINTS OF PRIVATE SCHOOL MATHEMATICS TEACHERS TO BLENDED DISTANCE LEARNING DELIVERY**

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Author: Cleford Jay D. Bacan

Year:2021

Adviser: Jem Boy B. Cabrella, Ph.D.

The new normal brought different uncertainties and concerns to all the educators around the globe, which scale from instructional to teaching role. In this phenomenological qualitative research, the scope is to focus on the education journey of private school Mathematics teachers utilizing the blended distance learning delivery and trying to gather their narrative adjusting to new normal education. Thus, this has driven the researcher to explore their experiences and viewpoints. Using a purposive sampling procedure, the researcher selected ten private school Mathematics teachers subjected to Key Informant Interview (KII) to gather data regarding their experiences and viewpoints. Results found that private school Mathematics teachers exhausted different means to offer the best possible learning experiences to the students despite the various circumstances that give them some hold back in their teaching role. They also exude hopes and positive outlooks to the new educational system to meet the demands of today's reality.

*Keywords: experiences, viewpoints, private school Mathematics teacher, blended distance learning delivery, Philippines*

## **PARENTAL INVOLVEMENT AND STUDENTS' LEARNING ENGAGEMENT IN MATHEMATICS: BASIS FOR ACTION PLAN**

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Author: Rhea Liza E. Bantilan  
Adviser: Alicia I. Ayuste, Ph.D.

Year: 2021

The purpose of this research study was to determine the significant relationship between parental involvement and students' learning engagement in mathematics in grade 9 level. This research study was conducted in four (4) public secondary schools in Matanao I district to determine both the levels of parental involvement and students' learning engagement in mathematics. There were 298 respondents who took the survey on parental involvement in terms of parents' attitudes on distance learning, parents as home-teacher and parents' participation to home learning activities. The same respondents took the survey on students' learning engagement in mathematics in terms of self-engagement, behavioral engagement and motivational engagement. The researcher utilized a modified questionnaire from Kenny (2006) for parental involvement, Rahman (2001) for parents as home-teacher, Epstein (2005) for parents' participation to home learning activities, Wang et al., (2016) for students' learning engagement. The questionnaire was validated by experts.

The results of the study revealed that both the levels of parental involvement and students' learning engagement in mathematics are high. Based on Pearson correlation, it revealed that the levels of parental involvement and students learning engagement in mathematics are significantly related. Increased parental involvement positively affects students learning engagement.

*Keywords: parental involvement, learning engagement, action plan, students' engagement*

## **TEACHERS' PERCEPTION, MODULE INNOVATION AND SELF-EFFICACY OF MATHEMATICS TEACHERS IN THE NEW NORMAL**

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Author: Shahoney Faith L. Gicale  
Adviser: Alicia I. Ayuste, Ph.D.

Year: 2021

The purpose of this study is to determine the self-efficacy of teachers as may be influenced by the teachers' perception in the new learning modality and module innovation in Mathematics 4. A total of 75 Grade 4 teacher-respondents participated in the study, which was conducted in all public central elementary schools in the Davao del Sur Division. This study utilized a descriptive correlational design. The researcher utilized adapted test questionnaires developed by Harris (2005) and Alam et al. (2020) for Teachers' Perception, Torre Franca (2017) and DepEd ADM Learning Resource Standards (2020) for Module Innovation, and Bandura (1997) and Pabualan et al. (2016) for Self-Efficacy that was contextualized and validated by experts. The results revealed that the level of teachers' perception in terms of readiness to modular distance learning and teaching mathematics through modular instruction is very high; the overall level of module innovation of teachers in terms of objectives, content, format and language, assessment and usefulness is very high; and the level of self-efficacy of mathematics teachers' teaching in the new normal in terms of instructional self-efficacy and professional abilities/teaching effectiveness is also very high. Moreover, it was determined that teachers' perception was positively correlated with teachers' self-efficacy teaching mathematics through modular instruction. The findings also showed a significant relationship between module innovation and self-efficacy of mathematics teachers. Hence, teachers' self-efficacy was influenced by the teachers' positive perception towards teaching Mathematics through modular instruction, and by the utilization of quality assured self-learning modules in the modular distance learning modality.

Keywords: *teachers' perception, module innovation, self-efficacy, modular instruction*

## **CONTENT ANALYSIS OF THE LEARNING PRINCIPLES OF THE SELFLEARNING MODULES IN MATHEMATICS GRADE 5 AND 6**

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Author: Ricardo P. Lauronal

Year: 2021

Adviser: Garnette Mae V. Balacy, MS

This study explored the manifestation of the learning principles in Mathematics prescribed by the K to 12 Curriculum Guide in the current selflearning modules (SLMs) following the most essential learning competencies (MELCS) during the distance learning modality. The learning principles are the following: experiential and situated learning, reflective learning, constructivism, cooperative learning and discovery and inquirybased learning. The units of analysis include the 578 module parts contained in the 38 SLMs of Grade 5 and 6 Mathematics for 1<sup>st</sup> and 2<sup>nd</sup> quarter of the current school year. Using quantitative content analysis research approach, a systematic coding of the modules based on the criteria of each learning principle was carried out. A statistical examination of the association of the manifestation of the learning principles and module characteristics like grade level, quarter and module part was also performed. It was found that the learning principles were applied at varied extent in the different module parts. The most dominant learning principle was experiential and situated learning, followed by reflective learning and constructivism. Combinations of these three learning principles were also common. Remarkable, no cooperative learning keywords were found in the different parts of the modules. Using Chi-square test, it was found that module part significantly influenced the manifestation of the learning principle. Based on the findings, it is recommended that DepEd, through the Learning Resource Management and Development System ensures that complementary and supplementary learning activities are provided in the SLMs to ensure a balance of the application of the learning principles specially in the competencies where they are most appropriate.

*Keywords: self-learning modules, learning principles, mathematics, content analysis*

## **COMPETENCY LEVEL ON MATHEMATICAL WORD PROBLEM SOLVING AND STUDENTS' PERFORMANCE**

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Author: Irish C. Say-a

Year: 2021

Adviser: Razel Allan R. Valleser, MoP

The main purpose of this study was to assess Grade 7 student's competency and performance ratings in mathematical word problem solving based on the categories of reading, comprehension, transformation, process, and encoding. Specifically, this study sought to determine the competency level and performance in mathematical word problem solving of Grade 7 students.

Descriptive-correlation research design was utilized in this study. The Respondents were the Grade 7 students of Felipe-Innocencia Deluao National High School in Barangay Tanwalang, Sulop, Davao del Sur, School Year 2020-2021. Gathered data were treated using Descriptive Statistics, and Pearson Product Moment Correlation Coefficient ( $r$ ).

The result of this study showed that the competency level of the Grade 7 students in mathematical word problem solving were less competent. They could read well but could not comprehend, transform, process, and encode correct answers in mathematical word problem solving. The Grade 7 students did not meet the expected performance to solve the mathematical word problems due to their difficulty to comprehend the problem and in processing and encoding their answers to the question.

Moreover, the results showed a significant relationship between students' level competency and performance rating in the mathematical word problem solving.

*Keywords: college teaching, assessment, student motivation, peer-review, peer-review process, writing skills.*

## **THE EFFECTIVENESS OF VIDEO IN TEACHING AND LEARNING MATHEMATICS**

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Author: Nikki T. Tinebro

Year: 2021

Adviser: Edna A. Cenita, M.S.

This study investigated the effectiveness of video lesson in teaching and learning mathematics. It involved a total of sixty Grade 10 students of Maria Clea R. Delos Cientos National High School, Piape, Padada, Davao del Sur. Students in the control group were exposed to pure modular learning prescribed by the Department of Education while those in the experimental group utilized the modular learning with video lesson as supplementary material prepared by the researcher. A 40-item researcher made test determined the academic achievement of students before and after the intervention period.

Pre-test scores results revealed that the Grade 10 students in both groups is on the "Did Not Meet the Expectations" level which implies that the students struggle with their understanding, prerequisite and fundamental knowledge have not been acquired or developed adequately to aid the understandings and more concepts are not learned. The two groups were comparable as there was no significant difference in their pre-test scores. However, post-test scores showed that there was a significant difference between the two groups. There was an increase in the academic achievement of student under the experimental group who used modular learning with video lesson compared to the academic achievement of students under the control group who only used pure modular learning. It can therefore be inferred that video lesson is effective in teaching and learning mathematics.

Keywords: *academic achievement, modular learning, video lesson*

**Master of Arts in Education  
(Science Teaching)**

## **LENTH OF INSTRUCTION VIDEO AND ACADEMIC PERFORMANCE IN THE MODULAR LEARNING MODALITY**

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Author: Manilyn G. Abundo

Year: 2021

Adviser: Mark Jude F. Trondillo, Ph.D

This study determined which length of instructional video significant influenced the academic performance of students. This study was an experimental research design. A quota random sampling using fishbowl method was used in selecting the participants.

A summative test was used to assess the performance of students. The result shows that the mean scores in the summative test between the different lengths of videos are in "approaching proficiency level". This implied that learners in both schools possessed the same level of understanding. The ANOVA result revealed that there is no significant difference on the academic performance when the students are exposed to video of different lengths. However, it was found out that there is a considerable difference in the scores gained between the two distinct schools. This implies that Sulop National High School students who participated in the study have much better response compared to Felipe Innocencia Deluao National High School.

Among the three lengths of videos, the 6-minute video is proposed and better to use because it is neither long nor short and easier to make. Moreover, the attention span of students will be captured in that length of time.

Keywords: *length, academic performance, modular*

## **LEARNING DELIVERY MODALITIES: EXPERIENCES, INSIGHTS AND PERCEPTIONS**

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Author: Zyren Luz A. Caingcoy  
Adviser: Alicia I. Ayuste, Ph.D

Year:2021

This study intended to delve experiences, insights and perceptions about the implementation of Learning Delivery Modalities among parents, teachers and students in three public junior high schools in South Malungon District. The study employed qualitative research design and utilized the phenomenological approach. Interview guide protocols with open ended questions were used to assemble responses of the ten key informants in an in-depth interview. Conversations were recorded via paper and pen, video and audio, which were then transcribed and translated. The data were carefully analyzed through thematic analysis procedure.

The results revealed that teachers, parents and students were dissatisfied, confused and worried with the implementation of learning delivery modalities. However, some of them found it helpful and relevant. The challenges encountered were identified to be: digital divide, low level of reading comprehension, lack of time management, lack of motivation, unachievable learning competencies and parent's incapacity.

Moreover, the participants suggested that constant communication is the key for the improvement of learning delivery modalities. They indicated that corporal punishment like hitting them with an object should not be done just to make students answer the module or learning activity sheets.

Additionally, they also suggested that providing learning assistance by having face to face with the most disadvantage students in school regardless of age is another way to improve performance despite restrictions of student – teacher interactions.

Keywords: *learning delivery modalities, experiences, insights, perceptions*

# **OCCUPATIONAL STRESS AND COPING STRATEGIES OF SCIENCE TEACHER USING MODULAR-DIGITAL INSTRUCTION**

Author: Beth B. Dedace

Year: 2021

Adviser: Kris Kristofferson Tan, MAED

The study was conducted to determine the occupational stress and coping strategies of Science teachers in the junior high schools within Digos City Division who were using modular-digital instruction for the School Year 2020-2021. Quantitative-correlational research design was utilized. This study made use of the adapted survey questionnaire from Copenhagen Burnout Inventory of the National Research Center for the working Environment for the occupational stress. However, the coping strategies of teachers were determined using BRIEF COPE Inventory.

Results revealed that majority of the Science teachers were female, aged 26-40, with no child, with monthly net income of Php5,000-Php17,500, and were assigned in Grade 7 and 8 levels. These teachers experienced moderate level of occupational stress in terms of work, personal and client. In coping with stress, prayer and meditation, active coping, positive reframing, acceptance, planning, use of instrumental support, use of emotional support, and humor were the coping strategies that had been done for a while by teachers. On the other hand, denial, venting, behavioral disagreement, and self-blame had been done for a while by the teachers, but substance use had not been done by them.

Results further showed that there was no significant difference on the teachers' level of stress when grouped according to profile variables such as gender, age, number of children, net income, and grade taught. Lastly, no significant relationship was found between teachers' occupational stress and coping strategies. Recommendations for further research includes conducting this study among broader scope of teachers including other subjects and modalities and most importantly, establishing a wellness clinic and setting up a teacher counselling centers within the campus with the help of mental health professionals to help stressed out teachers.

*Keywords: occupational stress, coping strategy, science teachers, modular-digital instruction*

## **STAND AND DELIVER: EDUCATIONAL INNOVATIONS AMIDST DIFFICULTIES IN TEACHING SCIENCE IN THE OUTER-BOUNDS OF DAVAO DEL SUR**

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Author: Elias Jr., G. Norab  
Adviser: Meliza P. Alo, Ed.D.

Year: 2021

This study aimed to explore the experiences, challenges and educational innovations made by teachers in the outer-bounds of Davao del Sur despite the lack of educational resources. Which was conducted during the school year 2020-2021. The study involved 10 respondents using qualitative research design.

The findings disclosed that the lived experience of teachers has an emerging theme of Building Social Culture, Burning Desire, Great Commitment, Valuable Experiences and Challenges encountered by teachers in the outer-bounds of Davao del Sur. The educational innovations have an emerging theme that really summarized the responses of the respondents, the themes about academic intervention, multimedia approach, teaching strategies.

It is also recommended that the Department of Education should continue to provide educational resources especially to those in the outer-bound areas. School heads should create seminars and training to promote the teachers' skills in creating more effective educational innovations in the classroom. Teachers will continue to promote professional development and apply such innovations that really help in the teaching and learning process. Future researchers can make another method of research to enhance educational innovations applied by the teachers or create another innovative teaching skill in the classroom setting.

Keywords: *outer-bounds, educational innovation, teaching strategies*

## **SCIENCE PROCESS SKILLS AND PERFORMANCE OF GRADE 9 STUDENTS: BASIS FOR MODULE ENHANCEMENT**

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Author: Honey Mae B. Fabroa

Year: 2021

Adviser: Alicia Imperial-Ayuste, Ph.D

This study aimed at determining the academic performance in Science among the Grade 9 students, after having been exposed to the Science Process Skills Modules. This study utilized the purposive sampling method wherein a total of 137 Grade 9 students from Sta. Cruz National High School, Bato National High School, Federico Yap National High School, and Manuel Francisco C. Ramos National High School during the third quarter period in April - May 2021. The content of the 30-item test was utilized to determine the proficiency level of the science process skills. The following statistical tools were employed, the arithmetic mean was utilized to answer sub problems 1 and 2. The Pearson r was used to determine the significance of the variables on study.

On the basis of the analyses of data, the following were drawn: the level of science process skills of Grade 9 students along observing, communicating, classifying, measuring, inferring, and predicting is described as developing. The proficiency level of science performance of Grade 9 students as based on their third quarter rating is described as advance. The relationship between the level of science process skills and science performance of Grade 9 students is significant. Based on the results of the study, the enhancement mechanisms to improve the Science Process Skills Module are developed as follows: contextualization of content; provision of questioning strategies; provision of simple experiments and hands-on activities that target the least learned science process skills; and provision of a feedback system where students can express the difficulties, they have encountered.

*Keywords: science process skills, module enhancement, science performance, observing, communicating, classifying, measuring, inferring, predicting*

# **CAPABILITIES IN THE ADMINISTRATION OF PUBLIC JUNIOR HIGH SCHOOLS' DISASTER RISK REDUCTION AND MANAGEMENT PROGRAM**

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Author: Jazel S. Saligan

Year: 2021

Adviser: Mark Jude F. Trondillo, Ph.D

This study sought to find out the school head's level of capabilities and the school action team's degree of administration of the Public Junior High Schools' Disaster Risk Reduction and Management Program among Public Junior High Schools of the Division of Digos City, Davao del Sur for the School Year 2020-2021.

The Philippine Disaster Risk Reduction and Management Act of 2010 states that School Disaster Risk Reduction and Management (SDRRM) program is a systematic approach for developing strategies, policies, and coping skills through administrative guidelines, organizations and operating competences in order to mitigate the negative effects of risks and disaster.

A quantitative non-experimental and descriptive designs were used to assess the level of capability of the school heads and the status of implementation of SDRRM. In addition to that, Pearson r was also used to assess the important link between the level of capabilities and degree of administration.

The results showed that most of the Public Junior High Schools still lack with several emergency supplies and equipment listed in the Department of Education (DepEd) electronic – Basic Education Information System (eBEIS) template while majority of the schools have emergency whistle, fire extinguisher, and first aid kit only. It was found that the school action team is capable in implementing the DRRM programs and do implement the undertakings required to the SDRRM team.

Lastly, there is a connection between the level of capabilities and degree of administration of school DRRM program which implies that the school heads capabilities to respond at a higher level will also result to a higher degree of administration school DRRM program.

*Keywords: disaster risk reduction and management, public school, junior high school, school heads, school action team, emergency supplies*

**Master of Business  
Administration  
(Major in Agri-Business)**

## **PLAN HOLDERS' RISK AVERSION PARAMETER AND INSURANCE DECISIONS**

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Author: Ana Marie Y. Arañez

Year: 2021

Adviser: Cherry Ann P. Roxas, DBA

The primordial objective of this study was to find the relationship between plan holders' risk aversion parameter and their insurance decisions in Davao Occidental. Descriptive correlational research design was used in this study with 100 entrepreneurs as respondents. The data were analyzed using relative frequency distribution, mean, and Pearson– Product Moment correlation. Majority of the respondents were female, with ages ranging from 33 to 38 years old. More than half of the plan holder respondents were married individuals earning a monthly income ranging from ₱ 25,001 to ₱ 30,000. Most of them acquired health insurance and vehicle insurance with monthly amortization ranging from ₱ 1,000 and below to ₱ 10,000 and above.

It was determined that the plan holders risk aversion parameter and their insurance decisions were significantly related. It obtained an r-value of 0.668 interpreted as strong positive linear relationship. It also obtained a p-value of 2.76E-15 which is lower than the 0.05 level of significance. The null hypothesis ( $H_0$ ) of the study was rejected. It was also found out that there is a significant relationship between the plan holders' risk aversion parameter and insurance decisions.

*Keywords: Risk aversion, insurance decisions, plan holders*

## **CYBERNETICS INSTRUCTION AND THE PERFORMANCE OF STUDENTS IN SCIENCE**

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Author: Jo Ann F. Cadayona

Year: 2021

Adviser: Meliza P. Alo, Ed.D

The aim of this study was to determine the outcome of Cybernetics Approach in Science instruction on the Academic performance of Grade 10 Students through an experimental type of research. The subjects of this study were the Grade 10 students enrolled in Digos City National High School. This was conducted from May to June, 2021.

As specified in the Learners' Preferred Learning Modality Survey conducted before the start of classes, there were those who opted to be in Online class (Cybernetics Instruction) and students who have chosen Modular class (4AS Instruction). These 8 sections were subjected to a pretest, those having similar class proficiency level from the Online class and the Modular class shall be chosen, the former was the experimental class the later, the control group.

Arithmetic mean and the standard deviation were utilized to determine the pretest, posttest and mean gain rating. Also, f-test and t-test were used to identify significant differences in Science of Grade 10 students in the 4AS Instruction and Cybernetics Instruction group.

As gathered, the following conclusions were made. There is no significant difference between the pretest mean rating, however, there is a significant difference between the posttest mean rating and there is a significant difference between the mean gain rating of the Grade 10 students in Cybernetics Instruction and 4As Instruction Groups.

As a learning insight, the utilization of Cybernetics Instruction in Science brought a positive outcome on the Academic performance of Grade 10 Students.

*Keywords: cybernetics, 4AS instruction, online learning, modular learning*

## **STRATEGIES TO SUSTAIN PROFITABILITY OF LAKATAN GROWERS IN DAVAO OCCIDENTAL AMIDST PANDEMIC**

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Author: April Ann D. Corbeta

Year: 2021

Adviser: Luciano D. Nasibog, Jr., DBA

The main purpose in conducting this study was to determine the strategies of the Lakatan growers in Davao Occidental to sustain profitability during pandemic.

On the socio-economic profile of the Lakatan Growers: the years in operation of the Lakatan growers was in 1-3 years in operation; on the size of land area, majority have 0.5 to 2.49 hectares of land; on the farm financial resources, most of the Lakatan growers used their personal money for the farm's financial needs; on the average income per month, dominant of the Lakatan growers were earning 1,000 to 25,000 per month.

The authentic data revealed that there is no significant relationship between the socio-economic profile and the strategies practiced by Lakatan growers in terms of production practices and marketing strategies during the pandemic.

Moreover, the data also revealed that there is no significant relationship between the strategies in terms of production practices and marketing strategies and the profitability of the Lakatan growers during the pandemic.

Keywords: *pandemic, marketing strategies, production practices, sustainability, profitability*

## **RESILIENCY OF MICROENTERPRISES AMIDST PANDEMIC IN DAVAO DEL SUR**

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Author: Donna Rose L. Ebo

Year: 2021

Adviser: Cherry Ann P. Roxas, DBA

COVID-19 has created an unprecedented crisis for microenterprises and challenged each single enterprise to reconsider its business operations and to adapt to the new unexpected circumstances. The foremost objective of this study was to determine the business resiliency of micro enterprises in Davao del Sur during Covid-19 pandemic. A descriptive-correlational design was employed with 100 purposively chosen microenterprises. Data were analyzed using frequency, relative frequency distribution and Pearson Product Moment correlation. Data revealed that majority of microenterprises were operating for not less than three (3) years, employing 1-3 workers and earning more than PhP 20,000.00 monthly. Moreover, the most influencing factor of resiliency in microenterprises amidst pandemic is entrepreneurial characteristics. Furthermore, entrepreneurial characteristics, utilization of technology, government support and crisis management showed significant relationship towards business resiliency among microenterprises.

Keyword: *business resiliency, microenterprises, COVID-19 pandemic*

## **CONSUMER BUYING BEHAVIOR FOR CANNED TUNA PRODUCTS IN GENERAL SANTOS CITY**

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Author: Lesterless S. Tomas

Year: 2021

Adviser: Luciano D. Nasibog Jr., DBA

The study was conducted in General Santos City. This study focuses on consumer preferences regarding the purchase of canned tuna products. Descriptive survey research design was employed in this study. The study was conducted on supermarkets or malls, convenience stores, public markets (SMSE's), and online gathering. The researcher used quantitative method by distributing questionnaires using quota sampling to 100 respondents employing relative frequency method, weighted mean, and Analysis of Variance (ANOVA).

Results of the study showed that there is a high degree of influence on product characteristics (4.03), psychological factors (3.76), promotional activities (3.64), and social factors (3.43) on the consumer buying decisions for canned tuna products. Moreover, profile based on age, sex, educational attainment, average monthly income, and source of income had no significant differences on consumer decisions on buying canned tuna products. The findings of the study confirmed that product characteristics perceived to be of higher influence on the purchased of canned tuna products.

*Keywords: consumer buying behavior, consumer decisions, consumer preferences*



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