



“The Perceptions of Teacher Educators of V.S.K. University Affiliated B.Ed. Colleges towards the Integration of Technology in the Classroom”

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Abstract:

The main aim of this study The Perceptions of Teacher Educators of V.S.K. University affiliated B.Ed. colleges towards the Integration of Technology into the Classroom. A sample of 50 teacher educators of ten B.Ed. Colleges affiliated to V.S.K. University, Bellary was selected through simple random sample selection procedure. Quantitative data of this study was analyzed using both descriptive and inferential statistics. The review that there is no significant difference between male and female teacher educators' perceptions towards the integration of technology into the classroom.

Key words: Teacher Educators, B.Ed. colleges, Integration of Technology

1.Introduction:

Every teacher needs to acquire the necessary tools to be able to navigate through the continuous flow of information that today's global communities gather with the Internet and advanced skills in the education field. For students to thrive in a world enabled by instructional technology, they need to be equipped with a huge number of skills to make sense of technology used to present. They need to aware of how to learn new skills as quickly as technology creates new challenges. Many students already use computers and surf the web on their own, but there is more to instructional technology than using desktop computers and surfing the Internet. Teachers and students need to acquire & access how to use a variety of electronic and multi-media gadgets. Teachers and students need to become more informed and capable users and suppliers of information. As Bybee & Loucks-Horsley (2000) contended, everyone needs to know how to collaboratively become successful across miles and various cultures in technology.

The use of technology in regular classroom instruction may move students beyond the traditional classroom learning. For example, some instructional technology methods may introduce challenges in higher order

thinking, and improve problem solving skills of students (Hamza & Alhalabi, 1999). Instructional technologies may serve as tools used by educators to help students to self-regulate and improve the self-paced learning process, and may encourage students to self-question and self-evaluation to find solutions to complicated problems (Hamza & Alhalabi). This provides a rationale for academic institutions to implement newly advanced instructional technology education in regular classrooms, in order to improve the teaching-learning processes for students and future educators. The broadened use of electronic communication and Information communication technology in today's globalized world has the potential to affect in dramatic ways the efficiency and quality of educational systems throughout the world (Chapman, Garrett, & Mahlck, 2004). The simplicity with which students and teachers can gather information about any topic over the internet has contributed to the transformation of instructional content (Chapman et al., 2004). Moreover, many courses developed in one country can be made accessible to learners across many countries (Chapman et al., 2004). This is already being observed in several international higher education institutions in more industrialized countries; however, it might only take a short time before this starts to surface in developing countries (Chapman et al.). It is estimated that the world use of electronic communication technology is just beginning; however, it is obvious that it will be a leading trend over the next decade (Chapman et al.). Therefore, teacher educators need to acquire and create teaching strategies and methods for integrating technology in traditional classroom instruction (Chapman et al.).

The shift to using advanced technology by teachers in primary and secondary schools may enhance and strengthen the access, efficiency, and quality of basic education (Chapman et al.). However, to attain this shift, future educators need to be well prepared and need to be trained effectively. When preparing future educators to integrate technology in their classroom curricula, teacher educators' Members who teach pre-service teacher education courses must integrate technology in their classroom instruction to encourage future educators to integrate technology into their own teaching when educating their future students (Stanford & Reeves, 2007).

Therefore, this research attempted to assess teacher educators' perceptions toward integration of technology in the classroom instruction because the responsibility of adequate preparation of future educators falls upon teacher educators. Teacher educators' views toward integration of technology may influence to a great extent future educators' readiness to integrate technology into their own teachings.

2. Definition of Terms:

Technology Integration - "The practical application of knowledge and technique especially in a particular area, here using computer hardware and software during classroom instruction" (Rogers, 2007, p. 6).

Teacher Educators- "Teacher educators are educational professionals who actively facilitate the formal and informal learning of teachers and student teachers".

3. Objective:

- 1) To study the perceptions of teacher educators of V.S.K. University affiliated B.Ed. colleges towards the integration of technology into the classroom based on Gender
- 2) To study the perceptions of teacher educators of V.S.K. University affiliated B.Ed. colleges towards the integration of technology into the classroom based on Age.
- 3) To study the perceptions of teacher educators of V.S.K. University affiliated B.Ed. colleges towards

the integration of technology into the classroom based on Teaching Experience.

4.Hypotheses:

1. There is no significant difference between male and female teacher educators' perceptions towards the integration of technology into the classroom.

2. There is no significant difference between teacher educator perceptions towards the integration of technology in the classroom based on age.

3. There is no significant difference between the means of teacher educators towards the integration of technology in the classroom based on teaching experience

5.Design of the study:

a.Sample:

A sample of 50 teacher educators of ten B.Ed. Colleges affiliated to V.S.K. University, Bellary was selected through simple random sample selection procedure. Data from these 50 teacher educators was collected and analyzed. Among 50 teacher educators 28 were male and 22 were female.

b. Methodology:

A survey was administered to teacher educators. Data was gathered regarding teacher educators perceptions toward integration of technology. Quantitative data was analyzed using both descriptive and inferential statistics.

c.Instrument:

The first section consist of 5 items to collect information about teacher educators gender, age and number of years of teaching experience, use or non-use of technology in the classroom, and type of technology programs or software programs used now or in the past.

The second section consisted of 15 items. A five point scale was used by the respondent for the 1 items: 1 = very important, 2 = somewhat important, 3 = important, 4 = somewhat not important and 5 = not important A five point Likert type scale was also used by the respondent.

d. Treatment of the Data:

The Statistical Package of the Social Sciences (SPSS) version 14.0 was used to analyze the data. Both descriptive and inferential statistics were used to describe and summarize results. The following descriptive statistics: measures of central tendency and variability, frequencies and distributions were calculated to summarize teacher educators' responses by their demographic characteristics.

6.Hypotheses wise analysis of the Data:

a. There is no significant difference between male and female teacher educators' perceptions towards the integration of technology into the classroom

To address the objective-1 "To study the perceptions of teacher educators toward the integration of technology into the classroom based on gender", t-test was used to investigate the differences between males and females teacher educators perceptions of competencies needed for the integration of technology in the classroom.

Table-1**T-test Results for Teacher educators Perceptions Based on Gender**

Gender	N	Mean	Std. Deviation	t-test
Male	28	28.530	3.544	0.160*
Female	22	29.270	3.003	

***not significant at 0.05 level**

As shown in table-1. There was no statistical significance between male teacher educators' perceptions of their competencies ($M=28.53$, $SD=3.54$) and female teacher educators' perceptions ($M=29.27$, $SD= 3.003$), $t=0.16$, $p >0.05$. Hence above hypothesis has been accepted. This shows that there is no significant difference between male and female teacher educators' perceptions towards the integration of technology into the classroom.

b. There is no significant difference between teacher educators perceptions towards the integration of technology in the classroom based on age

Table - 2**Descriptive Statistics of Teacher educators Perceptions Based on Age**

Age	N	Mean	Std. Deviation
21-30	8	35.23	8.06
31-40	15	32.43	4.02
41-50	21	28.41	4.36
over 51	6	31.40	1.31

One Way ANOVA was used to investigate the relationship between age and teacher educator's perceptions of competencies needed for the integration of technology in the classroom. Tables 2 and 3 showed the descriptive statistics and the ANOVA test results. Table 2 shows that the mean teacher educator's perceptions of competencies based on age ranged from 29.38 - 34.33. Also, as shown in the same table, ages of 21-30 have the highest mean of perceptions of the competencies needed for the integration of technology in the classroom while ages 41-50 have the lowest mean.

Table-3**ANOVA Results for Teacher educators Perceptions Based on Age**

	Sum of Squares	df	MeanSquare	F
Between Groups	250.33	3	187.622	2.243*
Within Groups	15312.546	38	98.734	

***not significant at 0.05 level**

To test for statistical differences between teacher educators perceptions of competencies based on age, one-way ANOVA was used as shown in table 3. There were no statistical differences between teacher educators perceptions competencies need for the integration of technology in the classroom based on age, $F = 2.243$, $p > 0.05$.

c. There is no significant difference between teacher educators perceptions towards the integration of technology in the classroom based on teaching experience

One Way ANOVA was used to investigate the relationship between the years of teaching experience and teacher educators' perceptions of the competencies need for the integration of technology in the classroom. Tables 4 and 5 show the descriptive statistics and the ANOVA test results.

Table-4
Descriptive Statistics of Teacher educators Perceptions Based on Teaching Experience

Teaching Experience	N	Mean	Std. Deviation
less 5 years	17	35.78	1.835
6-10 years	21	28.59	7.127
11-15 years	9	32.67	3.575
Over 16 years	3	33.04	2.676

Table-4 shows that the teacher educators perceptions means based on years of teaching experience ranged from 28.59- 35.78. Also, as shown in the same table, the years of experience "less than 5 years" have the highest mean of perceptions of the competencies needed for the integration of technology in the classroom while the years of experience "6-10" have the lowest mean.

To test for statistical differences between teacher educators perceptions of the competencies need for the integration of technology in the classroom based on years of teaching experience, one-way ANOVA was used.

Table 5
ANOVA Results for Teacher educators Perceptions Based on Teaching Experience

	Sum of Squares	df	Mean Square	F
Between Groups	292.12	3	86.21	1.612*
Within Groups	12161.12	38	78.12	

***not significant at 0.05 level**

Table 5 shows no statistical differences between the means teacher educators perceptions of the competencies needed for the integration of technology in the classroom based on years of teaching experience, $F = 1.612$, $p > 0.05$. Therefore we can conclude that here is no significant difference between teacher educator's perceptions towards the integration of technology in the classroom based on teaching experience.

7.Results and Recommendations:

Research hypotheses statistical analysis results showed no significant differences in teacher educators perceptions of the competencies needed for the integration of technology into classroom instructions based on gender, age and teaching experience. Those variables do not seem to influence teacher educators perceptions of the competencies needed for the integration of technology into classroom. Table-3 supports these findings. Most teacher educators expressed on the 15 items, which assessed competency levels for the integration of technology into the classroom instruction, that they are competent. Only a small percentage of teacher educators members expressed that they are not competent or somewhat not competent, which indicated that only a small number of teacher educators members did not feel that they have enough competency to integrate technology into classroom instruction.

Findings indicate that most teacher educator's members had positive perceptions of their competency levels for the integration of technology into the teaching and learning processes and viewed that to be an important factor for improving the education regardless of gender, age and years of teaching experience. Results of research objective conclude that teacher educators' perceptions of their competency levels for integrating technology practices into classrooms' instruction are positive. Teacher educators seem to have acquired adequate skills level for utilizing technology into their classrooms' instruction, and therefore, might be influencing future educators to integrate and use technology into their own classroom instruction.

This study assessed teacher educator's perceptions toward technology integration into classroom instruction and identified positive perceptions. Nevertheless, the study did not assess level of access to technology and the level of financial support available to integrate technology; therefore, future studies may aim at identifying the influence of those factors as it may serve the purpose of identifying problems that may impede the implementation process of technology into classroom instructions. As a result, policy makers may benefit from such assessments to improve efforts largely.

The study was strictly a quantitative study using a survey design. Consequently, it is recommended to use a qualitative design with the same population or with other types of populations such as focus groups, direct classroom observation, or interviews. This may provide more in-depth information that cannot be found by using a survey instrument.

None of the variables examined in this study seemed to influence teacher educators' perceptions. Future research should examine other variables such as level of access, level of financial support, teacher educators' professional training programs, and administrative support.

A longitudinal study is also recommended in order to capture factors that may influence teacher educators' perceptions toward the integration of technology. Such a study may provide more detailed description of perceptions and may serve as a checkpoint for improvements before and after professional development efforts.

8.Conclusion:

Teacher educators seem to be utilizing technology into their classrooms' instruction, and therefore, might be influencing future educators to integrate technology into their own classroom instruction. The findings of this study support previous research concerning the importance of having positive perceptions toward the

integration of technology that have been linked with more willingness to use technology. Javeri (2003) and Wang (2006) found that teachers were more willing to use technology when they have more positive perceptions toward its use. In addition, when teachers or teacher educators have positive perceptions toward technology integration, they have more knowledge about technology practices, leading to improved curricula for students (Wang, 2006).

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