POST GRADUATE STUDENT'S PERCEPTIONS OF THE PEDAGOGICAL BENEFITS OF WEB 2.0 APPLICATIONS

By

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ABSTRACT

Most people believe that our schools and colleges are failing to teach kids and youngsters in the 21st century, skills they will need in order to succeed in the future (Rachna Rathore 2009). Even as the price of technology continues to drop, computers keep getting faster, and nearly all teens are exploring online social networking. Schools have not only fallen behind other countries, but administrators have fallen behind of their own students. Communication technology, particularly real-time and collaborative online communities, represents an enormous draw for teens. Doctors no longer use 19th century practices on their patients; likewise educators have a duty to incorporate modern technology into the classroom. The power to harness multimedia, Blogs, Forums, Chat Rooms and other Web 2.0 technology, safely, for educational pursuits, is now in our hands (Starkman, Neal 2007). The aim of the study is to find out the level of "PG Students Perceptions of the Pedagogical Benefits of Web 2.0 Applications". The investigator used a survey method for doing this research. The investigator used the self prepared questionnaire for collecting the data. The investigator has collected 240 samples in Thoothukudi District, Tamilnadu using random sampling technique. The investigator has used percentage analysis, t-test and chi-square test for analyzing the data. The findings of the study were that most of the PG students were not familiar with web 2.0 tools and have a positive perception towards the pedagogical benefits of web 2.0 applications. There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their Gender, course of study and locality of the institution.

Key words: Web 2.0, Blog, Wiki, RSS, Podcast etc.

INTRODUCTION

The World Wide Web and Internet technology in general, is constantly evolving. Growing from early roots as a relatively static network of hyperlinked documents, Web 2.0 refers to a perceived second-generation of Web-based technologies including online communities, wikis, forums, blogs and chat rooms – technology which combines to form the basis for online social networking (Lam, Paul, Mc Naught and Carmel 2007). Although the name, "Web 2.0" suggests that there is a newer version of the Internet, in truth, there is no specific Web 2.0 program or software. No upgrades are required, and you won't find system specifications for it. Web 2.0 is merely a commonly used marketing label for the rich interactivity that many online destinations now offer to their members (Dunaway, Michelle. 2011). Most of the technologies people think of when describing Web 2.0, such as live, real-time databases, content editors that allow instantaneous worldwide publishing and interactive communities with blogs, forums and chat rooms etc… have been available since the earliest days of the Web. The title for the study is "post Graduate Students Perceptions of the Pedagogical Benefits of Web 2.0 Applications"

Operational Definition of Key Terms

The investigator aims to give explanations for the terms used in the title of the study.

Perception

Perception presents individual feeling or against something. In other words the degree of feeling of favourableness or unfavourableness towards some objects, person, groups, and ideas is called perception.

Pedagogical Benefits

Pedagogy is the study on process of teaching. The term

generally refers to strategies of instruction, or a style of instruction. Pedagogy is also occasionally referred to as the correct use of instructive strategies. The researcher defined that pedagogical benefits are nothing but interaction, communication, collaboration, knowledge creation, flexibility and writing in the teaching and learning process.

Web 2.0 Technologies

This term states a renaissance for web resources and tools by containing collaboration and social interaction. Web 2.0 includes community learning and collaborative learning in a social process. There has been shift from a World Wide Web that is "read only (web 1.0)" to a Web that is being described as the "Read Write Web (web 2.0)."

Post Graduate Students

Those who are studying post graduate course in Arts and Science College in Tirunelveli Educational district.

Objectives of the Study

- To find out the level of student familiarity with web 2.0 tools, perception level of web 2.0 tools in educational uses and basic web 2.0 tools.
- To find out whether there is any significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their Gender.
- To find out whether there is any significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their course of study.
- To find out whether there is any significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their locality of the Institution.

Hypotheses of the Study

The hypotheses of the present study is formulated as follows

- There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their gender.
- There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their course of study.
- There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their locality of the institution.

Method Adopted in the Present Study

In the present study, the investigator has employed the 'survey method'. Survey method is a method for collecting and analyzing data, obtained from large number of respondents representing a specific population collected through highly structured and detailed questionnaire or other techniques (Best, J.W., 1983).

Population And Sample of the Study

In this study, all the students studying in Post Graduate at various colleges irrespective of the nature of management and other criteria but located in Thoothukudi District, Tamil Nadu have been taken as the population for the study. A good sample must be representative of the entire population for a study and 240 samples have been collected using random sampling technique in Thoothukudi District, Tamilnadu.

Instrument

As there is no suitable tool available for the present study, the investigator has constructed and validated a scale to measure Perceptions on the pedagogical benefits of web 2.0 applications of post graduate students'. In order to achieve the objectives of the study, the investigators used a self-prepared questionnaire in the name of Web 2.0 Perception Questionnaire (W2PQ). The investigator referred various books and Journals to have clarity of concept and in addition to their information he consulted some subject experts about the content for the development of the tool.

Reliability and Validity of the Tool

To find out the reliability of the tool, test and retest method was used. The reliability of the test has been calculated by using pearson's product-moment correlation coefficient formula. The value obtained was 0.89. The tool was given to one expert in the field of Education (Dr. R. Arumugarajan, Associate Professor, Dr. Sivanthi Aditanar College of Education, Tiruchendur) and one expert in the field of

Educational technology (Dr. I. Muthuchamy, Associate Professor, Department of Educational Technology, Bharathidasan University, Trichy). From the responses, suggestions and guidance, some of the items were modified. Thus content validity was established by experts' opinion.

Data Collection

In Thoothukudi District, a two hundred and forty post graduate students' perceptions were analysed through the prepared questionnaire about the pedagogical benefits of web 2.0 applications. Students' responses to the questionnaire were statistically analyzed according to gender, course of study and locality of the institution.

Data Analysis Procedures

In this study, quantitative research methods like's frequencies and t-test (Aggarwal, Y.R., 1986) were used in order to investigate the research problem that is effected on web 2.0 applications. Questionnaire as survey was designed to get the perception of post graduate students towards pedagogical benefits of web 2.0 applications.

Data Analysis and Presentation of Findings

The first question of the survey was "Students Familiarity with Web 2.0 tools". The purpose of this question was to determine which Web 2.0 application(s) are widely familiar with post graduate students. This could help to understand which tool(s) are most implicitly used within post graduate students. The respondents were able to select multiple answers. Table 1 depicts the results of this question.

The majority of respondents were very poorly familiar with web 2.0 tools like blog, wiki, social networking, social bookmarking, RSS and media sharing sites. This shows that web 2.0 tool is most implicitly used in Higher education purpose. But most of the students did not have web 2.0 tool awareness.

The second question had13 statements in which respondents had to select each of them using there scales: - Yes, No and do not know what is it. Table 2 depicts the results provided.

In Table 2 all the 13 statements are related to students' basic skills of web 2.0 tools. The result shows that, most of the post graduate students do not use the basic web 2.0 tools. It means that most of the PG students are not aware of and do not utilize the web 2.0 tools.

The third question was "Students' benefits of web 2.0 Tools". The purpose of this question was to obtain a way of benefit of web 2.0 tools among the postgraduate students. The respondents were able to select multiple answers. Table 3 depicts the results of this question.

S. No.	Statements	Yes		No		Do not know what is it	
		F	%	F	%	F	%
1	Do you have your own blog?	15	6.2	195	81.2	30	12.5
2	Have you visited others' blogs?	15	6.2	195	81.2	30	12.5
3	Do you use RSS?	13	1.2	137	57.0	100	41.4
4	Do you search information on Wiki?	13	1.2	198	82.5	29	12.0
5	Do you express your opinions on Wiki?	13	1.2	198	82.5	29	12.0
6	Do you use P2P software?	18	7.5	204	85	18	7.5
7	Do you use ICQ, MSN or other instant messengers?	18	7.5	204	85	18	7.5
8	Have you ever visited social network sites, such as Facebook?	18	7.5	204	85	18	7.5
9	Have you ever visited photo-sharing websites, such as Yahoo Album, Flickr?	18	7.5	204	85	18	7.5
10	Have you ever set your own album on photosharing websites?	9	3.7	139	57.9	92	38.3
11	Have you ever posted your opinion when reading news online?	9	3.7	139	57.9	92	38.3
12	Have you ever watch videos on YouTube or other video-sharing websites?	9	3.7	139	57.9	92	38.3
13	Have you ever uploaded videos on YouTube or other video-sharing websites?	9	3.7	139	57.9	92	38.3

Table 2. Students' basic skills of web 2.0 tools

Response Options	Very familiar		Familiar		Some What Familiar		Unfamiliar		Very Unfamiliar		Don't know at all	
	F	%	F	%	F	%	F	%	F	%	F	%
Blog	15	6.3	23	9.6	50	20.8	42	17.5	90	37.5	30	12.5
Wiki	13	5.4	19	7.9	40	16.6	41	17.0	98	40.8	29	12.0
Social Networking	18	7.5	15	6.3	43	17.9	59	24.5	87	36.25	18	7.5
Social Bookmarking	4	1.6	5	2.0	13	5.4	50	20.8	80	33.3	98	40.8
RSS	3	1.2	5	2.0	14	5.8	40	16.6	78	32.5	100	41.6
Podcasts	4	1.6	2	0.8	16	6.6	20	0.8	80	33.3	118	49.1
Media Sharing Sites	9	3.7	5	2.0	18	7.5	44	18.3	72	30	92	38.3

Table 1. Students' Familiarity With Web 2.0 Tools

Table 3 shows that the most of the post graduate students had to know the benefits of web 2.0 applications. Nearly 15% of respondents were of opinion that it increased student faculty interaction, increased student to student interaction, improved students writing and is easy to integrate in the way of benefits of web 2.0 tools.

Hypotheses Testing

Null Hypothesis - 1

There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their gender.

Table 4 shows that the computed 't' value 0.05 is less than the table value 1.97 at 0.05 level and hence it is not significant. Consequently, the null hypothesis is to be accepted. And it can be said that there is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their gender.

Null Hypothesis - 2

There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their course of study.

Table 5 shows that the computed 't' value 1.37 is less than the table value 1.97 at 0.05 level and hence it is not significant. Consequently, the null hypothesis is to be accepted. And it can be said that there is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their course of study.

Null Hypothesis - 3

There is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their locality of the institution.

Table 6 shows that the computed 't' value 1.18 is less than the table value 1.97 at 0.05 level and hence it is not significant. Consequently, the null hypothesis is to be accepted. And it can be said that there is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their locality of the institution.

Interpretations

According to the 't' Test Results

Gender

The 't' test result shows that, there is no significant difference in the mean scores of perceptions towards pedagogical benefits of web 2.0 applications among the postgraduate students with respect to their gender. This may be due to their curiosity to know the innovative and new things and

Gender	N	Mean	Std	df	't' value	Remarks at 5% level
Male	87	29.41	6.99	238	0.05	NS
Female	153	29.36	5.70			

(At 5% level of significance, the table value of 't' is 1.97)

Table 4. Difference between the mean scores of PG Students in their Perception towards pedagogical benefits of web 2.0 applications with respect to gender

Response Options	Improve Student learning		Increase student faculty interaction		Increase student - student interaction		Improve students writing		Easy to integrate	
	F	%	F	%	F	%	F	%	F	%
Blog	48	20	55	22.9	45	18.7	38	15.8	54	22.5
Wiki	38	15.8	54	22.4	48	20	55	22.9	45	18.7
Social Networking	45	18.7	48	20	53	22	40	16.6	54	22.5
Social Bookmarking	40	16.6	54	22.4	48	20	53	22.0	45	18.7
RSS	55	22.9	48	20	54	22.5	45	18.7	38	15.8
Podcasts	48	20	53	22.0	40	16.6	54	22.5	45	18.7
Media Sharing Sites	54	22.5	55	22.4	48	20	36	15	47	19.5

Table 3. Students' benefits of Web 2.0 Tools

their environments and also their keen watch about the update and day-to-day information of new fashion of all the male and female post graduate students.

Course of Study

The 't' test result shows that, there is no significant difference between arts and science post graduate students in their perception towards the pedagogical benefits of web 2.0 applications. This may be due to the fact that, basically technology is neither a science nor arts. Both arts and science students got some work on experience in using computer in their school life. Both arts and Science students would have the opportunity to get the awareness of technological instruments. They have ample opportunity to interact with the society through technology. This develops in them reliable and systematic outlook in their life.

Locality of the College

The 't' test revels that there is no significant difference between rural and urban area post graduate college students in their perceptions towards pedagogical benefits of web 2.0 applications. It may be due to the fact, that all the Post Graduate Arts and Science College have well equipped technological laboratory and other infrastructure. All PG students have one computer paper for their syllabus. So there is an opportunity to learn entire technological instruments.

Comments and Recommendations

The goal of this study was to assess Post graduate student's perception of the pedagogical benefits of Web 2.0 to supplement in-class learning. While the initial results related to students' perception of pedagogical benefits of Web 2.0 applications were encouraging at times, they also lead to new questions and concerns. The results of this study provide a foundation for future research examining more specific factors that promote and inhibit faculty/student use of Web 2.0 applications, as well as methods of fostering support for faculty/ student use of Web 2.0 applications. Based on the findings of this study, as well as the disparity of empirical studies related to the use of Web 2.0 in higher education, the following are suggestions for future research.

Course of study	N	Mean	Std	df	't' value	Remarks at 5% level
M.A.	110	29.87	7.84	238	1.37	NS
M.SC.,	130	30.96	5.43			

(At 5% level of significance, the table value of 't' is 1.97)

Table 5. Difference between the mean scores of PG Students in their Perception towards pedagogical benefits of web 2.0 applications with respect to course of study

Locality of the Institution	N	Mean	Std	df	't' value	Remarks at 5% level
Rural	98	30.33	5.74	238	1.18	NS
Urban	142	31.03	6.13			

(At 5% level of significance, the table value of 't' is 1.97)

Table 6. Difference between the mean scores of PG Students in their Perception towards pedagogical benefits of web 2.0 applications with respect to their locality of the institution

Future studies could control for the type of Web 2.0 application and examine differences in their impact on the learning environment and student achievement. The use of Web 2.0 technologies offer many powerful information sharing and collaboration opportunities for learners and learning. In this study factors that influence faculty perceptions of several Web 2.0 applications in teaching and learning, as well as actual use of these Web 2.0 technologies, were explored. Future research is still necessary in order to identify the most effective methods of utilizing Web 2.0 technologies to improve teaching and learning productivity; and to better support active, social, and engaging learning environments. For similar results, further studies can be conducted in professional college students, like teaching profession and engineering profession etc. The present study is limited to Educational District of Thoothukudi only. This can be conducted within a wider geographical area. This study may be extended to a large sample taking some more variables. Owing to the constraint of time and money only few variables and few colleges could be included for this study.

Conclusion

Web 2.0 has the potential to bridge gaps between rich and poor, black and white, women and men, but without knowledge and application of this knowledge, Web 2.0 can further gouge the gap of the digital divide - with the wealthy having unlimited access to communication and the poor being further isolated from the rest of the world (Bassoppo-Moyo, Temba. C. 2006). Educators must attempt to link the globalized online world into their classrooms, as this is the world of the future. New

technology should be introduced to students who have or do not have access at home, and they should be shown that there is more to learning than the old chalk and talk method. The author believes that our schools are attempting to add technology into the curriculums, but the limitation is money and availability to technology (Aharony, Noa. 2011). Thus, the digital divide continues. The more competent today's students are with internet resources, the more likely they will be successful citizens of the world. Educators hold immense power to make positive change happen through globalization, by mobilizing students to connect with others around the world (Littlejohn, Allison., et al. 2009).

Teaching methodology will shift from teacher-centered education to learner-centered education (Morice, Jenny 2002). Teacher's dominance will be replaced by the knowledge dominance. So students now learn through computer teacher, television teacher and internet teacher. In future, another teacher who applies these technologies in the classrooms will replace a teacher who does not apply these technologies (Keegan and Desmond 2002). The investigation and its findings will help educational experts, thinkers, teachers and all those who are interested in the field of education to focus their attention on the present problems. This findings and results are not the end of the problem, but just a beginning of the search for innovation. By applying these results, the quality of teaching learning process will improve.

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