AN ANALYSIS OF THE USE OF TECHNOLOGY BY TEACHERS OF ARTS AND SCIENCE COLLEGE IN TERMS OF STAGES OF CONCERN

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Abstract

This study attempts to study the use of technology by teachers of arts and Science College in terms of stages of concern. . Normative survey method design was adopted for the present study. A sample of 300 of teachers from arts and Science College, were selected for the present study. Many teachers, especially more experienced faculty, find it difficult in handle technology. The possible reason for this is the lack of success in the use of technology in the classroom, which may be due to attitude, perception and worries of the teacher educator. This study analyzed the concerns of teachers in arts and Science College toward the use of technology using the Stages of Concern Questionnaire. Results indicate that the teachers having low awareness concern, high information concern, low management concern, low consequence concern are using more technology

Keywords: *Stages of Concern*

Introduction

Recent decades have seen the advent of new teaching practices, techniques, and philosophies, all with the intention of developing a stronger learning experience. The implementation of educational technology has numerous benefits for many within the education system. Technology and education are a great combination if used together with a right reason and vision.

The concept of Stage of Concern is one of the three parts of Concern Based Adoption Model (CBAM) which was developed in the early 1970s at the Research and Development Center for Teacher Education (RDCTE) in the University of Texas–Austin, it was framed around three concepts: Stages of Concern about an Innovation, Levels of Use of an Innovation and Innovation Configuration.

The present study is concerned about the Stages of Concern about an Innovation. Stages of Concern, enables leaders to identify staff members' attitudes and beliefs toward a new program or initiative. With this knowledge, leaders can take actions to address individuals' specific concerns. It has seven stages

Stage of Concern
0: Unconcerned
1: Informational
2: Personal
3: Management
4: Consequence
5: Collaboration
6: Refocusing

The Level of concern enables us to know not only the extent to which staff are using a new initiative but also whether individuals are at a beginning stage, still working through the challenges associated with it or at a more advanced level, where he or she has attained expertise. With this knowledge, the management can provide the support necessary to help all staff members using the new initiative effectively. Hence, the need was felt to undertake a study which could highlight faculty's' use of technology in terms of stages of concern

Statement of the problem

An analysis of the use of technology by the teachers of arts and science colleges in terms of stages of concern

Need and significance of the study

The effective use of Technology in Education has changed the face of education and it has created more educational opportunities. But there are various factors affecting the use of technology. This study is employed to identify concerns about use of technology by teachers of arts and Science College.

By analyzing the stages of Concern, we can assess and respond to the worries, attitudes, and perceptions of teachers as they deal with the challenges of using technology

and provide targeted support to help teachers to cope and focus on the task at hand. If a person's needs are addressed at the stage they are at, then they can move to new levels of practice. If the problem is not sorted out they will not achieve and in course of time innovative practices will be discarded and coping strategies which are often poor practice will be adopted.

Study of different stages of concern will give us insight into the benefits of awareness, management and collaboration for use of technology. As individuals become more comfortable with and skilled in using technology , their concerns shift to focus on broader impacts, such as how the initiative will affect their students or their working relationships with colleagues.

Arts and science colleges can organize workshops, seminars and training sessions where teachers can enhance and update their skills and competencies in using technology. It is also the duty of the management to provide the required technology in the college so the teachers uses technology confidently which in turn improves the teaching learning process.

Objectives

1. To find out any significant difference in the use of technology between teachers having high and low awareness concern for technology use.

2. To find out any significant difference in the use of technology between Teachers having high and low informational concern for technology use.

3. To find out any significant difference in the use of technology between Teachers having high and low personal concern for technology use.

4. To find out any significant difference in the use of technology between Teachers having high and low management concern for technology use.

5. To find out any significant difference in the use of technology between Teachers having high and low consequence concern for technology use.

6. To find out any significant difference in the use of technology between Teachers having high and low collaboration concern for technology use.

7. To find out any significant difference in the use of technology between teachers having high and low refocusing concern for technology use.

Hypotheses

1. There is no significant difference in the use of technology between teachers having high and low awareness concern for technology use.

2. There is no significant difference in the use of technology between teachers having high and low informational concern for technology use.

3. There is no significant difference in the use of technology between teachers having high and low personal concern for technology use.

4. There is no significant difference in the use of technology between teachers having high and low management concern for technology use.

5. There is no significant difference in the use of technology between teachers having high and low consequence concern for technology use.

6. There is no significant difference in the use of technology between teachers having high and low collaboration concern for technology use.

7. There is no significant difference in the use of technology between teachers having high and low refocusing concern for technology use.

Delimitations of the study

1. The study is confined to Puducherry region only.

2. The sample size is restricted to 300

3. The cluster sampling technique is used for the present study

Research methodology

Research design

Normative survey method is adopted for the present study. Normative survey method is oriented towards the description of the present status of a given phenomenon. The present research is also the study of present status of the use of technology by the teacher educators in terms of stages of concern.

Population and Sample

- **Population**

In the present study all the teachers of arts and Science College which are associated to University of Pondicherry were considered as the population for the study.

- **Sample**

300 teachers of arts and Science College constitutes the sample of the study.

Sampling Procedure

Cluster sampling technique was used in the present study.

Tools Used In the Study

Stages of Concern Questionnaire (SOCQ) prepared by Research and Development Center for Teacher Education (RDCTE) Staff, 1974 is used in the present study

The Stages of Concern Questionnaire (SoCQ) uses a Likert scale response format to measure seven hypothesized stages of concerns individuals have toward implementing change. The questionnaire contains 35 statements (five statements for each stage) that allow respondents to describe a concern they currently feel on a scale of 0 to 6. A response of 0 indicates a very low concern; a response of 6 indicates a very high concern. The SoCQ instrument is shown in Table 2 with the statements grouped by stages with the accompanying item number on the instrument as presented to respondents.

Detail of Dimensions and No. of Items of Stages of Concern Questionnaire

S.No.	Options	No. of Items
1.	Awareness	5
2.	Informational	5
3.	Personal	5
4.	Management	5
5.	Consequence	5
6.	Collaboration	5
7.	Refocusing	5
	Total	35

Scoring Procedure

Detail of Options in Stages of Concern Questionnaire

S.No.	Options	Points
1.	Irrelevant	0
2.	Not true of me now	1
3.	Somewhat true of me now	2,3,4,5
4.	Very true of me now	6,7

Statistical Techniques

To analyse and interpret the data both descriptive and inferential statistical techniques were used. The data collected was analysed and interpreted using mean, standard deviation and t-test.

DIMENSIONS	N	Mean	SD	t- Value
High Awareness Concern	150	26.53	3.49	25.642
Low Awareness Concern	150	9.40	7.40	
High Informational Concern	150	26.53	12.92	13.720
Low Informational Concern	150	9.85	7.40	
High Personal Concern	150	9.40	13.87	0.298
Low Personal Concern	150	9.85	12.92	
High Management Concern	150	24.34	15.98	9.95

Low Management Concern	150	9.56	9.82	
High Consequence Concern	150	25.62	15.79	10.10
Low Consequence Concern	150	9.21	10.82	
High Collaboration Concern	150	9.43	12.72	0.33
Low Collaboration Concern	150	9.76	11.82	
High Refocusing Concern	150	9.86	12.45	0.67
Low Refocusing Concern	150	9.15	11.98	

Findings of the study

1. There is significant difference in the use of technology of low awareness concerned teachers and high awareness concerned teachers for technology use. Use of technology of the teachers having low awareness concern is higher than the teachers having high low awareness concern for technology use.

2. There is significant difference in the use of technology of teachers, having low and high informational concern for technology use. Use of technology of the teachers having high Information concern is higher than the teachers having low information concern for technology use.

3. There is no significant difference in the use of technology of teachers, having low and high personal concern for technology use. They are making similar use of technology.

4. There is significant difference in the use of technology of more and less management concerned teachers for technology use. Use of technology by the teachers, having low management concern is higher than the teachers, having high management concern for technology use.

5. There is significant difference in the use of technology of the teachers, having low and high consequence concern for technology use. Use of technology by the teachers, having low consequence concern is higher than the teachers, having high consequence concern for technology use.

6. There exists no significant difference is the use of technology of the teachers, having low and high collaboration concern for technology use.

7. There exists no significant difference is the use of technology of the teachers, having low and high refocusing concern for technology use.

Educational Implications

It is evident from the results that the teachers having low awareness concern, high information concern, low management concern, low consequence concern are using more technology. It implies that additional motivational strategies should be created for teachers with high awareness concern, low information concern, high management concern, high consequence concern. They should be encouraged by giving them more opportunities and recognition.

Conclusion

Technology has entered all spheres of life and its tentacles has spread in the areas of education also. Education is becoming more effective with the usage of technology. One major reason for teachers of not using technology is the lack of awareness and knowledge in using technology. This paper analysis the stages of concern for technology uses of arts and college teachers and its educational implications.

References:

Cox, R. A. (1970). Article: "The process of Educational Technology: A tool for Development. In S.P.Ruhela (1999). **Essentials of Educational Technology***. New Delhi: Indian Publishers Distributers.*

Saglam, H. I. (2011). An Investigation on Teaching Materials Used in Social Studies Lesson

William, S. A. (2006). Stages of Concern of Teachers in North Carolina 4/4 Block Scheduled Public Schools. **Dissertation Abstracts International***, 67, (2), 453 A.*

Yan, B. (2007). Understanding Technology Adoption in Schools: A Social Approach. **Dissertation Abstracts International***, 67, (10), 3791 A.*