

RELATIONSHIP BETWEEN ICT COMPETENCY AND KNOWLEDGE COMPETENCY OF DISTANCE MODE B.ED. STUDENTS

ABSTRACT

Traditional educational practices no longer provide prospective teachers with all the necessary skills for teaching students, who must be able to survive economically in today's workplace. Teachers must teach students to apply strategies for solving problems and to use appropriate tools for learning, collaborating, and communicating. The problem is not necessarily lack of funds, but lack of adequate training and lack of understanding of how computers can be used to enrich the learning experience.

INTRODUCTION

India is a developing country. The main factor that made India a developing country is its educational wealth though the nation is poverty stricken. The progress of a nation depends on its education. Education is a human process, which involves the teacher and the taught. The teacher is the Kingpin of the process. The teaching profession is regarded as the most important profession as its educational and social values lie in its significant contribution to the development in the quality of life and betterment of the society. Today's classroom teachers must be prepared to provide technology-supported learning opportunities for their students. Being prepared to use technology and knowing how that technology can support student learning must become integral skills in every teacher's professional repertoire. ICTs have great potential for knowledge dissemination, effective learning and the development of more efficient education services.

ICT can also help to accelerate teacher training as the world is facing an acute and growing shortage of teachers with currently 60 million teachers in the world, but another 15-35 million needed to achieve Education for All by 2015. However, effective integration of emerging ICTs in traditional education models is impeded by many factors. A key retardation factor relates to the lack of proper ICT competencies on the part of teachers.

Teachers must be prepared to empower students with the advantages technology can bring. Schools and

classrooms, both real and virtual, must have teachers who are equipped with technology resources and who can effectively teach the necessary subject content while incorporating technology concepts. Real-world connections, primary source materials, sophisticated data-gathering and analysis tools are a few of the resources that enable teachers to provide heretofore unimaginable opportunities for student understanding.

OBJECTIVES OF THE STUDY

1. To find out the level of ICT Competency and Performance Competency of the distance mode students with reference to certain background factors.
2. To find out the difference in ICT Competency and Knowledge Competency of the distance mode students with reference to certain background factors.
3. To find out the relationship between ICT Competency and Knowledge Competency of distance mode students with reference to certain background factors.

P.Muthupandi

*Asst. Professor, Dept. of Education, DDE,
Madurai Kamaraj University, Madurai*

Dr.A. Amalraj

*Principal, Sri Saradha College of Education,
Ariyakulam.*

HYPOTHESES OF THE STUDY

There is no significant difference in ICT Competency of distance mode B.Ed. students with reference to certain background variables.

There is no significant difference in Knowledge Competency of distance mode B.Ed. students with reference to certain background variables.

There is no significant relationship between ICT Competency and Knowledge Competency of distance mode B.Ed. students with reference to certain background variables.

METHODOLOGY

This study was carried out among distance mode B.Ed. students (In-service Teachers) of Nagercoil and Madurai B.Ed. study centers of the Directorate of Distance Education, Madurai Kamaraj University. The method followed by the investigator was the survey method and purposive study sampling technique was used. The ICT Competency scale and the Knowledge Competency Questionnaire were validated and used by the investigator.

POPULATION AND SAMPLE

The population of the study included the distance mode students of Nagercoil and Madurai B.Ed. study centers of the Directorate of Distance Education, Madurai Kamaraj University, Madurai.

RESEARCH TOOL

In the present study the following tools were used:

1. ICT Competency Scale, prepared & standardized by the investigator.

2. Knowledge Competency Questionnaire, prepared & standardized by the Investigator.

STATISTICAL TECHNIQUES USED

The following statistical techniques were used for analysis and interpretation of the data.

1. Mean and Standard Deviation
2. 't' Test to find out the significant difference.
3. Pearson's Product-Moment Correlation

OBJECTIVE TESTING

Research
Paper

1. To find out the level of the ICT Competency of the distance mode B.Ed. students with reference to certain background variables.

Background variables	Category	Low		Average		High	
		No.	%	No.	%	No.	%
Gender	Male	22	19.5	66	58.4	25	22.1
	Female	20	23	53	60.9	14	16.1
Marital Status	Married	18	20.2	58	65.2	13	14.6
	Unmarrie	20	18	68	61.3	23	20.7
Locality of School	Rural	32	18.6	114	66.3	26	15.1
	Urban	3	10.7	21	75	4	14.3

2. To find out the level of the Performance Competency of the distance mode B.Ed. students with reference to certain background variables.

Background variables	Category	Low		Average		High	
		No.	%	No.	%	No.	%
Gender	Male	19	16.8	71	62.8	23	20.4
	Female	12	13.8	57	65.5	18	20.7
Marital Status	Married	20	22.5	51	57.3	18	20.2
	Unmarrie	19	17.1	68	61.3	24	21.6
Location of School	Rural	27	15.7	114	66.3	31	18
	Urban	5	17.9	17	60.7	6	21.4

HYPOTHESES TESTING

1. There is no significant difference in the ICT Competency of the distance mode B.Ed. students with reference to certain background variables.

Back ground variables	Category	Count	Mean	SD	t-value	Remark
Gender	Male	113	51.5	11.3	2.57	S
	Female	87	48.05	7.61		
Marital Status	Married	89	46.89	8.3	4.2	S
	Unmarried	111	52.5	10.5		
Locality of School	Rural	172	47.49	8.11	14.3	S
	Urban	28	65.43	5.77		

2. There is no significant difference in the Performance Competency of the distance mode B.Ed. students with reference to certain background variables.

Back ground variables	Category	Count	Mean	SD	t-value	Remark
Gender	Male	113	49.46	10.9	0.89	NS
	Female	87	50.7	8.7		
Marital Status	Married	89	47.04	10.4	3.81	S
	Unmarried	111	52.37	8.95		
Locality of School	Rural	172	48.51	9.78	8.38	S
	Urban	28	59.16	5.45		

3. There is no significant relationship between ICT Competency and Performance Competency of the distance mode B.Ed. students with reference to certain background variables.

Back ground variables	Category	N	Table Value	γ value	Remarks
Gender	Male	113	0.195	0.313	S
	Female	87	0.217	0.042	NS
Marital Status	Married	89	0.205	-0.037	NS
	Unmarried	111	0.195	0.304	S
Locality of School	Rural	172	0.159	-0.042	NS
	Urban	28	0.374	0.39	S

FINDINGS

1. ICT Competency of distance mode B.Ed. students is found to be average.
2. Knowledge Competency of distance mode B.Ed. students is found to be average.
3. There is a significant difference in the ICT Competency of the distance mode B.Ed. students with reference to their gender, marital status and locality of the school.
4. There is no significant difference in the Knowledge Competency of the distance mode B.Ed. students with reference to their gender.
5. There is a significant difference in the Knowledge Competency of the distance mode B.Ed. students with reference to their marital status and locality of the school.
6. There is significant relationship between ICT Competency and Knowledge Competency of male distance mode B.Ed. students.
7. There is no significant relationship between ICT Competency and Knowledge Competency of female distance mode B.Ed. students.

8. There is no significant relationship between ICT Competency and Knowledge Competency of married distance mode B.Ed. students.
9. There is significant relationship between ICT Competency and Knowledge Competency of unmarried distance mode B.Ed. students.
10. There is no significant relationship between ICT Competency and Knowledge Competency of distance mode B.Ed. students.
11. There is a significant relationship between ICT Competency and Knowledge Competency of distance mode B.Ed. students.

A major finding of this study is, there is a significant difference in ICT competency between male and female distance mode B.Ed. students. This is supporting the finding of Gurkay Birinci, A. and Kerem Kilicci who conducted a study on "The pre-service teachers' competency perceptions regarding technology use in the classroom", though opposed to that of Hernes et al. (2000) and Farren (2000) also expressed similar opinion of Hernes et al. (2000). The reason for this difference is not immediately clear. The instrument used may have varied on their emphases on pedagogical use of technology.

CONCLUSION

Rapid changes in technology will ensure that ICT will proliferate in the classroom. It is predicted that there will be many benefits for both the learner and the teacher, including the promotion of shared working spaces, resources, better access to information, the promotion of collaborative learning and radical new ways of teaching and learning. ICT will also require a modification of the role of the teacher, who in addition to classroom teaching will have other skills and responsibilities. Teachers will become specialists in the use of distributed learning techniques, the design and development of shared learning spaces and resources, and virtual guides for students to use the electronic media. Ultimately, the use of ICT will enhance the learning experiences of children, help

think and communicate creatively. ICT will also prepare our children for successful lives and careers in an increasingly technological world.

REFERENCES

Helen Holding & Clare Martin, (1998). *Mastering Microsoft Office*. London, UK: MacMillan.

<http://en.wikipedia.org/wiki/internet#references>

<http://iete-elan.ac.in/subjects>

dipcomputerfundamentals.htm

<http://www.baycongroup.com/wlesson0.htm>

<http://www.wiziq.com/tutorials/ppt>

John, W. (2007). *Learning and Teaching Using ICT*. New Delhi: Learning Matters Ltd.

Stephen, M. A., & Stanely, R. (1985). *Computer Based Instruction: Methods and Development*. New Delhi: Prentice Hall of India, Pvt. Ltd.

Continuation of page 4

INSTRUCTIONAL DESIGN

EVALUATION PHASE

Formative evaluation

Formative evaluation is presented in each stage of the process. In the e-Content package, Frequently Asked Question (FAQ), Quiz and Glossary options are to be provided for formative evaluation, which are helpful to the students for their self assessment.

Summative evaluation

Summative evaluation consists of tests designed for Criterion-referenced items. It is to appear prior to entrance into a given instructional sequence which is called pre-test and also to appear after completion of the instructional sequence which is called post-test. It provides opportunities for feedback from the students about the e-Content package.

GENERAL CONCLUSION

Research Paper

- (i) A cell for e-Content should be established in all the schools, colleges and universities. Faculties of the schools, colleges and universities should be involved to prepare e-Content packages in their respective subjects.
- (ii) University's Education Departments, Educational Multi-media Research Centres and Colleges of Education should train the faculties of the schools, colleges and universities for preparation of e-Content.
- (iii) Useful subject oriented web sites can be created and also utilized to deliver the validated e-Content packages for the benefit of the learners.
- (iv) Continuous Assessment cell on e-Content will be established for improvement of the programme.

REFERENCES

Print media

1. Aggarwal, J.C., (1999) *Essentials of Educational Technology: Teaching learning Innovations in Education*, New Delhi, Vikas Publishing House Pvt. Ltd.
2. Dick, W., & Carey, L. (1996) *The Systematic Design of Instruction (4th Edn.)* New York: Harper Collins College Publishers.
3. Leshin, C.B., Pollock, J., & Reigeluth, C.M. (1992) *Instructional Design Strategies and Tactics*. Englewood Cliffs, NJ: Educational Technology Publication.

Electronic media

1. www.e-learning.com
2. www.outsource2india.com/learning_solutions/articles_ADDIE.asp
3. www.en.wikipedia.org/wiki/ADDIE_model
4. www.learning-theories.com/addie-model.html