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A Study of the Impact of Inquiry Training Model on Achievement in the Organization of Commerce and Management Subject

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Abstract: *Placing students at the center of the learning process allows them to develop important abilities like observation, hypothesis formation, and evidence-based reasoning. In the Inquiry Training Model, teachers serve as facilitators, guiding students via structured inquiry while giving them the opportunity to explore ideas and develop knowledge autonomously. This technique not only improves students' grasp of the subject, but it also provides them with lifelong learning skills, encouraging creativity, adaptability, and a sense of ownership over their education. The current study focused on Class XI students from an Ahmedabad district school. The current investigation was conducted using the experimental research approach. For the current investigation, the researcher employed a post-test equivalent group true-type experimental research design. The researcher picked 80 kids from the Ahmedabad district's Class XI. Out of these students, 40 were assigned to the experimental group and 40 to the control group. The study found that the Inquiry Training Model is more effective than standard teaching methods in helping Class XI students obtain OCM subjects. It is equally effective on boys and girls in Class XI..*

Keywords*:* inquiry, training, model, teaching, experiment, Ahmedabad, school

I. INTRODUCTION

The Inquiry Training Model is a powerful pedagogical approach that fosters critical thinking, analytical reasoning, and problem-solving abilities among students, making it particularly effective in teaching Organisation of Commerce and Management to Class-XI learners. At this stage, students are being introduced to foundational concepts such as business organization, management principles, marketing, and finance. Traditional rote learning methods often fail to engage students with the dynamic and practical aspects of commerce. The Inquiry Training Model, however, encourages active participation by allowing students to investigate real-world commercial scenarios, ask questions, formulate hypotheses, and arrive at conclusions based on evidence and reasoning. This model not only enhances their conceptual understanding but also cultivates curiosity and intellectual independence, which are essential traits for future business leaders and entrepreneurs.

Furthermore, the Inquiry Training Model aligns well with the interdisciplinary nature of commerce and management education. It integrates knowledge from economics, accountancy, psychology, and sociology, prompting students to explore connections and apply their understanding in varied contexts. Through structured inquiry activities, such as case studies, role plays, business simulations, and problem-solving tasks, Class-XI students develop a deeper appreciation for decision-making processes, organizational behavior, and strategic planning. This experiential learning method empowers students to take ownership of their learning, improves their communication and collaboration skills, and prepares them for higher education and professional environments. In essence, the Inquiry Training Model transforms the classroom nto an interactive learning laboratory, bridging the gap between theory and practice in the Organisation of Commerce and Management subject.

In this research, the researcher studied effectiveness of Inquiry Training Model on achievement in OCM subject of Class XI students.

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Inquiry Training Model

The Inquiry Training Model is a student-centered teaching approach designed to cultivate critical thinking, problem-solving, and scientific reasoning by engaging students in the process of inquiry. Rooted in the work of Richard Suchman, this model encourages students to explore and investigate problems or phenomena by asking questions, formulating hypotheses, and testing their ideas through experimentation. The teacher's role is to facilitate the learning process by guiding students with open-ended questions and providing a structured yet flexible environment for discovery. This model helps learners develop independent thinking skills, fosters curiosity, and emphasizes evidence-based reasoning. By actively involving students in the learning process, the Inquiry Training Model promotes deeper understanding and long-term retention of knowledge.

The Inquiry Training Model involves a structured process that guides students through systematic investigation.

The steps are as follows:

1. Confrontation with the Problem

- The teacher presents a puzzling situation, problem, or phenomenon to the students.
- Students are encouraged to observe and identify key aspects of the situation.

2. Data Gathering – Verification

- Students ask questions to gather specific information about the problem, which the teacher answers with "yes" or "no."
- This phase focuses on verifying facts and narrowing down the scope of inquiry.

3. Data Gathering – Experimentation

- Students design experiments or suggest methods to collect additional data.
- They test their hypotheses by manipulating variables and observing outcomes.

4. Formulating Explanations

- Based on the data collected, students construct explanations and identify patterns or relationships.
- They refine their understanding of the problem and draw conclusions.

5. Analyzing the Inquiry Process

- The teacher and students reflect on the steps taken during the inquiry.
- They discuss the reasoning used, challenges faced, and improvements for future inquiries.

This model promotes critical thinking, curiosity, and independent problem-solving by actively involving students in the learning process.

II. OBJECTIVES

Objectives of present study are given below:

1. To study the effect of Inquiry Training Model on achievement in OCM subject of Class XI.
2. To study the effect of Inquiry Training Model on achievement in OCM subject of Class XI in the context of gender.

III. VARIABLES

The researcher defined following variables in present study:

1. Independent variable

Teaching Method

- Inquiry Training Model
- Traditional Teaching Method

2. Moderate Variables

Gender

- Boys
- Girls

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3. Dependent Variable

Scores of post test

IV. HYPOTHESES

Following are null hypotheses constructed.

- H01 There is no significant difference between mean scores of post-test obtained by students experimental and controlled group.
- H02 There is no significant difference between mean scores of post-test obtained by boys of experimental and controlled group.
- H03 There is no significant difference between mean scores of post-test obtained by girls of experimental and controlled group.

V. DELIMITATIONS

Delimitations of present study are given as below.

- The present study was conducted of Class XI students selected from a school of Ahmedabad district.
- The researcher selected only English-medium school from Ahmedabad district.

VI. LIMITATIONS

Limitations of present study are given as below.

- The researcher used two different teaching methods to teach the OCM subject to Class-XI students.
- The researcher used self-constructed post-test to measure post- experiment achievement of students.

VII. RESEARCH METHOD

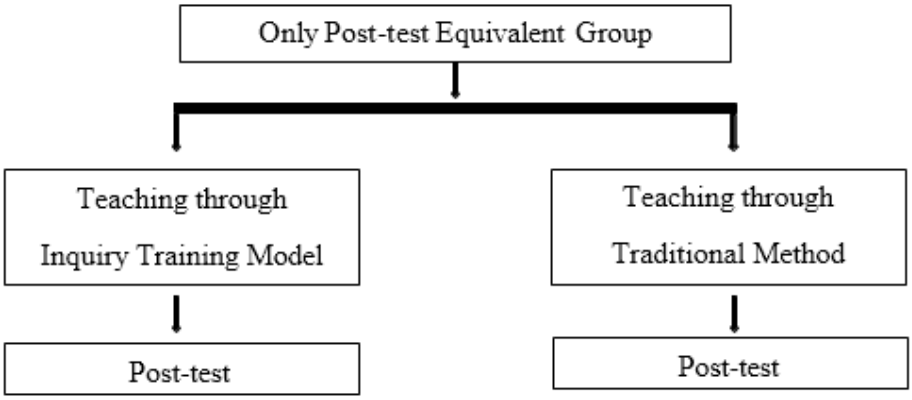
In this study, the researcher applied two different teaching methods on Class-XI students in OCM subject. The researcher used Experimental research method for present study.

Research Design

There are mainly three experimental research designs:

1. Pre-experimental research design
2. True experimental research design
3. Quasi experimental research design

Out of these experimental research designs, the researcher used following true experimental research design.



The researcher used only post-test equivalent group true type experimental research design for present study. In both groups, the students were treated with two different teaching methods. One group was called experimental group and

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was treated with Inquiry Training Model. Other group was called controlled group and was treated with traditional teaching method.

Sample of the Study

The researcher selected total 80 students from Class-XI of Ahmedabad district. Out of these students, 40 students were assigned in experimental group and 40 students were assigned in controlled group. The researcher used pair match method to distribute students in two different groups.

Research Tool

1. Teaching Tool

The researcher constructed Inquiry Training Model in OCM subject for Class-XI students. In this teaching model following topics were covered by the researcher.

- Sole Proprietorship
- Hindu Undivided Family
- Partnership
- Types of Partners and Types of Partnership Firm
- Registration of Partnership Firm and Partnership Deed
- Co-operative Society
- Joint Stock Company
- Types of Company
- Procedure of Formation of Company

2. Post-test

The researcher constructed a post-test worth 40 marks. There were three types of questions in test: 1) Objective, 2) Short answer and 3) Essay type. The test was constructed on the basis of blue print.

Implementation of Experiment

The researcher treated two different groups with two different teaching strategies. Experimental group was treated with Inquiry Training Model and controlled group was treated with traditional teaching method. In both groups, the researcher took 12 hours of treatment using different teaching methods.

VIII. DATA COLLECTION

The researcher gave self-constructed post-test the students of both groups after treatment. It was a one-hour test provided to the students. After one hour, the researcher collected all answer sheets. The researcher classified and analyze obtained scores of post-tests.

Data Analysis

The researcher conducted t-tests to check hypotheses. The results of t- tests and interpretations are given below.

H01 There is no significant difference between mean scores of post-test obtained by students experimental and controlled group.

Table 1.0: Result of t-test between mean scores of students of experimental and controlled group

Group	N	M	SD	SED	t-value	Significance
Experimental	40	34.29	2.19	0.46	10.23	0.01
Control	40	29.61	1.89			

df	0.05	0.01
78	1.99	2.64

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According to above table, calculated t-value is 10.23. For df=78, table t-values are 1.99 at 0.05 level and 2.64 at 0.01 level. Calculated t-value is more than table t-values at both levels. Therefore, hypothesis H01 is rejected and there is a significant difference between mean scores of students of experimental and controlled groups. Moreover, mean score of students of experimental group is 34.29 and mean score of students of controlled group is 29.61. Here, mean score of students of experimental group is more than mean score of students of controlled group. This revealed that teaching through Inquiry Training Model is more effective than teaching through traditional teaching method on students of Class-XI.

H02 There is no significant difference between mean scores of post-test obtained by boys of experimental and controlled group.

Table 2.0: Result of t-test between mean scores of boys experimental and controlled group

Boys	N	M	SD	SED	t-value	Significance
Experimental	20	35.06	2.13	0.67	6.83	0.01
Control	20	30.51	2.08			

df	0.05	0.01
38	2.02	2.71

According to above table, calculated t-value is 6.83. For df=38, table t- values are 2.02 at 0.05 level and 2.71 at 0.01 level. Calculated t-value is more than table t-values at both levels. Therefore, hypothesis H02 is rejected and there is a significant difference between mean scores of boys of experimental and controlled groups. Moreover, mean score of boys of experimental group is 35.06 and mean score of boys of controlled group is 30.51. Here, mean score of boys of experimental group is more than mean score of boys of controlled group. This revealed that teaching through Inquiry Training Model is more effective than teaching through traditional teaching method of boys of Class-XI.

H03 There is no significant difference between mean scores of post-test obtained by girls of experimental and controlled group.

Table 3.0: Result of t-test between mean scores of students experimental and controlled group

Girls	N	M	SD	SED	t-value	Significance
Experimental	20	33.21	1.93	0.63	6.92	0.01
Control	20	28.83	2.07			

df	0.05	0.01
38	2.02	2.71

According to above table, calculated t-value is 6.92. For df=38, table t- values are 2.02 at 0.05 level and 2.71 at 0.01 level. Calculated t-value is more than table t-values at both levels. Therefore, hypothesis H03 is rejected and there is a significant difference between mean scores of girls of experimental and controlled groups. Moreover, mean score of girls of experimental group is 33.21 and mean score of girls of controlled group is 28.83. Here, mean score of girls of experimental group is more than mean score of girls of controlled group. This revealed that teaching through Inquiry Training Model is more effective than teaching through traditional teaching method of girls of Class-XI.

IX. MAJOR FINDINGS

Major findings of present study are as follows:

1. Inquiry Training Model is more effective than teaching through traditional teaching method on students of Class-XI.
2. Inquiry Training Model is more effective than teaching through traditional teaching method of boys of Class-XI.
3. Inquiry Training Model is more effective than teaching through traditional teaching method of girls of Class-XI.

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X. FINAL THOUGHT

The inquiry training model is vital in teaching because it fosters critical thinking, curiosity, and active engagement among students. This model encourages learners to ask questions, investigate problems, and explore solutions through guided discovery. In this research, the researcher studied effectiveness of Inquiry Training Model on achievement of Class-XI students in OCM subject. The research revealed that Inquiry Training Model is more effective than teaching through traditional teaching method on students of Class-XI. It is equally effective on boys and girls of Class-XI.

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