

ABSTRACT

Mathematics is a subject required in all courses; hence, those in the field of mathematics education should not stop from exhausting all the possibilities of teaching mathematics better. One of the goals of mathematics teacher is how to teach mathematics effectively. Various methods and techniques of teaching have been considered and employed. One of them is by the use of workbook which is self contained and has independent instructional materials focused primarily on some well defined objectives.

The main objective of this study is to develop and validate a workbook in college algebra. Specifically, the study aims to conduct needs assessment on the development of a workbook in terms of content, presentation and usefulness, to develop a workbook in college algebra based on the needs identified by the respondents and to validate the proposed workbook in terms of content, presentation and usefulness. This study utilized the descriptive method of research. The method used was purposive sampling. Validated questionnaires were used to determine if there is a need to develop a workbook in college algebra. The respondents were composed of teachers teaching college algebra, first year and third year BSA students of Imus Institute.

The statistical treatments used were percentage to determine the needs to develop a workbook and mean to know if the developed workbook is appropriate for the first year college level in the sense that the developed workbook is suited to the comprehension level and abilities of the students.

Based on the analysis of the results it was found out that there is a need to develop a workbook in college algebra based on the needs assessment where there are more respondents who answered yes with the rating of 88.33%. The said workbook is appropriate for the first year college level since it is suited to the comprehension level and abilities of the students based on the evaluation made by the evaluators which garnered an over-all rating of 3.81. The validation made by the students registered on over-all rating of 3.90. The respondent strongly agreed on the developed workbook and was acceptable and good enough for the use of the students. The criterion for the presentation was given the highest score of 4.15, usefulness with the rating of 3.8 being the second and content with the rating of 3.75.

Based on the findings mentioned above, it was concluded that: the respondents both students and teachers, agreed that there is a need to develop a workbook in college algebra and that the workbook is appropriate and valid based on the content, presentation and usefulness.

It was recommended that a need analysis should be made prior to workbook development and in other areas of mathematics to ensure that the needs of the students are met. Further, the developed workbook in college algebra and other areas in mathematics should be based on the needs identified by the respondents. Similar study should also be conducted in other areas in mathematics. Likewise, teachers must be trained in workbook development to be able to work on similar instructional materials for classroom use. Finally, a follow-up study should be conducted to determine the effectiveness of the develop workbook.

