A STUDY OF INFORMATION LITERACY SKILLS AMONG STUDENT TEACHERS

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Abstract

The concept of information literacy is critical for student achievement, and furthering understanding of this concept will benefit the profession of education. Information literacy is a term used to describe a collection of required behaviours to effectively cope with information production and distribution. Information literacy improves students' understanding of the generating concept of information interpretation and how it can affect their own and others' perceptions of themselves and others. Most of the research studies are based on developing a new online pedagogical paradigm to improve the learning environment and ICT usage among students and teachers.

In this paper, the researcher studied the information literacy level among student teachers. The sample comprised 246 student teachers. A questionnaire was used to collect data and conducted a quantitative analysis. It was found that there is a need to develop a program for information literacy skills among student teachers.

Keywords: Information literacy, Student teachers

Introduction

According to Bruce and Candy (1995),[i] "Information literacy is the ability to locate, evaluate, manage and use information from a range of sources for problem-solving, decision-making and research." It serves as the foundation for further education throughout one's life. It is universally applicable across all disciplines, all settings, and all levels of schooling. It allows learners to understand materials and investigations, develop more self-direction, and take greater control of their own learning experience. Since IL augments students' competency in evaluating, managing, and using information, it is now considered by several regional and national accredited associations as a critical outcome for college students. IL is a survival skill in the Information Age. In addition, information literacy must be of particular relevance to resource-based learning in networked environments because it depends on electronic information resources. Allen (1997)[ii] also observes that understanding users' information needs is the first and most indispensable step in designing and building effective information systems. Diane Mittermayer (2005)[iii] did a study on the information literacy competency of first-year undergraduate students. A questionnaire was given to the first-year students that measured

knowledge in five areas: concept identification, search strategy, document types, search tools, and results.

In today's world of fast technological development and a plethora of information resources, information literacy and information ethics are two sides of the same coin, and they are becoming more essential. Due to the increasing complexity of this environment, people are confronted with a plethora of information options, both in their academic pursuits and personal lives. There are many sources of information, such as libraries, community resources, particular interest organizations, the media, and the internet. Information is progressively being provided to clients in unmoderated formats, expressing concern about the accuracy and consistency of what is being presented to them. Ethics in information-seeking behaviour helps students to locate and evaluate the unfiltered information available in the e-world. Thus, Information Literacy (IL) definitions tend to focus on a series of tasks and concepts related to information-seeking behaviour. Rowley and Urquhart (2007)[iv] observe that IL behaviour is tied to factors including domain knowledge and everyday information-seeking behaviour practices. Eisenberg and Berkowitz (2006)[v] focus on six broader areas of information literacy: (a) task definition, (b) information-seeking strategies, (c) location and access, (d) use of information, (e) synthesis, and (f) evaluation. The Big6 process has been implemented in many primary and secondary education environments and used in higher education.

Statement of the Problem

The present research study has been specifically explored to understand the student teachers' information literacy level. In this study, the researcher investigated various factors influencing the information literacy level of student teachers. The problem is stated as

" A study of Information literacy Skills among Student Teachers"

Operational Definitions of the Variables

Information Literacy: In this study, information literacy skills refer to the ability of research students to recognize which information is needed and have the ability to find, evaluate, process, present and communicate information in their research studies.

Student teachers: In this study, student teachers are those undergoing training for a B.Ed. The course is being offered at a teacher education college.

Aims of the Study

To study the information literacy skills of student teachers.

Objectives of the Study

1. To study the information literacy level of student teachers with the following dimensions

   a. Search strategies

   b. Keywords

   c. Concept identification

   d. Dissemination of knowledge

   e. Types of sources

2. To compare the information literacy level and its dimensions of student teachers with respect to Gender

   a. Male

   b. Female

3. To compare the information literacy level and its dimensions of student teachers with respect to computer training i.e.

   a. Computer training

   b. No Computer training

4. To compare the information literacy level and its dimensions of student teachers with respect to web access

   a. No access

   b. Home

   c. College

   d. Both Home & College

5. To compare the information literacy level and its dimensions of student teachers with respect to level of education

   a. B.Ed

   b. M.Ed

   c. PhD

6. To study the relationship of the overall information literacy level of students with the dimensions of awareness of ethics in information-seeking behaviour of student teachers

Hypothesis of the Study

1. There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to Gender i.e.

   a) Male

   b) Female

2. There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to computer training i.e.

   a) Computer training

   b) No Computer training

3. There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to web access i.e.

   a) No access

   b) Home

   c) College

   d) Both Home & College

4. There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to Level of Study, i.e.,

   a) B.Ed

   b) M.Ed

   c) Ph.D

5. There is no significant relationship between overall information literacy scores and Overall Awareness of Ethics in Information Seeking Behaviour.

Methodology of the Study

A quantitative approach was adopted in this study. The objective of the research study is to collect quantitative data from comprehending the researcher's suggested research topic better. This design emphasized the collection and analysis of quantitative data. Data gathering via questionnaires was the initial step of this research. The second phase was the analysis phase of

the study. The present research follows the descriptive method of the Causal Comparative and Correlational types.

Sampling

For this study, the population will be student teachers from the education department and affiliated colleges of Mumbai University. The sample for the study was 246 students. In the present investigation, the sampling process was done through the stratified sampling technique.

Tools used for the study

The questionnaire for assessing information literacy skills includes the following dimensions.

      a. Search strategies

      b. Keywords

      c. Concept identification

      d. Dissemination of knowledge

      e. Types of sources

Reliability

The internal consistency reliability using Cronbach's alpha and split-half method of the information literacy scale was 0.66 and 0.69, respectively.

Techniques of Data Analysis

Analysis of data refers to organizing the data and tabulating it into a manageable and understandable form. Analyzing data consists of descriptive analysis and inferential analysis. In the present study, analysis of data will include descriptive analysis and inferential analysis

Analysis and Discussion

Hypothesis No. 1

There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to Gender i.e.

    a) Male

    b) Female

The mean, standard deviation, and t-value are calculated for overall Information Literacy and its dimensions based on student gender. According to the null hypothesis, there is no significant difference in overall information literacy and its dimensions among students based on Gender. The statistical technique used to test this hypothesis is the t-test.

The overall Information Literacy scores of male and female students are 8.54 and 8.33, respectively. The 't' value calculated for Overall Information Literacy (t=0.836) of research

students with respect to Gender reveals that males and females do not differ significantly. The obtained t value (0.836) is less than the 0.05 level value. As a result, the null hypothesis is accepted for overall Information Literacy.

There is no statistically significant difference in overall Information Literacy levels based on Gender. There is no significant gender difference in the dimensions of overall information literacy.

Hypothesis No. 2

There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to computer training i.e.

    a) **Computer training**

    b) **No Computer training**

For students' overall information literacy and its dimensions related to computer training, the meaning, standard deviation, and t-value are calculated. According to the null hypothesis, there is no significant difference in overall information literacy and its dimensions among students in relation to computer training. The statistical technique used to test this hypothesis is the t-test.

The result reveals that the mean score of overall Information Literacy of computer trained students is 8.57 and the untrained computer students are 8.28. The t-value calculated for Overall Information Literacy (t=1.159) of students with respect to computer training reveals that students do not differ significantly. The obtained t value (1.159) is lesser than the tabulated at 0.05 levels. The null hypothesis is therefore accepted. There is no statistically significant difference in overall information literacy based on computer training.

Hypothesis No. 3

There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to web access i.e.

    a) **No access**

    b) **Home**

    c) **College**

    d) **Both Home & College**

The mean, S.D and ANOVA is calculated for the Overall Information literacy and its dimensions with respect to Accessibility of the Internet. The null hypothesis was tested using the statistical technique of one way classification of ANOVA. Overall, information literacy is

higher for students who have access to the internet both at home and at college (9.23) than for those who only have access to the internet at home (8.88) and college (8.06).ANOVA is used to find the difference in the overall information literacy of students belonging to different types of accessibility of the internet. It reveals that students studying at different levels of accessibility of the internet (F=3.07) differ significantly among themselves at 0.05 levels. The obtained F value is greater than the tabulated F at the 0.05 level. The null hypothesis is therefore rejected. There is a significant difference in the overall information literacy of students with respect to the accessibility of the internet.

Hypothesis No 4

There is no significant difference in the Overall Information literacy level and its dimensions of students with respect to Level of Study i.e.

   a) **B.Ed**

   b) **M.Ed**

   c) **Ph.D**

The mean, S.D, and ANOVA are calculated for overall information literacy and its dimensions with respect to the level of research study among research students. The null hypothesis was tested using the statistical technique of one-way classification of ANOVA. It is found that overall information literacy is higher for students at the Ph.D level (9.11) than for those studying at the M.Ed (8.20) and B.Ed (8.97) levels. ANOVA is used to find the difference in the overall information literacy of students belonging to the different levels of study (B.Ed., M.Ed and Ph.D.) (F=4.640) reveals that research students studying for B.Ed, M.Ed and Ph.D differ significantly among themselves at 0.05 levels. The obtained F value is greater than the tabulated F at the 0.05 level. As a result, the null hypothesis for overall information literacy is rejected. There is a significant difference in overall information literacy based on an academic level.

Hypothesis No. 5

There is no significant relationship of overall information literacy scores of students with Overall Awareness of Ethics in Information Seeking Behaviour.

The null hypothesis states that there is no significant relationship between students' overall information literacy scores and the overall awareness of Ethics in Information Seeking Behaviour. The statistical technique used to test this hypothesis is Pearson's coefficient correlation (r). The r of information literacy with Awareness of Ethics in Information Seeking

Behaviour was 0.50. The r-value for overall information literacy scores with cognitive Awareness of Ethics in information-seeking behaviour scores was significant at the 0.01 level. There is a significant correlation between students' overall Information Literacy level and their awareness of Ethics in Information Seeking Behavior.

Conclusion

The concept of information literacy has arisen due to concern about the need to train students to cope with the information explosion, and the term has been particularly connected with lifelong learning. To impact other students' academic disciplines, they require a robust information literacy programme that helps them understand the resources available in the library and helps them gain an insight into the resources available in their relevant subject areas.

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