Study of Student Teachers' Anxiety Level towards Utility of Cyber Resources in Practice -Teaching Of Mathematics –Method

Sangita Raghupatrao Bihade

Assistant Professor Shri Shivaji College Of Education, Amravati, Maharashtra, India

Abstract

In the digital era, the cyber resources play an important role in both teaching and learning. It makes learning accurate and up to date. Cyber resources includes mainly all the online applications of computer, like email, web based applications, search engines, Meta search engines and so on. They provide computing, networking, and the power of data analysis. Therefore, it is a felt need, those students, especially student-teacher of particularly math's teaching method should first have a favorable perception towards these cyber resources and thereby they may get an opportunity to involve themselves in making use of them through interest during their learning process. Hence an attempt has been made to study math students-teachers anxiety level towards the use of cyber resources in practice teaching .

KEYWORDS: Anxiety level, cyber resources, practice teaching, mathematics-method.

INTRODUCTION:
The concept of education is like a diamond which appears to be of different color (nature) when seen from different angles (point of view). Commonly, education is any process, formal or informal, that helps to develop the potentialities of human beings, including their knowledge, capabilities, behavior patterns and values. Education is the creation of sound mind in a sound body. The Internet is an important communication channel in terms of both work and leisure activities. According to a recent International Telecommunication Union (ITU) report, the number of Internet users worldwide doubled over the past five years. The number of people worldwide that access the Internet from home has increased from 1.4 billion in 2009 to almost 1.6 billion in 2010, and was expected to surpass the 2 billion mark during 2010 (ITU 2010). According to Foreseeing Innovative New Digital services (2012), the number of regular Internet users increased from 10.97 million in 2012. As such, the Internet impacts users' communication ability, working style, and lives in significant ways.

Teacher Education is going through an unprecedented period of change. Across the world, the number and quality of teachers are becoming a key policy concern. Ensuring an adequate supply of high-quality teachers is therefore a challenge, as is the expanding task of providing coherent, career-long, professional development opportunities for all teachers. As knowledge increases and technologies emerge, so the status, knowledge and understanding of teachers have to adapt. The scale of demand for teacher education is huge. In this context, it is clear that the institutions of teacher education created in the twentieth century will be unable to meet the demands of the twenty-first. To follow an inevitable logic, it is now becoming apparent that some form of school based, open, flexible form of support for teachers will merge with the traditional initial and in-service

structures existing today. Existing institutions will play a role, but it will be a transformed one that builds on traditional strengths but utilizes the new modes of working.

Cyber resources refer to the form of resources that are used to share, build, store and interchange the information through electronic media such as video conferencing, e-mail, blogs, cyberspace etc. These cyber resources are remarkable tool for teaching learning process in new millennium year. So teacher with nil anxiety level are likely to perform good on pedagogy. A teacher experiences anxiety towards using cyber resources due to cognitive, emotional and psychological problems. The factors responsible for the arousal of such problems are poor infrastructure in learning atmosphere, inadequate facilities in work place, lack of knowledge, negative thoughts about cyber resources and the like. It interferes with their normal work and hinders their class room teaching with cyber resources. B.Ed. students of math method of teaching are the future teachers who have to deal with cyber resources in cyber classroom of future India. So the investigators felt the necessity to bring in to focus the anxiety towards using cyber resources in teaching of B.Ed. students of math method. Cyber resources keep learners active and encourage involve in discussion with teachers.

Although cyber -university is recognized as a future-oriented educational organization, the research on the educational outcomes of cyber -university is not fully conducted. Particularly, regardless of various discussion on design aspects of educational systems or educational program for educational outcomes, the research on the transfer of educational outcomes to the fields after education has been rarely conducted (Lim 2009). Blogs, wikis, e-book, search engines, online drive, etc. are used in teaching process creates a wonderful learning environments. These kinds of resources are known as cyber resources. B.Ed., students Anxiety towards cyber resources is referred as the fear or state of emotions that developed while using cyber resources in teaching. An attempt has been made by the investigators over all to check perception of student –teachers of math as teaching method towards use of cyber resources in teaching.

Educational technology grew over the past few decades, especially online technology. Teachers and students should increase their knowledge of the resources of the online technology such as blogs, wikis, e-book, search engines, online drive etc. These kinds of resources are known as cyber resources. These cyber resources when used in teaching process create wonderful learning environments. An anxiety state refers to transitory state or condition of the person that varies in intensity, fluctuating over time as a function of the amount of stress upon an individual. B.Ed., students Anxiety towards cyber resources is referred as the fear or state of emotions that developed while using cyber resources in teaching. Therefore, it is a felt need to study the Anxiety towards using cyber resources in teaching.

In the present digital era, the development in various aspects of cyber resources has reached beyond our imagination and expectations. Even though cyber resources have a lot of applications in various fields, one should not forget its applications in the field of education. It is very useful and helpful in the teaching and learning process. Therefore, literacy over the new cyber resources is very much needed for B.Ed., students. The cyber resources have created a revolution in the content of education and in the nature of learning process. It has the capability of multiplying the human intellect and has

tremendous educational implications. Variety of information regarding Cyber resources Knowledge required for B.Ed. students is collected from the expert teachers handling Computer science subjects and from other Web resources and their basic components are given below.

1. Web service

2. Online resources

3. Online repository

4. Online teaching sources

5. Online communication

6. Online references

7. Online gadgets

8. Online helps related sources

9. Online information system.

10. Basics of Cyber resources.

11. Software applications.

12. Operations associated with Cyber resource.

13. Applications of Cyber resource.

14. Internet and Web basics
15.Maths teaching learning blogs

Cyber resources have been used widely in education in the present decade. Especially teacher can enable better communication and present subject matter relevantly and more effectively by using cyber resources. Classroom becomes a virtual environment that allows learners to understand practically of what learning and teaching is all about and also helps learners to have long retention of subject content. Teachers can share innovative ideas and different methods of teaching with suitable examples among themselves from anywhere in the world through cyber resources. This approach emphasizes and enhances teacher's professional competency. So cyber resources are necessary in the digital age of the modern classroom. Thus, teachers and pre-service teachers like B.Ed., student-teachers of math method should develop a positive attitude towards using cyber resources. Therefore, the investigators attempted to study the perception of anxiety level towards using cyber resources in practice teaching of B.Ed. students of math method.

OBJECTIVES OF THE PRESENT STUDY
The following are the objectives of the present study.
To study:
i)The entire sample and also the sub-sample of students-teacher of math as teaching method perception towards the use of cyber resources.

ii)□The significant difference, if any, between the various categories of sub-samples divided on the basis of gender, locale and the economical status and having email ,blogs where they are studying in respect of their perception towards the use of cyber resources in practice teaching.

METHOD AND SAMPLE

Normative survey method has been employed in the present study.

The investigator made use of purposive sampling technique and has chosen all student-teacher of math as teaching method from investigators college of education .23 students of math method was sample of the study.

TOOL

As there is no suitable tool available to realize the aforesaid objectives, the investigator has constructed and standardized a scale to measure the math student-teachers perception and anxiety level towards the use of cyber resources. It is a Likert type scale and each statement is set against a five point scale of "Strongly agree", "Agree", "Undecided", "Disagree", and "Strongly disagree" and weights of 5,4,3,2 and 1 are given in that order for the positive statements and the scoring is reversed for the negative statements. The final scale consists of 15 statements and out of which 10 statements are favorably worded and the remaining 5 statements are unfavorably worded. An individual score is the sum of the scores of the 15 items. The score ranges from 15 to 75. The maximum score that one can get in this is 75. Higher score indicates the favorable perception and no level of anxiety towards the use of educational cyber resources for teaching .

RELIABILITY AND THE VALIDITY OF TOOL

Perception towards the use of cyber resources scale has construct validity as item were selected having the „t" value more than 1.72 (Edward 1975). It intrinsic validity was found to be 0.85. The reliability of this scale by split of technique, (Consistency) followed by the use of spearman- Brown prophecy formula is found to be 0.72. Thus the attitude towards the use of cyber resources has validity and reliability. This scale has been administered to a sample of as many as 100 students and the data thus collected have been analyzed statistically with the help of computer to arrive at results and are given below.

Math student-teachers' anxiety level towards utility of cyber resources in practice teaching of entire sample and its sub-samples

Anxiety Level	Entire sample	gender		locality		Having LAPTOP		Having Email id	
		M	F	R	U	Y	N	Y	N
High	0.5%	0.0%	0.5%	0.5%	0.0%	0.5%	1.0%	1.0%	0.6%
Middle	4.0%	2.5%	3.0%	2.2%	1.2%	1.0%	1.0%	2.3%	2.2%
Low	94.5%	97.5%	96.5%	97.3%	98.8%	98.5%	98.5%	96.7%	97.2%

From above table 94.5% of entire sample had low level of anxiety towards use of cyber resources in practice teaching. Only 0.5% of entire sample had high level of anxiety towards use of cyber resources in practice teaching. Only 4.0% of entire sample had middle level of anxiety towards use of cyber resources in practice teaching. So all math student-teachers have positive attitude towards use of cyber resources in practice teaching.

Significance of difference between the means of the anxiety level towards use of cyber resources in practice teaching of math method student-teachers.

Math student-teachers	N	M	S.D.	t-value	significance
Male	08	66.32	14.72	0.07	NOT
Female	15	66.78	13.22		

Significance of difference between the means of the anxiety level towards use of cyber resources in practice teaching of math method student-teachers.

Math student-teachers	N	M	S.D.	t-value	significance
Rural	09	62.78	13.59	0.25	NOT
Urban	14	64.25	14.16		

Significance of difference between the means of the anxiety level towards use of cyber resources in practice teaching of math method student-teachers.

Math student-teachers	N	M	S.D.	t-value	significance
Having lap-top	16	61.78	19.72	0.13	NOT
Not Having lap-top	07	62.84	16.22		

Significance of difference between the means of the anxiety level towards use of cyber resources in practice teaching of math method student-teachers.

Math student-teachers	N	M	S.D.	t-value	significance
Having email	19	68.79	18.32	0.38	NOT
Not Having email	04	65.78	13.22		

RESULTS AND IMPORTANT FINDINGS
The maximum mark for the low level anxiety and perception towards the use of cyber resources scale is 75 and the minimum mark is 15. One who scores above 45 have favorable perception and low level of cyber resource usage anxiety towards the use of cyber resources and who gets 45 and below has otherwise. On this basis, the entire sample and its sub-samples were divided in two groups and are given in table. In respect of the entire sample of student-teachers of math method as much as 98.33% of them show favorable perception towards the use of cyber resources in practice teaching of math method and only 01.67% of them show unfavorable perception towards it. This

finding reveals that the majority of student-teachers of math teaching method have favorable perception the use of cyber resources.

In respect of the male and female students, the t-value is found to be 0.07, which is not significant at 0.01 level and it is concluded that there is no significant difference between male and female math-student-teachers in respect of their anxiety level towards the use of cyber resources. In respect of the rural and urban students, the t-value is found to be 0.25, which is not significant at 0.01 level and it is concluded that there is no significant difference between rural and urban math-student teacher in respect of their anxiety level towards the use of cyber resources. The t-value is found to be 0.13, for math-student teacher having lap-top and is not significant at 0.01 level and hence it is concluded that there is no significant difference between the students having lap-top in respect of their attitude towards the use of cyber resources. Similarly, the t-value is found to be 0.38, for the student-teachers having own email not significant at 0.01 level and hence it is concluded that there is significant no difference between in respect of their anxiety towards the use of cyber resources.

CONCLUSION
Thus this study has yielded a lot of interesting findings. Out of the entire sample, majority of math student-teachers (94.50%) have low level anxiety towards the use of cyber resources and the same trend is seen for the sub-samples, too. Therefore, the study clearly indicates that the student-teachers have very low level of anxiety towards the use of cyber resources in practice teaching. So student teachers of math method have good competencies in the use of cyber resources in practice teaching.

REFERENCES
Baloglu, M. (1999). A Comparison of Mathematics Anxiety and Statistics Anxiety in Relation to General Anxiety. Texas: Author. Abstract retrieved March 30, 2013, from ERIC database.
Blessman, J. & Myszczak, B. (2001). Vocabulary and Its Effect on Student Comprehension. Illinois: Author. Abstract retrieved March 23, 2013, from ERIC database.
Carol S. Holzberg, (2006). "*Cyber Science:* Thrill Your Students with These Web-Based Science Resources". Journal Articles; Reports-Descriptive, Technology & Learning, v26 n6 p32; Jan 2006.

Sireci, S.G.(2007). Are Educational Tests Inherently Evil?, *Nonpartisan Education Review / Essays*, *3(4)*. Retrieved [date] from http://www.nonpartisaneducation.org/Review/Essays/v3n4.pdf
Access this essay in .pdf format

Rajasekar, S. (2010). Manual for attitude towards using cyber resource scale, Manasvi, national psychological corporation, agra.