INCLUSION OF ICT: A PROPOSED CHALLENGE IN TEACHER EDUCATION

Asst. Prof. Dr. Sarika M. Patel

At SSR College of Education

Sayli, Silvassa.U.T of DNH.

And

Asst. Prof. Dr. Vinu Agrawal

At SSR College of Education

Sayli, Silvassa.U.T of DNH.

ABSTRACT

Technology is becoming an integral element for educational reforms and innovations at school level. Computer is not only an object to be studied it has now become a teaching and learning tool for teachers and students.Hence, we can't just be limited up to inclusion of ICT in the curriculum of teacher education programs. Teacher education must involve technological competence regarding use of technology in methods classes, developing learning materials, evaluation and examination part and other administrative works at school level. This paper focuses on status and challenges at teacher education level to produce teachers who are competent for smart classrooms. The main findings of the study were;

-Basic facilities regarding physical environment for inclusion of ICT are found in education institutions.

- It is found that students face technical difficulties to access technology while teaching practice.

- All students believe that inclusion of ICT is need for the day and for the future perspectives.

Key Words: Computer,ICT, teacher education, challenges, teacher trainees.

Introduction:

It is said that no technology can replace teachers' role in classroom but teachers using technology effectively are the threat for teachers who do not.Educators and thinkersemphasize on inclusion of technology in education field. Technology is becoming an integral element for educational reforms and innovations at school level. Computer is not only an object to be studied it has now become a teaching and learning tool for teachers and students. The present scenario of school education denotes an enhancement of pre-service education on ICT for teachers prospective. Technology no more used only as a supporting aid for teaching learning practices but it has emerged as a subject in its own right as a separate discipline.

The roots of this challenge lies at the teacher education. To develop educational programs for smart classrooms and to execute teaching learning process using smart classroom requires virtual learning

environment at teacher education level.Another challenge for teacher education is to get classrooms where trainees can learn from teacher educators how to use technology effectively in their lessons. Hence, we can't just be limited up to inclusion of ICT in the curriculum of teacher education programs. We require proactive steps for its integration in actual teaching learning process. Teacher education must involve technological competence regarding use of technology in methods classes, developing learning materials, evaluation and examination part and other administrative works at school level. This paper focuses on status and challenges at teacher education level to produce teachers who are competent for smart classrooms.

Objectives:

1. To check the technology rich physical learning environment of classroom.
2. To know the students awareness about uses of technology in classroom.
3. To find out challenges regarding uses of technology in classroom.

Methodology

Out of different methods of conducting research, descriptive survey method was applied to fulfill objectives of the present study.

Sample

The sample of study comprised 100 students of three various B.Ed. colleges, two from South Gujarat and one from U.T. of Dadra and Nagar Haveli. The students were selected through random sampling technique. To select students randomly the lottery method was applied by the researcher. The selection of sample is shown in the table: 1.

Table: 1

Sr. No.	Name of the College	No. of students	No. of students selected (Boys)	No. of students selected (Girls)	Total
1	R.K.Desai College of Education, Vapi, Dist. Valsad	98	10	30	40
2	Shree AkhandvidyaAranyakB.Ed. College, Barumal, Dist. Valsad	94	08	22	30
3	SSR College of Education, Silvassa, U.T. of Dadra & Nagar Haveli	99	08	22	30
Total		291	26	74	100

Tools

For the present research self constructed inventory was used by the researcher to collect the data. The inventory consists of following aspects:

- Check list of ten questions on availability of technology based physical resources in classroom.
- Three point rating scale for twelve statements on awareness about uses of technology in classroom.
- Open ended questions.

Analysis of the Data

Table: 2

	College-1		College-2		College-3	
	Availability	Non availability	Availability	Non availability	Availability	Non availability
Technological resources						
Computer	√		√		√	
Internet	√		√		√	
Wi-Fi	√			√		√
Interactive white board	√			√		√
Mounted projector	√		√			√
Google/Educational Apps.		√		√		√
UPS	√			√	√	
Availability of software		√		√		√
Maintenances of ICT tools	√		√			√

In the above table it is found that the teacher education colleges have basic facilities related to technology such as computer, internet, projector, UPS etc… ICT tools are well maintained by the various institutions. All the teacher education colleges do not have Wi-Fi facility. Smart board and smart classroom are not available in all the colleges.

Table: 3

Statement	College-1		College-2		College-3		Total(Average %)	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
I use computer while teaching practices.	100%	98%	85%	79%	80%	63%	88.3%	80%
Teachers should use computer while teaching practices.	100%	100%	100%	100%	100%	100%	100%	100%
Inclusion of ICT in teaching is the need for the day.	100%	100%	100%	100%	100%	100%	100%	100%
I use various educational Apps. During teaching practice.	33%	72%	56%	85%	09%	29%	32.6%	62%
I use power point presentation.	58%	61%	72%	87%	100%	100%	76%	82.6%
I use pen drive for back up.	90%	66%	86%	57%	100%	58%	92%	60.3
I access internet in college for various academic activities.	88%	78%	82%	91%	98%	95%	89.3%	88%
I use smart board in teaching practice.	41%	28%	15%	19%	56%	52%	37.3%	33%
Internet is useful for social networking only.	12%	19%	22%	11%	44%	39%	26%	23%
We have exposure of smart classroom in schools during practice teaching sessions.	100%	100%	72%	67%	95%	97%	89%	88%
I want to use internet while teaching in class but do not get required facilities.	96%	89%	91%	93%	100%	97%	95.6%	93%

Major Findings

1. For the first objective i.e.; to check the technology rich physical learning environment of classroom, researcher used check list to collect the data. From the data collected through check list was analyzed and found details as under:

- Computers and internet and projector facility are available in all the colleges.
- Students don't have interactive board exposure in college while teaching practice.
- Students are not provided with various educational apps and educational software to use while teaching practices.
- All the ICT tools are well maintained by the institutions.

2. For the second objective of the research i.e.; to know the students awareness about uses of technology in classroom, the researcher collected the data through opinionnaire. The data of an opinionnaire was analyzed as under:

   As per the data analysis shown in table: 2;

- Majority of students use computer while teaching practices. It is found that percentage of boys using computer is more than of girls.

- All the students believe that Teachers should use computer while teaching practices andinclusion of ICT in teaching is the need for the day.

- It is found that only few students use educational apps during teaching practice. And majority of students do not use educational or Google apps for teaching practices. It is also observed that girls use educational apps more than of boys.

- Majority of students use power point presentation for teaching practices.

- Students use pen drive for data backup. The ratio of boys is higher than the ratio of girls having pen drive.

- Majority of student access internet to perform various academic activities.

- Some students use smart board during teaching practice. But many students yet don't use smart board.

- Majority of students have exposure of smart classroom in schools during practice teaching sessions.

- All the students want to use internet while teaching in class but do not get required facilities.

3. To find out challenges regarding uses of technology in classroom, students were asked open ended questions which pointed out following points.

- Students face technical problems like power, connectivity of internet, speed of net, power backup, etc... while using technology in classroom.

- Sometimes students find it difficult to use technology in classroom due to lack of competent teacher educators.

- Students feel that teaching with technology sometimes become very entertaining and the main content left aside.

Suggestions

- Various teacher education colleges should upgrade the standards in making use of technologies such as Wi-Fi, latest version of software, internet connectivity, interactive boards, LMS (Learning managing system) and smart classroom.

- In order to make teacher trainees skillful in handling ICT tools, teacher educators should be properly trained.

- All the future teachers must be given exposure to use smart boards and smart classroom at teacher education institutions.
- Practice lessons based on e-learning, e-assessment should be included in the teacher education curriculum.

Conclusion

The teachers of future shall be facilitated with all the resources in terms of hardware, software, internet, greatly at the class rooms in schools. The concept of smart class room is not new in today's school system. But the challenge is that today's prospective teachers will have to teach with technology in the smart classrooms of tomorrow. Hence, teachers will have to become directors of their own learning with regard to using information technologies in the classroom. Teachers are expected to be skillful to integrate ICT into pedagogy areas to make learning more meaningful.

References:

- Aggarwal, J. C. (1996) Educational Research: An Introduction, New Delhi: Arya Book Depot.
- Mohan, Radha (2006) Research methods in Education, Neelkamal Publication (P) Ltd, Hyderabad.
- Karhade, B., (2007) ShastriyasanshodhanPaddhati, Pimpalapure and co. Publishers, Nagpur
- Behere,S. , (2004) SamajikSanshodhanPaddhati, Vidya Prakashan,Nagpur
- Emerging methods in E-learning Global trends in the education, Teacher
- http:/n.wikipedia.org
- http:/www.webopedia.com
- https://www.Dictionary.cambridge.org