





ACTION RESEARCH ON IMPROVING STUDENTS' ACADEMIC PERFORMANCE IN MATHEMATICS 8 USING "FILIPINIZED COMPETENCY-BASED INSTRUCTION OR FIL-CBI APPROACH

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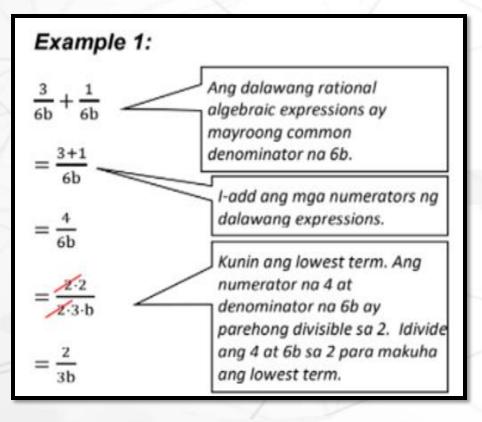
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Filipinized Competency-based Instruction

(FIL-CBI) Material



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Name:					8 -
	SURNAME	FIRS	TNAME	MI.	Section
			SCORES		
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Lesson 8 (L8): Operations on Rational Algebraic Expressions – Adding and Subtracting Similar RAE

Similar RAE are rational algebraic expressions with the same or common denominator.

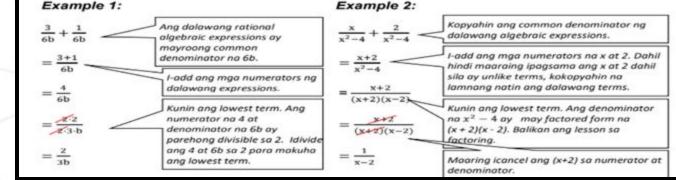
$$\frac{a}{b} \pm \frac{c}{b} = \frac{a \pm c}{b}, c \neq 0$$

Steps in Adding/Subtracting Similar Rational Algebraic Expressions/Rational Algebraic Expressions with Common Denominators:

1. Add/subtract the numerators

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- 2. Place the result over the common denominator.
- 3. Reduce your answer to its simplest form.









Context and Rationale

- The students in distance learning experience difficulty in understanding Math instructional materials written in English.
- The medium of instruction of Math self-learning modules challenged learners in MDL.
- The study verified the effectiveness of Filipinized Competencybased Instruction (Fil-CBI) in improving the Math performance of students under MDL.

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Research Questions

1. What is the level of Mathematics performance of the learners before and after the experiment?

2. Is there a significant improvement in the Mathematics performance of learners who utilized the self-learning module written in English?

3. Is there a significant improvement in the Mathematics performance of learners who utilized the Fil-CBI instructional material?

4. Is there a significant difference between the Mathematics performance of learners who utilized the Fil-CBI instructional material and learners who used the self-learning module written in English?

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Methodology

Twenty-four (24) grade 8 learners were selected to participate in the study. The participants were divided into two groups with statistically the same level of previous math performance. Both groups took a 25-item pre-test and post-test involving one of the identified least mastered skills in Mathematics 8. The teacherresearchers facilitated a modular learning session in between the conduct of the pre-test and post-test. The control group used instructional material written completely in English, while the experimental group utilized the Fil-CBI instructional material.

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Results

Table 2

Math Performance of Control and Experimental Groups

M	GENERAL LICERIO GERONIM EMORIAL NATIONAL HIGH SC		ilona Blue Rizal !		School ID: 301439
	Post test	14.08	5.16	17.83	5.03
	Pre test	7.67	3.37	7.67	2.01
		Mean (CG)	SD	Mean (EG)	SD







Results

Table 3

Comparison between the Pre-test and Post-test Performance of Control Group

	Mean (Pre)	Mean (Post)	Т	Ρ	SD (Pre)	SD (Post)
Control Group Performance	7.67	14.08	-3.45	.002*	3.37	5.16
*p < .05						
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Results

Table 4

Comparison between the Pre-test and Post-test Performance of Experimental Group

	Mean (Pre)	Mean (Post)	Т	p	SD (Pre)	SD (Post)
Experimental Group	7.67	17.83	-6.22	.000*	2.01	5.03
Performance						
*p < .05						
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Results

Table 5

Independent t test (Performance of Control and Experiment Groups)

	Mean (CG)	Mean (EG)	т	p	SD (CG)	SD (EG)
Pre test	7.67	7.67	.00	1.000	3.37	2.01
Post test	14.08	17.83	-1.73	.049*	5.16	5.03
*~ < 05						

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*p < .05

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Recommendations

1. Other grade levels can utilize this approach to provide additional instructional support to learners under MDL.

2. Conduct a similar study in other subject areas that use English as a medium of instruction.

3. Examine the perception of learners on the use of the Filipino language as the medium of instruction

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Recommendations

4. Develop and modify the Fil-CBI instructional material, structured to the prescribed format of the Department of Education.

5. The Fil-CBI approach can be of use for the learners and teachers who will participate in curricular and extracurricular competitions outside the school.

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THANK YOU!