



PROBLEM – BASED VIDEO INSTRUCTION AND THE PROBLEM-SOLVING SKILLS IN MATHEMATICS 10

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ABSTRACT

Everyone has the right to have a proper and quality education. Since we are now in a new normal for as to adapt to the current situation, teachers are really encouraging to adjust by simply applying the current trends or strategies of teaching and learning. One of the common strategies being used nowadays is the video teaching. This study was conducted to determine the effectiveness of Problem – based video instruction and the problem-solving skills in Mathematics 10. The study used developmental and experimental design. In this research design, the researcher created a video lesson anchored to Kolb's learning cycle such as; review, learning discussion, application and adaptation phase. The video lessons were used to improve student's problem-solving skills in terms of conceptual understanding, strategy and reasoning, computational and execution skills, communication, and insight skills. The researcher used random sampling, those grade 10 students of Gumaca Integrated School who can access the video lesson whether offline or online are part of the sampling procedure. To test the significant difference between the level of mastery of the of the student respondents on problem solving skills before and after being exposed to the Problem – based Video instruction in Mathematics the researcher applied paired samples t-test. Analysis of data revealed that the problem-solving skills of the students in terms of conceptual understanding was proficient, strategic and reasoning skills as well as computational and execution skills was developing, then communication and insight skills were both emerging before the used of problem – based video instruction. After being exposed to Problem – based video instruction the problem-solving skills of the students becomes proficient in terms of strategy and reasoning skills, computational and execution skills, communication skills and insight skills while their conceptual understanding was exemplary. It is recommended that teachers may be given more trainings on how to develop and improve their skills in giving learning instruction or teaching strategies. And since we are now in a digital era where our students are considered 21st century learners that are exposed in computers/ technology teachers should be encourage to develop instructional materials like video lessons for their students. However, since this study is limited only to the selected competencies in mathematics 10, future researches about this kind of study should be conducted.



Keywords: Problem-based video instruction, problem solving skills, video lessons