

# Inquiry- Based Learning Tools in Enhancing the Problem- Solving Skill of Grade 10 Students in Probability and Statistics

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## ABSTRACT

Integrating inquiry-based learning as a pedagogy in online distance learning should improve the problem-solving skills of the students. More so, the use of tools relative to inquiry-based learning during online distance learning is a big help to develop problem- solving skills of the students. To support, this study focused on the use of inquiry-based learning tools in terms of blogs and social networks and various publishing tools that aimed to determine its effectiveness in enhancing the problem-solving skill performance of the students. The study used a quasi-experimental research design in conducting the study in which divided 60 Grade 10 students into two groups answered pretest and posttest instruments during the third grading period of academic year 2020-2021. The result showed a significant difference between the pretest and the posttest scores performances of the students which implies that the use of Inquiry- Based Learning Tools helped improved their problem-solving skills. This indicates a significant increase in the students' performance from "not yet meeting expectations" to "fully meeting expectations" in problem- solving skill aspects as to snapshots, concepts and applications, strategies and approaches, accuracy, and representations and communications. This study also revealed that there is no significant difference on the posttest scores performance of the two groups of respondents exposed to Inquiry- Based Learning Tools. Thus, the findings denoted the importance of the use of the Inquiry- Based Learning Tools in Mathematics not just for Grade 10 students but also in all grade level in high school.

*Keywords: problem- solving skill, inquiry- based learning tools, blogs and social networks, various publishing tools, quasi- experimental*