

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF EDUCATION REGION X

DIVISION OF CAGAYAN DE ORO CITY

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BOOK OF ABSTRACTS ISSN 2467-6624 VOLUME 1 NUMBER 2 2016

Available @ http://depedcdo.com/category/research/abstracts/

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REPUBLIC OF THE PHILIPPINES DEPARTMENT OF EDUCATION **REGION X** DIVISION OF CAGAYAN DE ORO CITY FR. WILLIAM F. MASTERSON, SJ AVENUE, KM 5, UPPER BALULANG, CAGAYAN DE ORO CITY ontents 1. Translating DepEd's Project EASE Science Modules to Classroom Audiovisual Technology: An Experience of Synergy among Stakeholders 2. WIBIFLASH: A Proactive 3-in-1 Tool in Improving the Memorization Skills of the Grade Three Pupils in Multiplication 3. Project Move Up with MAB: Increasing Mathematics Proficiency Level of Grade One Pupils Using Math Activity Booklet 4. Determining Attitude towards Issues on Sexuality: Basis for Strengthening Counseling Service 5. Exploring the Adaptive Capacity to the Perceived Vulnerability to Climate Risk in Protecting School Children: Viewing Climate Change Impacts through a Child's Eyes 6. Employable Skills Needed by Local Industries of East II District Division of Cagayan de Oro City: Basis for Senior High School Courses Offering 7. The Impact of ADM (Alternative Delivery Mode) of Instruction in Saving SARDO (Students at Risk of Dropping Out) 8. DepEd Computerization Program: Venue for Improving Teachers Pedagogy 9. Project ESP (Empowerment Scheme for Pupils): Intervention to Reduce Absenteeism, Dropout Rate and Increase Parents' Engagement 10. ICT Level of Proficiency among School Heads and Concerns on Technology Integration in K-12 Schools 11. Window Cards: A Daily Multiplication Drill to Develop Mastery Skills among Grade IV-Onyx Pupils 12. Instruction of Metacognitive Strategies and Reading Beliefs: Do They Make a Difference on Students' English Achievement?

TEACHING AND LEARNING

Translating DepEd's Project EASE Science Modules to Classroom Audiovisual Technology: An Experience of Synergy among Stakeholders

Ray Butch D. Mahinay, Ph.D. ray.mahinay@deped.gov.ph Master Teacher II, Tablon NHS Best Paper & Best Presenter (Regional awards, non-CI Oral Category)

It has been established by many educational theorists that classroom audiovisual technology like instructional videos can aid student learning. In the aim to facilitate science learning, this study explored the feasibility of making science videos from existing DepEd's Project EASE science modules which was collaborated between Xavier University-School of Education and Tablon National High School. Face and content validation of the videos were done by educational technology experts. The video on Electricity was evaluated (1) excellent in instructional design and pedagogical soundness; (2) excellent in content; and (3) very satisfactory in audio-visual quality by science teachers using the modified Instructional Video Evaluation Instrument from Beaudin and Quick (1996). Following the non-experimental pretest and posttest design, a sample video was pilot-tested to 41 students which questionnaires were also given. Results showed that there is an increase of scores in the achievement test from the diagnostic test after the students watched the videos. T-test analysis yielded a significant difference from the two scores at 0.05 alpha level. Apart from the achievement that this audiovideo technology is meaningful to the students and teachers, this project sets an example of synergy of various stakeholders to improve teaching and learning processes.

Keywords: audiovisual technology, instructional videos, science learning

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016 WIBIFLASH: A Proactive 3-in-1 Tool in Improving the Memorization Skills of the Grade Three Pupils in Multiplication

Carol Ocmeja-Lorono and Melody Amarga West City Central School (CI-Oral Category)

This study was conducted to improve the memorization skills of Grade III- Apricot pupils in the multiplication table using the WIBIFLASH tool. It made use of a pretest and posttest research design to find out how the combination of window cards, bingo game, and flashcards enhances the memorization skills of pupils in the multiplication table. There were 46 pupils comprising the participants of the study. A standardized pretest in multiplication was conducted and results have shown that 35 out of 46 or 76% got scores below 75% of the total score. Reasons to this problem were analyzed and verified through a triangulation method of surveys, focused group discussion and observation. The results indicated the need for exposing the participants to an intervention that would improve their memorization skills on the multiplication table. Hence, after the pretest the participants were exposed to the WIBIFLASH tool, a combination using window cards, bingo dame. and flashcards. These combined materials were conducted in drills, exercises, and enrichment activities during Mathematics class. After four (4) weeks, a posttest was conducted to find out its effectiveness. The data gathered were graphed and analyzed. The findings revealed that after the exposure of the WIBIFLASH tool, 10 out of 46 pupils or 22% had scores below 75% of the total items in the post test. There were 36 out of 46 pupils or 78% got scores above 80% of the total item. The difference showed from pretest to posttest scores signified an improved memorization of the multiplication table of the pupils.

Keywords: memorization skills, WIBIFLASH tool, math learning

*Qualifier during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City *Presented during the 2016 Guro Formation International Conference held at Tagaytay on October 27-29, 2016 & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016.

TEACHING AND LEARNING/CHILD PROTECTION

Project Move Up With MAB: Increasing Mathematics Proficiency Level of Grade One Pupils Using Math Activity Booklet

> Kristine M. Omaan Bugo Central School (CI-Based Poster Presentation Category: Teaching & Learning))

Employing the descriptive method of research, this action research aimed to improve the pupils' proficiency level in Mathematics through the use of teacher-modified worksheets called Math Activity Booklet. Data were collected using the Early Grade Math Assessment (EGMA) and was used as the basis for establishing the baseline data. The Math First Grading Examination results were used as the end line data. To increase the math proficiency level of Grade One-Begonia pupils, a remedial intervention program was initiated. The pupils took the EGMA and those who belonged in the beginning level were determined. EGMA results showed that the pupils got low scores in the following competencies: number identification, skip counting by 2, 5 and 10. Remedial sessions were conducted and the Math Activity Booklet (MAB) was introduced. The results of the study showed that there was an increase in the pupils' Math proficiency level based on their first grading test results. The study concludes that the pupils who underwent remedial sessions using the Math Activity Booklet have developed the least mastered skills, thus, increasing the pupils' math proficiency level. It is recommended that the researcher, with the support of the school, would develop a comprehensive collection of worksheets that will be used by all pupils to further develop the pupils' basic mathematical skills.

Keywords: Math proficiency, Early Grade Mathematics Assessment, remediation

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016. Determining Attitude towards Issues on Sexuality: Basis for Strengthening Counseling Service

> Arlene B. Valmoria, RGC Macabalan NHS

(CI-Based Oral Presentation Category: Child Protection)

The study was conducted to determine the students prevailing attitude towards issues on sexuality of grade 8 to grade 10 students of Macabalan National High School. The respondents of the study consisted of 300 randomly selected (from grade 8 to grade 10) students of Macabalan National High School.As growing individuals, teenagers encounter various changes in life which caused them to adjust on that stage. Failure to cope with the changes may result to behavioral problems of adolescents. Due to these issues on sexuality, the researcher as Guidance Counselor enhanced counseling service as intervention to address the problem. A descriptive research design was utilized. For the the researcher data gathering, made questionnaire as a tool for pre and post survey to gather information before and after the intervention. Based on the result of the presurvey, the respondents have only fair attitude towards issues on sexuality. With the series of counseling enhanced conducted, the respondents have good attitude based on the information gathered from the post survey. It is then a challenge to continue the conduct of enhanced counseling sessions as intervention to continuously alleviate teen-age pregnancy and public display of affection cases.

Keywords: sexuality, adolescent, premarital sex, attitude, public display of affection

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; 2016 Guro Formation International Conference held at Tagaytay on October 27-29, 2016; & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016.

CHILD PROTECTION/GOVERNANCE

Exploring the Adaptive Capacity to the Perceived Vulnerability to Climate Risk in Protecting School Children: Viewing Climate Change Impacts through a Child's Eyes

Mark John T. Gabule¹ & Evelyn Q. Sumanda² ¹Chairman, Research Department, GRSHS-X ²Secondary School Principal I, Gusa RSHS Best Paper & Best Presenter ¹ (Regional awards, non-CI Oral Category-Child Protection)

This paper explores the issues on what and how to adapt climate change by presenting baseline data of school children reporting changes to their environment due to changes in the climatic conditions. It also examined to what extent they are aware of the issues related to climate change vulnerability and its capacity to cope with extreme changes identified at the local (school and community) level. A mixed method of research was used; data were collected using the triangulation technique: survey, observation, face to face interview, focus group discussion (FGD) and participatory tool assessments. The results show that children have limited understanding on how to adapt to climate change and could not demonstrate clearly and established strategy that explained on how their school would adapt. Similarly, a lack of disaster-risk-related planning initiatives were evident on the part of the school where children are not being involved. The study concludes that there is a strong determinant of high vulnerability to climate risk to children. Therefore, greater attention should be given to understanding the characteristics of vulnerability, adaptive capacity and resilience of communities. Furthermore, the Department of Education for disaster framework risk reduction management must be instituted and cascaded down to every child in school.

Keywords: child protection, vulnerability, climate change, adaptive capacity, Philippines

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; 2016 Guro Formation International Conference held at Tagaytay on October 27-29, 2016; & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016. Employable Skills Needed by Local Industries of East II District Division of Cagayan de Oro City: Basis for Senior High School Courses Offering

Marivic D. Labitad, Kenneth C. Bete, Nerissa V. Dazo, Jenelin S. Enero, Edwin O. Mamba Bugo National High School (Non-CI poster Category-Governance)

This study is attempted to identify the skills needed in local industries and the courses offered in the senior high schools in District II of Cagavan de Oro City Division as basis for Senior High School courses offering. A descriptive research methodology was used for this study. A survey on skills needed by local industries and Senior High School Offering of East II District was administered. Results revealed that Senior High School course offerings in District II do not correspond to the needs of local industries since generally, the highest frequency skills needed of which are Welding, Food and Beverage Services, Electrical Installation Front Office. and Maintenance and Computer Servicing are offered only in one school except for Electrical Installation and Maintenance which is offered by four schools. The results of Focus Group Discussion revealed that graduates of these four highest frequency skills have high employability rate provided that they are NCII Holders. It is recommended that Senior High Schools in East II District should offer these courses for school year 2017-2018.

Keywords: employability, Senior High School Courses, skills

* Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; 2016 Guro Formation International Conference held at Tagaytay on October 27-29, 2016; 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016; & 2016 Career and Employment Research Congress held at CDOC

GOVERNANCE

The Impact of ADM (Alternative Delivery Mode) of Instruction in Saving SARDO (Students At Risk of Dropping Out)

> Mary Jean Labadan Sungahid Balulang National High School (non-Cl Oral Category)

This study aimed to determine the impact of ADM Instruction in saving Students-At-Risk of Dropping Out (SARDO). The study is descriptive and used a simple statistical method. A modified survey questionnaire and an interview supplemented the gathered data. The researcher conducted a survey first, took the list of SARDO in each section and the OHSP record as the ADM catchment. Based on the gathered data, a student who is always absent in class has the tendency to drop out in the middle of the school year. Ninety percent (90%) of teachers recommended the students to ADM instruction, after being identified as SARDO. Given the ADM instruction, students can help their parents at home, and have flexible time. This means that ADM is favorable to learners with diverse learning needs. ADM improved the school performance and maintained the zero dropout for three years. This contributed impact not only to the school but to the whole division of Cagayan de Oro City. The study was conducted in one particular school only and can be replicated for further study. The study is holistic, findings may vary from one school to another.

Keywords: alternative delivery mode, student-at risk of dropping out, open high school program

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016. DepEd Computerization Program: Venue for Improving Teachers Pedagogy

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Arnold S. Langam, MAEDA² ²ICT Coordinator, Macabalan National High School

Best Paper & Best Presenter (Regional awards, CI Oral Category)

DepEd Computerization Program (DCP) provided the public schools with appropriate technologies that would enhance the teaching-learning process (DO 78, s. 2010). This study was conducted to determine the level of increase in the ICT integration in the lesson after the intervention was given. The study employed the Continuous Improvement (CI) method that includes three stages: Assess, Analyze and Act. Descriptive statistics were used after the survey responses. Interview and focus group discussions among students and teachers were done to further validate results. A survey questionnaire was adapted from UNESCO ICT Inventory Questionnaire. The paired t-test was used to determine the significant differences between mean scores on ICT teachers' competence. The findings of the study revealed that through mentoring a program conducted by the ICT Coordinator, teachers were introduced to computer applications. Findings revealed that there was an increase in the teachers integrating ICT in their classes. And after the first guarter of the school year there was a significant increase in the Teachers ICT competence. It is recommended that teachers could make use of the multimedia instruction in their respective schools so as to help students' concretize abstract concepts and processes skills which may improve students' academic achievement. Furthermore, there is a need to examine further the type of multimedia used for teaching and learning in relation to exchange of communications for students' better comprehension, as much as possible the multimedia should commensurate to students' cognitive structure.

Keywords: DepEd Computerization Program, Pedagogy, Information and Communication Technology, Teachers ICT Competence, Intervention, Assessment

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; & 2016 Guro Formation International Conference held at Tagaytay on October 27-29, 2016.

GOVERNANCE/HUMAN RESOURCE DEVELOPMENT

Project ESP (Empowerment Scheme for Pupils): Intervention to Reduce Absenteeism, Dropout Rate and Increase Parents' Engagement

¹Paraida D. Orangot, Ph. D & ²Marina L. Cajes

¹Principal II, Iponan ES, ²Teacher III, Iponan ES

Best Poster, Regional award (CI-Oral Presentation Category)

This paper aimed to determine if project ESP can help reduce pupils' absenteeism, dropout rate and increase parents' engagement in school. It involved both gualitative and guantitative data following the Continuous Improvement (CI)methodology. The 368 4Ps recipients were grouped into 13 classes across all levels from Kinder to Grade VI. Descriptive statistics such as frequency and percentage were used. Focus Group Discussion (FGD) and unstructured interview were also conducted. The findings revealed that the average monthly attendance of 4Ps pupils surpassed the 85% requirement set by the program. Thus the level of attendance is highly compliant. Furthermore, a Zero Dropout among 4Ps pupils was recorded to indicate that the recipients were prevented from dropping out of school and that there was total dropout reduction. Lastly, the parents manifested a very high participation. They exerted effort in showing their support and in monitoring their child's performance by getting involved in all school activities.

Keywords: 4Ps, empowerment, absenteeism, dropout, parental engagement

*Presented during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City; & 2016 PCBER held at PICC, Manila on Dec. 5-7, 2016. ICT Level of Proficiency among School Heads and Concerns on Technology Integration in K-12 Schools

> Reynaldo E. Manuel, Jr., Ph.D., CESE Assistant Schools Division Superintendent

National Level Best Paper - 2016 PCBER (non-CI Oral Presentation Category)

This study assessed the ICT level of proficiency among school heads and concerns on technology integration in K-12 schools in the Division of Cagayan de Oro City. Cross-sectional analysis research design was employed involving one hundred seven (107) school heads. The findings showed that only 15% affirmed to a very great extent that they have attended technology training, 18% to a little extent, 33% to some extent, and 34% to a great extent. It further showed that 71% preferred to have technology training in a small group with the trainers. When grouped according to gender, it was found out that there was no statistically significant difference on the ICT knowledge and skills in both software and hardware. They were proficient in the knowledge and skills in MS Word, while slightly proficient in MS Excel, MS powerpoint and creating, sending and opening e-mail attachments. However, school heads were slightly not proficient in the knowledge and skills on Photoshop, MS Office publisher, breeze, teaching platforms (blackboard, moodle, edmodo, WebCT, Schoology, etc.), teaching with online chat rooms/discussions group, hypertext linking, creating learning-based web pages/sites, integrating web pages with word processing software, and web logging. School heads strongly agreed that technology must be integrated in the curriculum. It is recommended to conduct technology training in a modular approach and strengthen the monitoring and evaluation of the existing ICT equipment in K-12 schools, extent of ICT utilization and its impact in facilitating change towards continuous improved school performance.

Keywords: information and communications technology, technology integration in K-12, ICT proficiency

*Presented during the 2016 Philippine Conference on Basic Education Researchers (PCBER) held at Philippine International Convention Center (PICC), Manila on December 5-7, 2016.

TEACHING AND LEARNING

Window Cards: A Daily Multiplication Drill to Develop Mastery Skills among Grade IV-Onyx Pupils

> Ma. Divina A. Gloria¹, Myla A. Villacencio² West City Central School

(non-CI Poster Presentation Category)

This study attempted to determine if using window cards as a drill can be an effective way to increase multiplication fact fluency of the pupils. This research used descriptive method involving fifty (50) pupils from Grade IV-Onyx of West City Central School. Based on the results of the long test, 35 out of 50 pupils showed below 75% proficiency level in multiplication. These pupils had difficulty in solving mathematical equations dealing with multiplication. The intervention of using the adapted window cards as daily multiplication drill would increase pupils' fact fluency. Pupils were tested through the Diagnostic Test, Long Test (serves as pretest) and participated in daily use of window cards, where scores of each pupils were recorded. At the end of six-week study period, the pupils of Grade IV-Onyx took the long test again which also serve as post-test. The results of the different test conducted were compared to see if improvements were made. The results of the post test showed that 15 out of 50 pupils in Grade IV-Onyx improved the number of facts they could recall, when comparing the results of their pretest and post-test. The information gained throughout the study will be shared with co-teachers in an effort to show how daily practice using window card as a daily drill can promote pupils success in the classroom.

Keywords: Window Cards, Mastery Skills, Multiplication Drills

*Qualifier during the 2016 Regional Research Congress held on October 24-25, 2016 @ Grand Caprice, Cagayan de Oro City Instruction of Metacognitive Strategies and Reading Beliefs: Do they Make a Difference on Students' English Achievement?

> Jean T. Loquillano, PhD Senior Education Program Specialist

> (non-CI Oral Presentation Category)

This study investigated the effect of the instruction of metacognitive strategies and students' reading beliefs in relation to the English achievement of the Grade 10 students. Descriptive survey research was used involving pretest-posttest design. Likewise, an interview and observation were also employed. The survey involving 131 students revealed that: (1) The students had moderately high use of metacognitive strategies during the English achievement test;(2) respondents generally showed low mastery level on their reading skill as shown in the lack of mastery in vocabulary and comprehension strategies and a very low mastery in critical thinking skill; (3) students' metacognitive strategies used during test taking significantly influenced their English achievement scores; (4) instruction and utilization of metacognitive strategies showed significant gain scores in all components of students' English achievement test. In effect, instruction of metacognitive strategy proved to be a positive predictor of students' achievement test result. Moreover, students' active reading beliefs were significant only on vocabulary knowledge and syntactical skill but not significant in comprehension and critical thinking skill. Furthermore, passive reading beliefs have no bearing on students' English achievement test. This research points to the need for English teachers to make direct instruction on metacognitive strategies to assist students in enhancing their reading skill.

Keywords: Metacognitive strategies, reading beliefs, English Achievement test

* Presented during the International Conference in Education for Sustainable Development 2016: Collaboration and Linkages: Keys for Global Educational Integration at Penang, Malaysia on October 24-29, 2016.

