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DIFFERENTIAL EFFECTIVENESS OF THE MODULAR APPROACH
IN THE TEACHING OF INTEGRATED SCIENCE

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A Dissertation

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by

Florentina C. Pahila

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ABSTRACT

The effectiveness of integrated science teaching, using the modular approach is the main concern of this study. To find out its effect, three methods of teaching were included in the study namely, the modular individualized instruction, the modular cooperative learning and the traditional method. The effect of these different methods was measured in terms of the post test scores the third year high school students who were grouped according to the method of teaching they were subjected to. The performance of these students in the post test were then compared. Significant differences in achievement among students in different methods of teaching and between educational attainment of the father and interactions among methods of teaching and educational attainment of the father were also determined.

The researcher employed the non-equivalent control grouped design, hence, intact classes were used. An achievement test consisting of 50 items was constructed by the researcher and used as both the pretest and posttest. The data collected were then subjected to an analysis of covariance (ANCOVA) with the pretest score, the grade in biology and the entrance test score as the



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covariates and the posttest score as the dependent variable at the .05 level of significance.

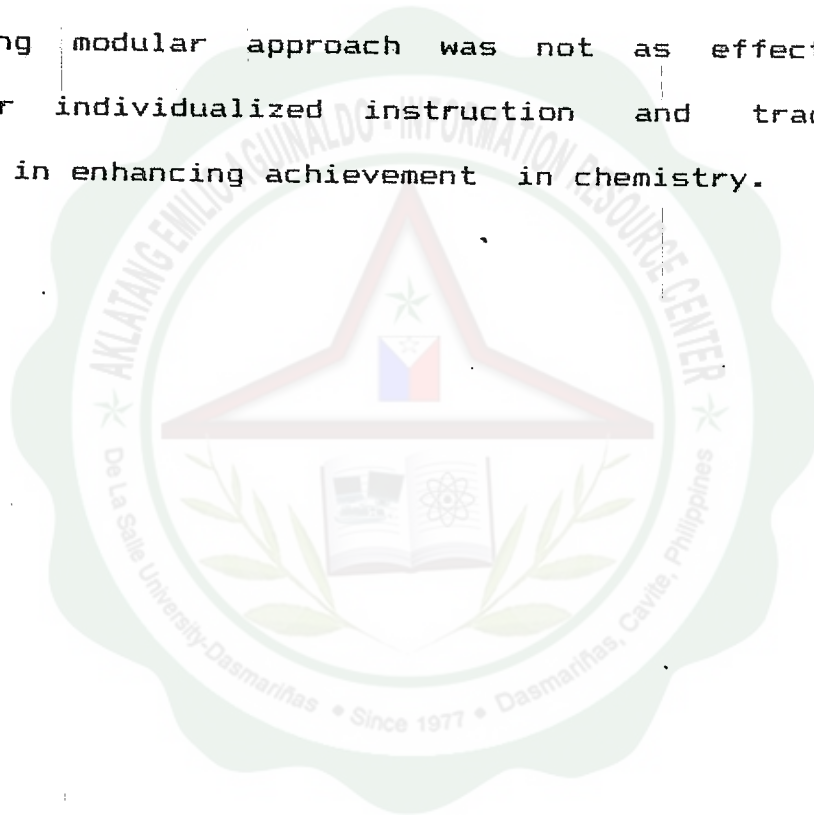
The results of the F-test at the .05 level of significance revealed that no significant differences existed in the achievement of students who were subjected to the different methods of teaching as affected by the educational attainment of the fathers and there was no interaction effects between the method of teaching and the educational attainment of the fathers. However, when the differences between means for the different methods of teaching were compared using the Scheffee method of multiple comparison, it was found out that students who were taught the using modular individualized instruction performed better than those students who were taught using the modular cooperative learning, whereas students who were taught the using traditional method performed better than those students who were taught using the modular cooperative learning but students who were taught using modular individualized instruction did not show greater advantage in achievement over the students who were subjected to the traditional method.

From this study, it can be concluded that using instructional modules in the teaching of integrated



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science III (chemistry, physics, biology) through modular individualized instruction enhanced the achievement of the students especially those whose fathers were educated up to the elementary level. It is concluded that the traditional method of teaching promoted comparative performance of students with those in the individualized instruction group but cooperative learning modular approach was not as effective as modular individualized instruction and traditional method in enhancing achievement in chemistry.



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