

# DE LA SALLE UNIVERSITY

COGNITIVE DEVELOPMENT AND ACHIEVEMENT IN SCIENCE  
THROUGH THE TRADITIONAL AND INQUIRY APPROACHES  
OF TEACHING GENERAL CHEMISTRY

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MAJOR IN CHEMISTRY

BY

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## ABSTRACT

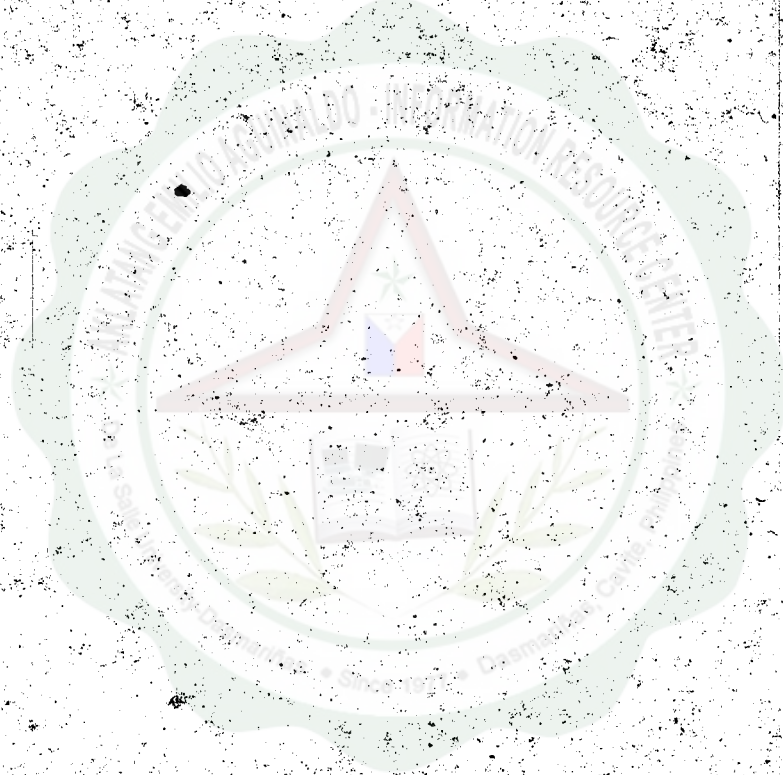
The inquiry approach of teaching science is based on Piaget's theory. This is called the learning cycle which is particularly effective for laboratory activities. This study investigated if there was a significant difference in the development of cognitive levels between the experimental group exposed to the inquiry teaching method and the control group exposed to the traditional method of teaching chemistry through laboratory experiments. The experimental group composed of thirty-two students and the control group of thirty-four students taking General Chemistry, served as samples. Using the pretest and posttest on Piagetian Tasks, the result was not significant as shown by the Theta Coefficient.

To find if there was a significant difference in the performance of the students in the achievement test when exposed to the inquiry teaching method or to the traditional teaching method, analysis of covariance was employed using achievement test scores as the dependent variable and the NCEE and SAI as the independent variables.





The researcher concluded that the inquiry approach of teaching was more effective than the traditional approach of teaching science laboratory activities as seen in the study.



# DE LA SALLE UNIVERSITY

## TABLE OF CONTENTS

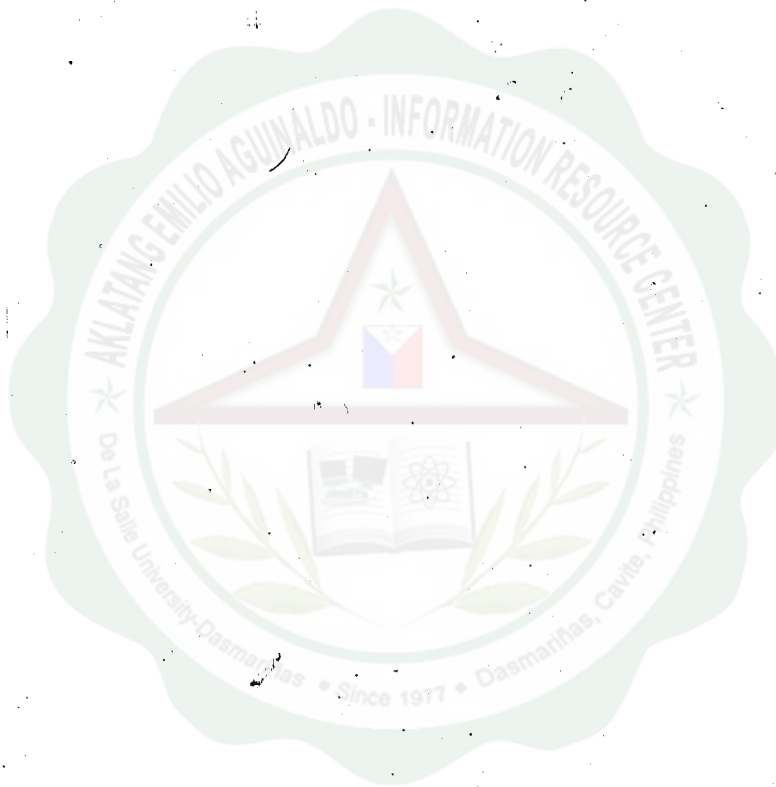
	PAGE
APPROVAL SHEET .....	i
DEDICATION .....	ii
ACKNOWLEDGMENTS.....	iii
ABSTRACT .....	vi
<b>CHAPTER</b>	
1 INTRODUCTION.....	1
Statement of the Problem.....	6
Statement of the Null Hypotheses.....	7
Assumptions of the Study.....	8
Theoretical Framework of the Study.....	8
On the Inquiry Approach of Teaching and Learning.....	15
Significance of the Study.....	20
Definition of Terms.....	22
2 REVIEW OF RELATED LITERATURE.....	26
Foreign Studies.....	26
Local Studies.....	37
Addendum on other Related Studies.....	39
3 METHODOLOGY.....	41
Design of the Study.....	41
Data Gathering Procedure.....	41
Statistical Techniques Used for Analyzing Data.....	47
4 PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA.....	51
5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS. . .	63
Findings.....	63
Conclusions .....	66
Recommendations.....	66
BIBLIOGRAPHY .....	68



# DE LA SALLE UNIVERSITY

## APPENDICES

- A - Raw Scores/Data.....
- B - The Experiments.....
- C - Statistical Analysis.....





# DE LA SALLE UNIVERSITY

## LIST OF TABLES

TABLE NO.	TITLE	PAGE
4.1	Classification of Students Into the Piagetians (Cognitive) Levels.....	51
4.2	Analysis of the Pretest and Posttest Scores on the Piagetian Tasks.....	53
4.3	Analysis of the Pretest on the Piagetian Tasks Using the Sign Tests and its Test for Significance.....	54
4.4	Analysis of the Scores (Posttest) of the Achievement Test in General Chemistry.....	55
4.5	Descriptive Data.....	56
4.6	Correlation Matrix.....	57
4.7	Adjusted Means of the Experimental and Control Groups.....	58
4.8	Summary Table of the Stepwise Regression.....	59
4.9	Analysis of Covariance Table and Overall Results.....	61
4.10	Comparative Performance of Experimental and Control Groups.....	62

