TABLE OF CONTENTS


| | Page |
|---|---|
| ACKNOWLEDGEMENT | v |
| ABSTRACT | vi |
| LIST OF TABLES | xii |
| LIST OF FIGURES | xiv |
| CHAPTER | |
| I. The Problem, Its Background and Significance | 1 |
| Background | 1 |
| Statement of the Problem | 6 |
| Significance of the Study | 9 |
| Definition of Terms | 10 |
| Basic Assumptions | 12 |
| Limitations | 12 |
| II. Review of the Literature | 14 |
| General Review | 15 |
| Review Related to Specific Tasks | 23 |
| General Remarks | 28 |
| III. The Procedure | 30 |
| Description of Population | 30 |
| The Subjects | 32 |
| Pilot Study | 33 |

CHAPTER

Page

Materials ..... 35

Interview Procedure ..... 36

Introduction to the interview ..... 39

The tasks ..... 40

Scoring ..... 47

Treatment of Data ..... 52

IV. Results and Analysis of Data ..... 54

Results ..... 54

Conservation of solid amount task ... 54

Conservation of weight task ..... 57

Conservation of volume task ..... 58

Reciprocal implications task ..... 58

Exclusion of irrelevant variables task ..... 61

Analysis of Data ..... 62

Socio - Economic Groups ..... 70

V. Discussion, Implications, and Recommendations 73

Performance in the Tasks ..... 73

Effect of Variables ..... 81

Grade ..... 81

Sex ..... 83

Task ..... 84

CHAPTER

Page

Horizontal Decalage ..... 89

Summary of the Findings and Implications for Education..... 90

Suggestions for Further Research ..... 93

APPENDIXES ..... 96

APPENDIX A. The West Bank and Its Educational System ..... 97

APPENDIX B. The Arabic Version of the Interview .. 101

APPENDIX C. The Record Sheet ..... 109

APPENDIX D. A Sample of Students' Responses ..... 110

BIBLIOGRAPHY ..... 116