



## **INTEGRATION OF ICT IN RESEARCH**

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### **1 Introduction**

Language is a medium of communication in a person's life. People whether literate or illiterate learn one or many languages.

A person's language reflects his personality. He can express his views, thoughts, beliefs, attitudes and ideas through his language. English language came to India with the advent of the British. English is considered as a universal language as it is the most widely spoken language in the world. We can communicate to the most of the people outside the world through this language. English has acquired international importance as it is widely used in trade and commerce. A person can develop his personality and can learn many advances, techniques and science through it.

#### **1.2 Importance of computer skills:**

Computers are an integral part of our world. In fact, many schools, colleges and work places have started requiring students to have computers since the 1990s. Computer skills are important because people may be required to participate in web-enhanced courses, conduct research online and use basic computer applications. Connecting with the rest of the world is now online as well.

Computers and computer devices have grown to hold key roles in schools, homes and the workplace. Many students acquire basic skills in high school so that they know how to operate a computer. In addition, students learn skills such as sending emails, conducting Internet research, creating word processing documents and creating presentations. These basic computer skills help students achieve success in college when they are utilized for processing and presenting information.

### **1.3 Meaning of E-mail:**

Today, most if not all people have access to the internet. The internet has paved a way to many possibilities such as social media connection across the world and with that connects, comes marketing. It has evolved rapidly and now more and more people use these services they can find on the internet.

One of these services is known as email services otherwise known as webmail. If you use the internet then you have certainly used webmail, you probably use it every day. The importance of reading mail is no doubt very significant because of personal and official matters that may need your urgent attention.

Email communication is important type of written communication. Today, communications are conducted among business firms, organizations and companies mostly via emails. This is not only the cheapest but also the most reliable means of communications. The companies and organizations communicate with other companies and organizations for business purposes through emails. The orders are placed through emails; the enquiries are placed through emails; the picture samples of being imported/exported things are sent via emails as attachments. Moreover, email provides most authentic and secure means of communication. The records of past emails can be retrieved very easily in moments.

### **1.4 Need of the Study:**

To come to a good way and method to teach writing skill many research have been done and to some extent came to some positive findings. In this new age of communication, students tend to communicate internationally through the technologies and they should be provided and supported to express themselves in a broad way.

Sending and receiving e-mails is a dominant way of communication for the students to get closer to what they desire. In the light of the problem statement, the present study aimed to determine whether providing background information via e-mail by the teacher and writing e-mail by the students is effective in learners' writing ability. Significance of the Study Most of the researches regarding providing background Information have so far been concerned with classroom contexts and numerous studies have corroborated the effectiveness of it in these environments. However, the problem is that not much investigation has been devoted to providing learners with background Information through computer technologies. Therefore, there is a need to further investigate the impact of providing background Information through technologies on language improvement. Thus, the present study investigated the impact of providing e-mail writing skills by the teacher to secondary students.

### **1.5 Statement of Aims:**

Enhancing E-Mail Writing Skill among Secondary School Students

### **1.6 Operational definitions of the key terms:**

**Computer skills-** Choosing the appropriate axis for a variable on graph, placing ordered pairs on the plot, determining scale and labeling the axes with numbers these are the basic graphing skills.

**E-mail skill** - the ability to send electronic mail both formal and informal through the internet for various purposes.

**Students** – Refers to those students of class 8<sup>th</sup> of Children’s Academy School.

### **1.7 Objectives of the Study:**

1. To identify the difficulties faced by secondary students in writing e-mails.
2. To provide remedial measures for enhancing the email writing skill among secondary students.
3. To find out difference between the pre-test and post-test scores of secondary students.

### **1.8 Hypothesis of the study:**

**Ho1** – The student do not face any difficulties in writing emails.

**Ho2** – There is no different between the pre-test scores and post-test scores of Secondary students regarding email writing.

### **1.9 Delimitation of the study:**

1. The present study is limited to only one school of Mumbai city is i.e. Children’s Academy School.
2. The present study is focused only on the students of English Medium
3. The present study is limited to the difficulties related to e-mail writing.
4. The study consists of only on 25 students.
5. This study is limited to the students of session 2018-2019.

## **2. Literature Review**

The review of related literature is the most essential step when undertaking a research project. It provides a brief and critical appraisal of related studies and shows how the study contributes to the knowledge available in this particular field.

It is as valuable as it helps the researcher to understand useful concepts, tools, techniques and the method which they are used in the study. Related literature forms the necessary background for the research and serves as a guidance of required knowledge with which the researcher must be acquainted.

The following literature was reviewed by the researcher-

**1. Title:** Computer Literacy in Higher Education

**Name of the researcher:** Ian Reid

**Year:** 1997

**Method:** Orientation Workshops

**Objectives:** to provide a short workshop to commencing students, at minimal cost, that enabled students with little prior exposure to computers to learn how to log on at a pool computer room, use Windows or the Macintosh operating system, do basic word processing, use email and basic web browsing.

**Results:** It would appear that the model of students running sessions under the guidance of a study adviser is successful and worthy of further development. It has the advantages of being cost effective, easy to access, presented in an on-Campus context, utilizing and coordinating resources from across the institution, and presented in a student-friendly peer delivery mode. The model will be expanded in time and place to increase its availability in 1998.

**2. Title of the Study:** Computer Literacy among Students of Zahedan University of Medical Sciences

**Researcher -** Hassan Robabi1 & Azizollah Arbabisarjou

**Methods:** This is descriptive-analytic.

**Methods:** descriptive-analytic.

**Sample:** 385 students from all schools (Medicine, dentistry, paramedics, health, rehabilitation, nursing and midwifery) were selected through randomized- classified sampling.

**Results:** The results showed that the 77.1% had personal computer. The total mean of students' computer literacy around six domains was  $141.9 \pm 49.5$  out of 240. The most familiarity with computers was the ability to it in internet ( $29.0 \pm 11.4$ ) and the lowest was familiarity and using ability of hard ware ( $17.5 \pm 10.6$ ). There was a significant relationship between passing the Computer lesson ( $P=0.001$ ), passing Computer course ( $P=0.05$ ) and having personal computer ( $P=0.001$ ) with the mean of computer literacy.

### 3.1 Meaning and types of research method:

Once the researcher has identified the problem area for study and specified the goals and objectives for the study, he or she then comes to the core of the study which is research methodology. The methodology is the most important phase of the research process. In that it gives guidance as to how the study will be conducted.

Research methods can be called as planning and execution undertaken by researcher to solve a specific research problem. It involves research method, sample and sampling technique, tools for research, data collection and data analysis methods. The research problem can be past oriented, present oriented or future oriented. Thus on the basis of the conclusions, the research methods are divided into three categories as given under:

- **Historical Method**
- **Descriptive Method**
- **Experimental Method**

**Historical method:** Historical method provides a method of investigating to discover and describe and interpret what happened in the past. Historical research attempts to establish facts so as to arrive at conclusion concerning past events.

To conduct historical research primary sources of data are commonly used. They are the eye witness accounts. Primary sources of data include relics or remains, documents such as laws, official minutes, films, recordings and research reports etc.

**Descriptive method:** According to John W. Best, 'A descriptive study describes and interprets what is?' it is concerned with conditions and relationships that st, opinions that are held, processes that are going on, effects that are evident or trends that are developing. It is primarily considered with the present, although it often considers past events and influences as they relate to current conditions. Generally survey method is used for data collection in this type of research study.

**Experimental method:** The research in which effect of one factor on the other studied is called the experimental research. In scientific terms, experimental research means examining the hypothesis, indicating the cause and effect relation.

According to Kerlinger(1953), "An experiment is taken to make an scientific investigation in which investigator manipulates and controls one or more independent variables and observes the dependent variable or variables for variation concomitant to the manipulation of the independent variable."

It is only method of research that can truly test the hypothesis concerning the cause and effect relationships. It represents the most valid approach to the solution of educational problems both practical and theoretical and to the advancement of education as a science.

Experimental design is the blue print of the procedures that enable the researcher to test hypothesis by reaching valid conclusions about relationships between independent and dependent variables. Three categories of experimental design are as follows:

- **Pre - experimental design**
- **True - experimental design**
- **Quasi - experimental design**
- Selection of a particular design is based on the purpose of experiment, the type of variables to be manipulated and the conditions or limiting factors under which it is conducted.

### **3.2 Selection of research methodology:**

Experimental research method was chosen to conduct the present study. Within the experimental research design pre experimental design i.e. one group pretest posttest design is used.

#### **One-group pretest - posttest design**

In this design the researcher administers a pretest, then the treatment and finally a posttest. The effects of treatment are judged by the difference between the pretest and posttest scores. The design is represented as follows:

**O<sub>1</sub> X O<sub>2</sub>**

Where O<sub>1</sub> - Pre-test

X - Treatment

O<sub>2</sub> - Post-test

### **3.3 Sample and sampling technique**

#### **3.3.1 Sample:**

A sample is small portion of the population that is selected for observation and analysis. The sample comprises of 25 students of Children's Academy School .

#### **3.3.2 Sampling Technique:**

Sampling technique is the strategy chosen for selecting samples based on logistics, ethics and paradigm of the researcher. Generally two types of sampling techniques are used, which are as follows.

## 1. PROBABILITY SAMPLING

Simple random sampling  
Systematic sampling  
Stratified sampling  
Cluster sampling  
Multi stages sampling

## 2. NON PROBABILITY SAMPLING

Quota sampling  
Incidental sampling  
Convenience or chunk sampling  
Purposive sampling  
Judgmental sampling

Purposive sampling technique was applied to select school, Children's Academy School and Standard 8th students were chosen by using simple random sampling technique.

### 3.4 Data collection

#### 3.4.1 Tools for data collection:

The researcher used self-constructed pretest and posttest question paper. Following question paper (Appendix A and B) were used for data collection:

1. Pre-test question Paper.
2. Post-test question Paper.

#### 3.4.2 Administration of tools:

At first permission was sought from the principal of the school to conduct the present study. Then the class teacher was contacted and permission was to administer the tool was taken from him/her. The researcher gave necessary instructions to the students regarding the pretest or posttest question paper. The data was collected from 25 students. (Appendix C).

### 3.5 Method of data analysis:

Mean method was used to analyze the pre-test and post- test scores of students

### 4.1 Introduction

Analysis is used to describe the characteristics of the sample. It limits generalization to a particular group of individuals observed and studied. This provides valuable information about the nature of a particular group and that group only.

**Objective:** To identify the difficulties faced by secondary students in writing e-mails.

#### Hypothesis of the study:

**Ho1** – The student do not face any difficulties in writing emails.

**TABLE 4.1**

**ANALYSIS OF MEAN PRE-TEST SCORES OF THE STUDENTS.**

Sr. No.	Test	Total no of students(N)	Mean
1	Pre-test	25	6.44

**Interpretation:** Table 4.1 shows that the mean scores of pre-test of students of Children’s Academy School who faced difficulties writing emails. The mean score acquired by the students is **6.44** which is very less. Hence the hypothesis 1 is rejected. The students faced the difficulties in writing e-mails.

**TABLE 4.2**

**ANALYSIS OF POST-TEST SCORES OF THE STUDENTS**

Sr. No.	Test	Total no of students(N)	Mean
1	Post-test	25	20.44

**Interpretation:** Table 4.2 shows that the mean scores of post-test standard 8<sup>th</sup> of Children’s Academy School, who enhanced the email writing skill. The mean score acquired by the students is **20.44** which is better than mean score of pre-test .

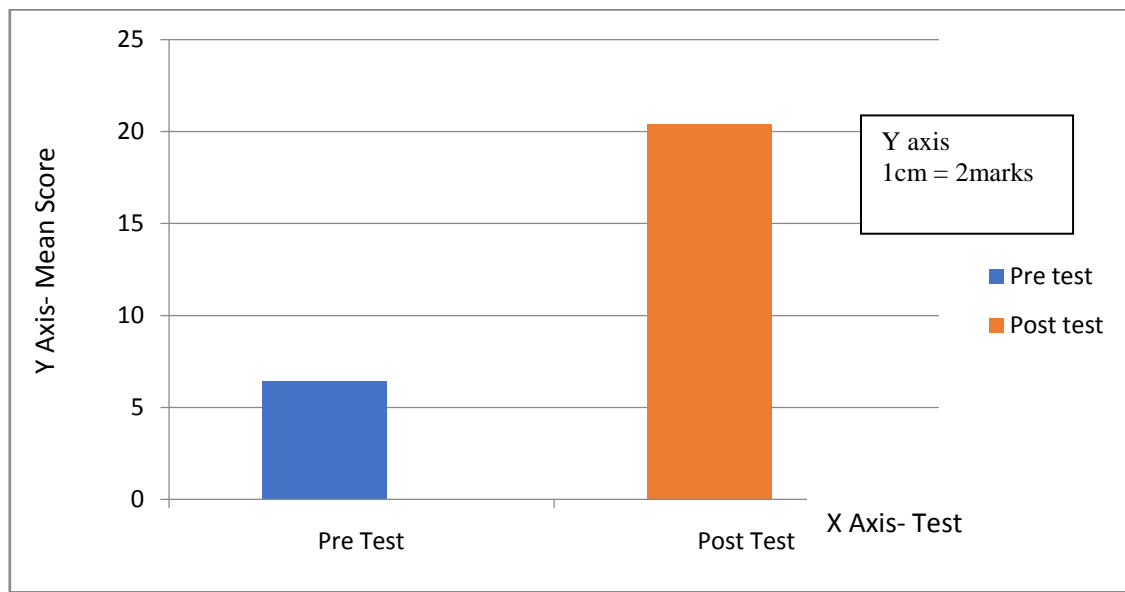
**TABLE 4.3**

**DIFFERENCE BETWEEN MEAN VALUE OF THE SCORES ACQUIRED BY PUPILS IN PRE-TEST AND POST-TEST**

Sr. No.	Test	Total no of students(N)	Mean	$M_2 - M_1$
1	Pre-test	25	$M_1 - 9.4$	14
2	Post-test	25	$M_2 - 20.4$	

**Interpretation:** Mean of the pre-test and post-test of students is calculated in table 4.3. It is clear that mean of post-test scores **20.44** is higher than that of mean of pre-test scores **6.44**. The difference in the mean is **14** Therefore null hypotheses is rejected. The graphical representation is give below.





**Figure 1**

**DIFFERENCE BETWEEN MEAN VALUE OF THE SCORES ACQUIRED BY STUDENTS IN PRE-TEST AND POST –TEST**

**SUMMARY AND CONCLUSION**

**5.1 Introduction**

Computer skills fit into two categories: hardware and software.

Hardware skills allow you to physically operate a computer. Hardware skills can be as simple as knowing how to turn devices on and off. They might also involve more complex tasks like connecting machines to networks, changing parts or fixing broken devices. For these complex tasks, many employers hire trained technicians with advanced computer skills.

Software skills help you to efficiently use computer programs and applications. There are some software skills that employers may consider as prerequisites to employment. Employers may not include some software skills on job posts under the assumption they are universally understood. For example, many employers may believe all applicants have a basic knowledge of word processing programs, like Microsoft Word.

An *email* is a text, typically brief and informal, that is sent or received over a computer network. While email messages are usually simple text messages, attachments (such as image files and spreadsheets) can be included. An email message can be sent to multiple recipients at the same time.

The first e-mail was sent less than 40 years ago. In 2007 the world's billion PCs exchanged 35 trillion e-mails. The average corporate worker now receives upwards of 200 e-mails per

day. On average, Americans spend more time reading e-mails than they do with their spouses.

An **email message** is generally limited to one idea rather than addressing several issues. If you address more than one topic in a single email message, chances are the recipient will forget to respond to all points discussed. Discussing one topic allows you to write a descriptive *subject line*, and the receiver can file the single subject message in a separate mailbox if desired. If you must send a lengthy message, divide it into logical sections for easy comprehension.

### **5.2 Objectives of the Study:-**

- 1 To identify the difficulties faced by secondary students in writing e-mails.
- 2 To provide remedial measures for enhancing writing emails skill among secondary students.
- 3 To find out difference between the pre-test and post-test scores of secondary students

### **5.3 Hypothesis of the study:**

**Ho1** – The student do not face any difficulties in writing emails.

**Ho2** – There is no different between the pre-test scores and post-test scores of Secondary students regarding email writing.

### **5.4 Conclusion:-**

With reference to objective 1 hypothesis  $HO_1$  was rejected. It can be concluded that students of secondary school face difficulties in writing emails. With reference to objective 2 hypotheses  $HO_2$  was found to be null.

This hypothesis was rejected. The results conclude that the after remedial training given by the researcher student were benefited .A significant difference was found between the two tests.

When give remedial teaching by the teacher the student had clear understanding about email writing skills in details the students immediately understood the concept.

### **5.5.1 Suggestion in General:-**

#### **1) For Students-**

The students need to practice this skill at home regularly like any other skill in order to enhance and master it.

## 2) For Teachers: -

The teachers need to create lesson plans that will encourage email writing skill for the betterment of the students.

### 5.5.2 Suggestion for further Research: -

1. Other researches can use the present research as a stepping-stone of conduct research.
2. This research can be done ICSC, CBSE and IB boards also.
3. This research can be done between two or more Secondary schools.
4. It can be done between two or more classes.
5. This research can be done by more than 25 students.

## BIBLIOGRAPHY

### Books

*Agarwal J.C (2009).Deputy Director of Education (Retd) Directorate of Education, Delhi.*

*Himanshu .S (2015) Teaching of Email writing skills. APH Publishing Corporation 4435-3617, Amsari Road, daryaganj, New Delhi – 110002.*

*Published by S.B. Nangia*

### Web sites links

<https://files.eric.ed.gov/fulltext/EJ1092843.pdf>

<http://www.ascilite.org/conferences/perth97/papers/Reid/Reid.html>

<https://education.seattlepi.com/importance-computer-skills-college-1205.html>