Avinasi Gounder Mariammal College of Education
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EDITORIAL

International Journal of Pedagogical Studies (IJPS) is an international journal that publishes high quality of articles and research papers in English in all areas of Education. The journal aims to provide platform for the Research Aspirants, academicians, Professional Practioners, Scholars and Students to impart and share knowledge in the form of high quality theoretical and empirical original research papers in the field of education. The journal welcomes the submission of manuscript that meet the general criteria of significance and academic excellent papers and it will be published every year after acceptance. IJPS will publish original research articles pertaining to the education related work.

Chief-Editor

Prof. A. Sivakumar

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Research Paper

1 TEACHER'S PERCEPTION ON ICT SUPPORT SERVICES PROVIDED BY COLLEGE MANAGEMENT

Abstract

Information and communication technology is a force that has changed many aspects of human lives. Teacher training and professional development is seen as the driving force for the successful usage of information and communication technologies in education. An exposure to information and communication technologies can be an important motivation tool to promote and enable teacher professional development. The present study attempts to find out to how the teaching faculties perceive ICT support system provided by the college management. A sample of 695 college teachers working in 24 Arts and Science colleges affiliated to Bharathiar University, Coimbatore were participated in this study. Differential factorial analysis was used to analysis this data. The study reveals that greater effort being taken by the college management in the ICT support to make the teachers more resourceful.

Keywords: *Teacher's Perception, Information and Communication Technology and Professional Development*

Introduction

Information and communication technologies have become common place entities in all aspects of life. Across the past twenty years, the use of information and communication technologies has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and governance. Within education, information and communication technology has begun to have a presence but the impact has not been as extensive as in other fields. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of information and communication technologies in education lends itself to more student-centered learning settings and often this creates some tensions for some teachers and students. But with the world moving rapidly into digital media and information, the role of information and communication technologies in education is becoming more and more important and this importance will continue to grow and develop in the 21st century.

Rapid changes in technology will ensure that information and communication technology will proliferate in the classroom. It is predicted that there will be many benefits for both the learner and the teacher, including promotion of shared working space and resources, better access to information, promotion of collaborative learning and radical new ways of teaching and learning. Information and communication technology will also require a modification of the role

Preparing teachers to benefit from information and communication technology use is about more than just technical skills. Teacher technical mastery of information and communication technology skills is a not a sufficient precondition for successful integration of information and communication technologies in teaching. Teachers require extensive, on-going exposure to information and communication technologies to be able to evaluate and select the most appropriate resources. However, the development of appropriate pedagogical practices is seen as more important that technical mastery of information and communication technologies. Only a few teachers typically have a comprehensive knowledge of the wide range of information and communication technology tools and resources.

In today's world teachers need to be equipped not only with subject-specific expertise and effective teaching methodologies, but with the

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capacity to assist students to meet the demands of the emerging knowledge-based society. Teachers therefore require familiarity with new forms of information and communication technology and need to have the ability to use that technology to enhance the quality of teaching and learning. In this regard, the management has to play a significant role in supporting and enhancing ICT services for the benefit of teachers and students.

With the advent of new technologies, majority of the employees in higher education institutions have started to learn and use them. Still there are number of people in the higher education institutions who do not use information and communication technology due to various reasons such as, some simply resist the usage of technologies without any specific reason, some do not have trust about potential of technologies, some feel that use of technologies will make them redundant and so on. The higher education institutions must adopt a policy to train and motivate the teachers to use technologies for their own and institutional benefit. The institutions must organize workshops, seminars, and hands on activities on regular intervals to train their staff. They can assign students as personal counselors and the trainers to motivate and train the staff for the use of information and communication technology (Pradeep, 2012). Wheeler and Steve (2001) explored the effects of ICT on teaching and learning, the changing role of the teachers in constructivist learning environment and new skills may be expected to acquire in order to make fruitful use of new technologies. Larbi-Apau (2011) found high and positive computer attitude with affective dominating usefulness, behavior and control factors among teaching faculties in three public universities in Ghana.

The present study examines the extent to which the college management provides modern information and communication technology support services for the benefit of teachers.

Methodology

Sample of the Study

In the present study, 695 teachers from 24 Arts and Science colleges affiliated to Bharathiar University formed the sample of the study. The stratification was done on the basis of sex, type of college and geographical location of the college.

Tool

In the present study, the following research tools were used for data collection:

1. Human Resource Management Scale (HRMS) constructed and validated by the researcher. Information and Communication Technology subscale was used in this study. The correlation coefficient was computed to be 0.812. The calculated value 0.812 shows the high reliability of the Human Resource Management Scale. The intrinsic validity measure calculated for Human Resource Management Scale was found to be 0.901. This shows the validity of the tool.

2. Personal Data Sheet

Results

In the differential analysis, mean and standard deviation were calculated and the data were interpreted by using relevant statistical techniques. In order to find out the significance of difference between two samples 't' test was applied.

Table - 1: Significance of difference between Male and Female Teachers in their perception regarding ICT Support Function of Human Resource Management

Gender	M	SD	N	't'
Male	53.84	14.01	249	
Female	59.58	12.78	446	5.48*

**Significant at 0.01 level*

The male and female teachers differ in their perception regarding the ICT support function of human resource management. From the table, the female teachers have more positive perception regarding ICT support function when compared with their counterparts.

Table - 2: **Significance of difference between Teachers Above 20 years of Teaching Experience and Below 20 years of Teaching Experience regarding ICT Support Function of Human Resource Management.**

Experience	M	SD	N	't'
Above 20 years	50.96	14.10	98	5.28*
Below 20 years	58.60	13.11	597	

**Significant at 0.01 level*

There exists significant difference in the perception of teachers above 20 years of teaching experience and below 20 years of teaching experience regarding ICT support function of human resource management. It is found that the teachers below 20 years of teaching experience show more positive sign of perception regarding ICT support practice when compared with the teachers above 20 years of teaching experience. It is concluded that teaching experience of teachers is one of the factors in influencing their perception related to ICT support practice of human resource management.

Table - 3: **Significance of difference between Teachers Below 30 years of Age and Above 30 years of age in their perception regarding ICT Support Function of Human Resource Management.**

Age	M	SD	N	't'
Below 30 years	56.4887	14.29202	354	2.071**
Above 30 years	58.6070	12.58119	341	

**Significant at 0.05 level*

There exists significant variation between the teachers below 30 years of age and above 30 years of age in their perception related to ICT support practice of human resource management. From the table, it is inferred that the teachers above 30 years of age have more positive perception in the managerial role of their authorities related to ICT support function of human resource management than the teachers below 30 years of age. It is concluded that age of the teachers is one of the factors in influencing their perception related to ICT support function of human resource management.

Table - 4: **Significance of difference between Teachers working in Co-Education and Women's Colleges in their perception regarding ICT Support Function of Human Resource Management**

Gender of College	M	SD	N	't' Value
Co-Education	56.11	13.30	541	5.26*
Women	62.48	13.09	154	

**Significant at 0.01 level*

The two categories of teachers differ in their perception regarding ICT support function. It is observed from the table that the teachers working in women's colleges show more positive perception about ICT function comparing the teachers working in co-education colleges. It is concluded that the college category of teachers exerts considerable influence on their perception regarding ICT support function of human resource management.

Conclusion

The descriptive analysis indicates the greater support given by the management to the teachers for applying Information and Communication Technology in the teaching and learning process. In the present study, the management of the colleges, to a greater extent, provides modern information and communication technology for the benefit of the teachers.

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Research Paper

2 ANALYTICAL STUDY ON PERCEPTION ABOUT PHARMACEUTICAL CHEMISTRY OF HIGHER SECONDARY SCHOOL STUDENTS IN CHEMISTRY

Abstract

The objectives of the present study to measures some factors influencing the perception of higher secondary chemistry students about pharmaceutical chemistry. So the investigator has decided to undertake an investigation on 'perception about pharmaceutical chemistry of higher secondary school students in chemistry in tiruchirappalli. A sample contain 300 students who are studying in various schools were selected. The researcher used the tool is 'perception about pharmaceutical chemistry' for the study is normative survey method. Based on the attempts made by the investigator concluded that, the female students are having more perception than the male students and the rural students are having more perception than the urban students about pharmaceutical chemistry at higher secondary level. And the students are studying in non co-education school has more perception than the students are studying in co-education school and science group students has more perception than the mathematics group students about pharmaceutical chemistry at higher secondary level. And the government and private school students are at the same level in their perception about pharmaceutical chemistry.

Keywords: *Analytical, Perception, Pharmaceutical Chemistry and Higher Secondary School Students.*

Introduction

With the development of modern civilization, people in the world got difficulties from all directions. Particularly various diseases infected the human race as well as animals and vegetables kingdom. To overcome and live safe life we should have a sound knowledge on pharmaceutical chemistry. And the world of tomorrow will make still greater demands on person to be "well educated" in the manifold society of today and as such he or she should have some degree of pharmaceutical literacy.

From the origin living beings, accorded with diseases, so the therapeutically tries started at once. Though pharmaceutical chemistry has been with us for more than 5000 years, the subject has never been made popularly as it is today.

The pace of pharmaceutical chemistry discovery and invention has accelerated amazingly during the last few decades. It has been said that chemical medicines is the only branch of natural products in which theories of four thousand years old such as siddha.

Pharmaceutical Chemistry

In pharmaceutical chemistry chemotherapy is the science in which chemicals are used for the treatment of diseases. It has developed in to a vast subject today and efforts are being continuously made to search new drugs for cancer, hypertension and mental illness among others. Almost every one of us taken as a aspirin tablet. Although aspirin is a product of chemical industry today, our forefathers used the bark of the willow tree as an analgesic with good reason too, as the bark contains, among other chemical derivatives of 2 hydroxyl acid, which is also active ingredient in the breakdown of aspirin in the body.

Similarly, the plant Rauwolfia serpentina is used in Ayurveda to treat hypertension (high blood pressure). One of the first drugs used in modern medicine to hypertension was the chemical

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reserpine isolated from the same plant. While nature showed the way for the development of many drugs, others were obtained after intensive research in the laboratory.

Significance of the Study

One of the triumphs of modern medicine is the successful eradication and control of many diseases, which until recently, were scourges. The role played by chemicals in this venture can hardly be over emphasized. DDT and chloroquine in the eradication of malaria, broad spectrum antibiotics like penicillin and cholramphenical have all been significant advances. Chemicals used in chemotherapy in pharmaceutical chemistry are frequently classified according to their action. Thus analgesics relieve pain, antipyretics reduce temperature, anti-inflammatory control inflammation and antibiotics kill bacteria and other micro-organisms. Other chemicals are used us supplements as they may not be adequately available in the human diet.

Statement of the Problem

The aim of the present study to measures some factors influencing the perception of higher secondary chemistry students about pharmaceutical chemistry. So the investigator has decided to undertake an investigation on 'perception about pharmaceutical chemistry of higher secondary school students in chemistry in tiruchirappalli.

Objectives

1. To find out if there is any significance difference in perception about pharmaceutical chemistry between boys and girls students are studying in the higher secondary school.
2. To find out if there is any significance difference in perception about pharmaceutical chemistry between urban and rural students are studying in the higher secondary school.
3. To find out if there is any significance difference in perception about pharmaceutical chemistry between students are studying in government and private higher secondary school.
4. To find out if there is any significance difference in perception about pharmaceutical chemistry between students are studying in co-education and non co-education higher secondary school.
5. To find out if there is any significance difference in perception about pharmaceutical chemistry between the higher secondary school students are studying in science and mathematics groups.

Hypotheses

1. There is no significance difference in perception about pharmaceutical chemistry between boys and girls students are studying in the higher secondary school.
2. There is no significance difference in perception about pharmaceutical chemistry between urban and rural students are studying in the higher secondary school.
3. There is no significance difference in perception about pharmaceutical chemistry between students are studying in government and private higher secondary school.
4. There is no significance difference in perception about pharmaceutical chemistry between students are studying in co-education and non co-education higher secondary school.
5. There is no significance difference in perception about pharmaceutical chemistry between the higher secondary school students are studying in science and mathematics groups.

Methodology

Sampling

In the present study is based on normative survey method. A sample contain 300 students who are studying in various schools were selected. The higher secondary second year students were from government higher secondary co-education school, government boys higher secondary school, government girls higher secondary school and aided school. The above schools were also classified into rural and urban wise.

Tool

The researcher used the tool is 'perception about pharmaceutical chemistry' for the present study. The tool consists of true or false statements for 50 marks were constructed (from plus two chemistry book) to test the perception of pharmaceutical chemistry of higher secondary

students. Each statement of the questionnaire is to be scored zero and one in the tool perception if the students tick the correct response one mark given otherwise zero.

Collection of Data

The investigator requested the concerned school chemistry teacher to conduct the test to know the perception in pharmaceutical chemistry area with school headmaster permission and also the data collection conducted to the students. Perception test is in the type of statements which should be answered as whether true or false nearby to tick. From the answered sheets each students score is calculated.

Statistical techniques

Master data was prepared from the scoring sheets with the student schools data as entered in it. From the master data received descriptive statistics were used to describe the sample with reference the variable taken for the study. Generally two kinds of statistical techniques are used in analyzing the data mean and standard deviation. In the differential analysis the significance of difference between two groups was studied using t test.

Analysis and Interpretation of Data

Based on the research problem and its objectives the following hypotheses are verified through the data analysis and interpretation.

Table - 1: Showing the Mean, Standard Deviation and 't' value of Boys and Girls Students

S.No	Gender	N	Mean	S.D	Level of significance
1.	Boys	156	40.04	5.19	4.17
2.	Girls	144	42.40	4.34	Significant at 0.01 level

The above table 1 shows that the calculated t value 4.17 with degrees of freedom 298 is greater than the table value of t (2.59) at 0.01 level of significant. Hence it is concluded that there is a significance difference in perception about pharmaceutical chemistry between boys and girls students are studying in the higher secondary school. Due to the fact that, the girl students having more favorable perception on pharmaceutical chemistry than boys.

Table - 2: Showing the Mean, Standard Deviation and 't' value of Urban and Rural Students

S.No	Residence	N	Mean	S.D	Level of significance
1.	Urban	177	38.45	5.12	7.74
2.	Rural	123	42.39	4.69	Significant at 0.01 level

The above table 2 shows that the calculated t value 7.74 with degrees of freedom 298 is greater than the table value of t (2.59) at 0.01 level of significant. Hence it is concluded that there is a significance difference in perception about pharmaceutical chemistry between urban and rural students are studying in the higher secondary school. Due to the fact that the rural students having more favorable perception on pharmaceutical chemistry than urban students.

Table - 3: Showing the Mean, Standard Deviation and 't' value of Government and Private School Students

S.No	Type of school	N	Mean	S.D	Level of significance
1.	Government	271	41.19	4.69	0.25
2.	Private	29	41.07	1.74	Not Significant

The above table 3 shows that the calculated t value 0.25 with degrees of freedom 298 is less than the table value of t at 0.05 level of significant. Hence it is concluded that there is no significance difference in perception about pharmaceutical chemistry between government and private students are studying in the higher secondary school. Due to the fact that they do not differ significantly between the students are studying in government and private higher secondary school.

Table - 4: Showing the Mean, Standard Deviation and 't' value of Co-education and non co-education students

S.No	Nature of school	N	Mean	S.D	Level of significance
1.	Co-education	123	30.60	4.69	10.49
2.	Non co-education	177	38.57	5.14	Significant at 0.01 level

The above table 4 shows that the calculated t value 10.49 with degrees of freedom 298 is greater than the table value of t (2.59) at 0.01 level of significant. Hence it is concluded that there is a significance difference in perception about pharmaceutical chemistry between students are studying in co-education and non co-education higher secondary school. Due to the fact that, the students of co-education system has more perception than the students of non co-education system about pharmaceutical chemistry at higher secondary level.

Table - 5: Showing the Mean, Standard Deviation and 't' value of Mathematics and Science Group Students

S.No	Subject group	N	Mean	S.D	Level of significance
1.	Mathematics	180	40.92	5.81	3.34
2.	Science	120	42.76	3.70	Significant at 0.01 level

The above table 5 shows that the calculated t value 3.34 with degrees of freedom 298 is greater than the table value of t (2.59) at 0.01 level of significant. Hence it is concluded that there is a significance difference in perception about pharmaceutical chemistry between the higher secondary school students are studying in science and mathematics groups. Due to the fact that, the students of mathematics group has more perception than the science group students about pharmaceutical chemistry at higher secondary level.

Findings

- ✓ The t test result reveals that, there is a significance difference in perception about pharmaceutical chemistry between boys and girls students are studying in the higher secondary school. While comparing the mean scores of boys (40.04) and girls students (42.40), it is concluded that, girls has more perception than the boy students about pharmaceutical chemistry at higher secondary level.
- ✓ The t test result reveals that, there is a significance difference in perception about pharmaceutical chemistry between urban and rural students are studying in the higher secondary school. While comparing the mean scores of urban students (38.45) and rural students (42.39), it is concluded that, the rural students has more perception than the urban students about pharmaceutical chemistry at higher secondary level.
- ✓ The t test result reveals that, there is a significance difference in perception about pharmaceutical chemistry between students studying in co-education and non co-education higher secondary school. While comparing the mean scores of co-education school students (30.60) and non co-education school students (38.57), it is concluded that, the students are studying in non co-education school has more perception than the students are studying in co-education school about pharmaceutical chemistry at higher secondary level.
- ✓ The t test result reveals that, there is a significance difference in perception about pharmaceutical chemistry between the higher secondary school students are studying in science and mathematics groups. While comparing the mean scores the students are studying in mathematics group (40.92) and the students are studying in science group (42.76), it is concluded that, the students are studying in science group has more perception than the students are studying in mathematics group about pharmaceutical chemistry at higher secondary level.
- ✓ The t test result reveals that, there is no significance difference in perception about

pharmaceutical chemistry between government and private students are studying in the higher secondary school. Due to the fact that they do not differ significantly between the students are studying in government and private higher secondary school. So the government and private school students are at the same level in their perception about pharmaceutical chemistry.

Discussion

Based on the findings the investigator concluded that, the female students are having more perception than the male students about pharmaceutical chemistry at higher secondary level. This may due to the fact that, the female students are concentrate and spend more time in their studies when compared to their counterparts.
The rural students are having more perception than the urban students about pharmaceutical chemistry at higher secondary level. This may due to the fact that, the rural students having more knowledge of science and aware about pharmaceutical chemistry when compared to the urban students.

The students are studying in non co-education school has more perception than the students are studying in co-education school about pharmaceutical chemistry at higher secondary level. This may due to the fact that, the students are studying in non co-education who free in their group discussion, outspoken, extravert, and mingled with one another when compared to the students are studying in co-education school.

The students are studying in science group has more perception than the students are studying in mathematics group about pharmaceutical chemistry at higher secondary level. This may due to the fact that, most of the mathematics group students are less concentrate and interest in chemistry than science group students.

Conclusion

Based on the attempts made by the investigator concluded that, the female students are having more perception than the male students and the rural students are having more perception than the urban students about pharmaceutical chemistry at higher secondary level. And the students are studying in non co-education school has more perception than the students are studying in co-education school and science group students has more perception than the mathematics group students about pharmaceutical chemistry at higher secondary level. And the government and private school students are at the same level in their perception about pharmaceutical chemistry.

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Research Paper

3 EFFECTIVENESS OF E-LEARNING IN TRIGONOMETRY

Abstract

The study enhances the effectiveness of Electronic Learning (E-learning) in learning Trigonometry at Xth standard level. Single Group Experimental Design was adopted for the study. Twenty Xth standard students were selected (10 students from Government school and 10 students from Matriculation school) as sample using convenience sampling technique. The hypotheses of the study are, 1. There is significant difference between pre-test and post-test in learning Trigonometry of the selected group of students, 2. There is a significant difference between male and female students in learning Trigonometry by using E-Materials, and 3. There is significant difference between government and matriculation schools students in learning Trigonometry by using E-Materials. Achievement test was prepared as tool in the area of Trigonometry from X standard syllabus for both pre-test and post-test. Mean, Standard Deviation, and t-test were used to analyze the data collected from the sample. The finding of the study is, E-learning enhances scores of the Xth standard students in Trigonometry.

Keywords*: E- Learning, Trigonometry and Enhance.*

Introduction

E-learning exploits interaction technologies and communicative systems to improve the learning experience of the students. It has the potential to transform the way of teaching and learning across the world. It can raise standards and widen the lifelong learning. It cannot replace teachers and lecturers, but alongside with the existing teaching methods, it enhances the quality of teaching and reduces the time spent on administration. Trigonometry is a branch of Mathematics that studies relationship involving length and angles of triangles. Trigonometry is good at finding missing sides and angles. The study shows that, the effectiveness of E-learning in Trigonometry.

Related Studies

Kristof De Witte et al. (2014) study the effectiveness of a computer assisted math learning program. It was observed that the instrumented for the participation in the CAI-tool, making more exercises lead to higher test scores.

Roschelle, et al. (2010) focus in an experimental design on a software tool that was developed with the purpose of enabling a large group of pupils to learn more advanced mathematical concepts and skills in Texas. They identified a positive significant impact of the use of the program on pupils mathematics achievements. Roschelle et al.

conclude that the CAI-tool is an effective tool to enhance pupil knowledge of more advanced mathematics.

Need for the Study

Trigonometry is a part of Mathematics at Xth standard level in the schools of Tamilnadu. It is an important concept to score marks in Xth standard public examinations. Since it includes functions, graphs, identities and graphs, the students are suffering to score the marks in Trigonometry. The students could not understand and solve the word problems given in the book prescribed by Tamilnadu Government. To make them to understand the concept of Trigonometry, the teachers have to take them to real situations and have to explain the concept. But, practically it is not possible to explain each concept of Trigonometry with real time examples. For this purpose, the researcher made an attempt to use E-

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Learning materials such as concept videos and self testing to enhance the understanding of the concepts in Trigonometry.

Objectives

The following objectives were framed for the study.

- To find out the significant difference between pre-test and post-test in learning Trigonometry of the selected group of students.
- To find out the significant difference between male and female students in learning Trigonometry by E- Learning
- To find out the significant difference between government and matriculation schools students by E- Learning.

Hypotheses

The following Hypotheses were framed for the study

- There is a significant difference between pre-test and post-test in learning Trigonometry of the selected group of students.
- There is a significant difference between male and female students in learning Trigonometry by using E-Materials.
- There is a significant difference between government and matriculation schools students in learning Trigonometry by using E-Materials.

Method

Single Group Experimental Design was adopted for the study.

Population

The students studying at Xth standard in Vadavalli, Coimbatore are the population of the study.

Sample

Twenty students were selected as sample for the study. Among the twenty samples, ten government school students were selected and ten matriculation school students were selected at Vadavalli by Convenience Sampling Technique. The researcher chose Convenience sampling technique for the easiest access of the sample. The cost and time to select the sample are very less in Convenience sampling technique.

Tool

An Achievement test that contains 10 one marks, 10 two marks, and 4 five marks questions was prepared from the concept of Trigonometry from Xth standard book prescribed by Tamilnadu Government. The same tool was adopted for both Pre-test and Post-test.

Procedure

Since the researcher used convenience sampling techniques, the sample selected for the study were drawn from in and around the residential area of the researcher. All the twenty samples were given pretest on Trigonometry. After taking pretest, the samples were given E-Learning material on Trigonometry and they were given proper instruction how to use those materials. After one week gap, the samples were given posttest on Trigonometry with the same achievement test given for pretest. The scores, collected from pretest and posttest were taken for the testing of hypotheses.

Statistics

Mean (M), Standard Deviation (SD), and t-test were used to analyse the data and to test the hypotheses of the study.

Data analysis

Null Hypothesis H_O: 1

Table - 1: Mean, Standard Deviation and 't' value of pre-test and post-test in learning Trigonometry

Concept	Test	N	M	SD	df	t-value	Sig.
Trigonometry	Pre-test	20	19.30	4.305	19	6.076	P<0.01
	Post-test	20	24.55	5.381			

The above table 1 shows that the calculated t-value 6.076 is greater than the tabulated t-value 2.861 for df 19. There is a significant difference between pre-test and post-test scores of the students in Trigonometry. Hence, the null hypothesis is rejected at 0.01 level of significance. It is also observed from the table that the mean value of post-test 24.55 is greater than the mean value of pre-test 19.300. Learning through E-Learning materials enhances the scores of the students in trigonometry than through conventional methods.

Null Hypothesis H_O: 2

Table - 2: Mean, Standard Deviation and 't' value of Male and Female students in learning Trigonometry

Concept	Gender	N	M	SD	df	t-value	Sig.
Trigonometry	Male	11	24.09	6.33	18	0.405	P>0.01
	Female	9	25.11	4.53			

The above table 2 shows that the calculated t-value 0.405 is less than the tabulated t-value 2.878 for df 18. There is no significant difference between male and female students in learning Trigonometry byE- Learning. Hence, the null hypothesis is accepted at 0.01 level of significance. It is also observed from the table that the mean value of female students is 25.11, which is greater than the mean value of male students is 24.09. Female students' performance in learning Trigonometry is slightly greater than the Male students' performance in learning Trigonometry by E-Learning.

Null Hypothesis H_O: 3

Table - 3: Mean, Standard Deviation and 't' value of Government and Matriculation School students in learning Trigonometry

Concept	School	N	M	SD	df	t-value	Sig.
Trigonometry	Government	10	22.10	3.66	18	2.189	P>0.01
	Matriculation	10	27.00	6.05			

The above table 3 shows that the calculated t-value 2.189 is less than the tabulated t-value 2.878 for df 18. There is no significant difference between government and matriculation school students in learning Trigonometry by E-Learning. Hence, the null hypothesis is accepted at 0.01 level of significance. It is also observed from the table that the mean value of matriculation school students is 27.00, which is greater than the mean value of government school students is 22.10. Matriculation school students' performance in learning Trigonometry is greater than the government school students' performance in learning Trigonometry by E-Learning.

Findings

The following are the main findings of the study

1. There is a significant difference between pre-test and post-test in learning Trigonometry of the selected group of students.
2. There is no significant difference between male and female students in learning Trigonometry by E-Learning.
3. There is no significant difference between government and matriculation schools students in learning Trigonometry by E-Learning.

Conclusion

The present study reveals that E-Learning enhances the students' scores in Trigonometry and there are no gender and school differences in learning Trigonometry through E-Learning. The schools are pleased to introduce E-Learning to provide good quality education to the students. Students are advised to make use of these E-Learning resources to gain better understanding of the subjects of study.

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Research Paper

4 A STUDY ON WATER POLLUTION AWARENESS OF HIGHER SECONDARY STUDENTS AT ERODE DISTRICT

Abstract

Water pollution means alteration in physical, chemical and biological characteristics of water which may cause harmful effects on human and aquatic life. The main objective of the study is to find out difference in the awareness in water pollution with respect to gender, Locality and type of school. Higher Secondary school students in Erode District were the population and the investigator used the purposive sampling technique to select 2197 samples. The Environmental Pollution Awareness Inventory was the tool used in the study.. The major findings of the study were Water pollution awareness of Male and Female students are same. Water pollution awareness of Rural and Urban Students are same. Water pollution awareness of Government and Private school students differs. It is concluded that water pollution awareness should be enriched among school through various activities.

Keywords: *Water pollution, Awareness and Harmful Effects.*

Introduction

The role of education is understanding protecting and solving problems related to environment which has been realized all over the world. Education for environment might succeed if it is deliberately directed towards children. Realizing on education it is emphasized that, there is a paramount need to create a consciousness of the environment. It must permit all ages of sections of the society beginning with child. Besides air pollution, land pollution, noise pollution the investigator investigates about water pollution.

Water Pollution

Water covers over 70% of the Earth's surface and is a very important resource for people and the environment. Water pollution affects drinking water, rivers, lakes and oceans all over the world. This consequently harms human health and the natural environment. Here you can find out more about water pollution and what you can do to prevent it.

"Water pollution may be defined as the alteration in physical, chemical and biological characteristics of water which may cause harmful effects on human and aquatic life".Water is said to be polluted if it is has not been of sufficiently high quality to be useful for man in present or future. The pollutants include sewage, industrial chemicals and effluents, silt, Oil and other waster. Pesticides, chemicals from the air dissolved in rainwater, fertilizers, pesticides and herbicides leached from the land also pollute water.

Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans and groundwater). Water pollution occurs when pollutants are discharged directly or indirectly into water bodies without adequate treatment to remove harmful compounds. Water pollution affects, plants, and organisms living in these bodies of water; and, in almost all cases the effect is damaging not only to individual species and populations, but also to the natural biological communities.

Raw sewage and industrial waste flows across international borders New River passes from Mexicali to Calexico, California. Water pollution is the contamination of water bodies (e.g. lakes,

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rivers, oceans, ground water). Water pollution is a major problem in the global context. It has been suggested that it is the leading worldwide cause of deaths and diseases, and that it accounts for the deaths of more than 14,000 people daily. An estimated 700 million Indians have no access to a proper toilet, and 1,000 Indian children die of diarrheal sickness every day. Some 90% of China's cities suffer from some degree of water pollution.

Review

Tal, Tali (2010) conducted the study on "Pre-Service Teachers' Reflections on Awareness and Knowledge Following Active Learning in Environmental Education"This study focuses on the pre-service teachers' reflection on an environmental knowledge questionnaire administered in an introductory environmental education course. Reflection sheets that addressed pre-/post-course knowledge questionnaires were collected from 75 students who took the course in three consecutive years. The students represented diverse ethnic and professional background, which is typical in teacher training programs in Israel. The students' initial environmental knowledge was poor but increased substantially after the course. Their reflections addressed their knowledge acquisition, as well as their growing awareness. They reflected upon the variety of teaching methods and especially on the online debate forum and on the field trips, claiming that these methods contributed a great deal to their learning. However, fewer statements addressed behavioral changes with respect to the environment. In spite of the improvement in the students' awareness and knowledge, it is suggested that further environmental education is required to continue the transformation process.

Coban, Gul Unal.et al (2011) conducted the study on "Elementary School Students' Water Awareness" The aim of this study is to present the results of a project conducted through a Water School Workshop Study related to students. The 30 students from 6th, 7th and 8th grade levels who were given water education for 25 lecture hours in totally 5 days by using originally developed instructional materials participated in the study. The results showed that the WaterSchool is generally effective on the students' conception about water, attitudes toward water usage, awareness of environment and general opinions related to the water. Moreover, the students' answers for quantitative data collection tools were determined to be significantly permanent compared with the answers to the qualitative data collection tools even 3 months after the WaterSchool.

Method

In this study Survey Method is adopted and the population includes higher Secondary school Students in Erode District. The investigator used the purposive sampling technique to select 2197 samples from four blocks namely Chennimalai, Ammapet, modakurichi, Bhavani Sagar.

Tool

Environmental pollution Awareness Inventory was the tool used in the study. Only 8 statements were asked related to water pollution. The Inventory was developed by the investigator. Reliability and validity of the tool was found.

Objectives

To find out the difference in the awareness in water pollution with respect to gender, Locality and type of school.

Hypothesis-1

There is no significant difference between Male and Female students in their Awareness of Water Pollution.

Table-1 Mean, SD and 't' Value of Male and Female Higher Secondary students

Gender	N	Mean	SD	t-value	Result
Male	839	13.94	1.43	1.40	Not Significant at 0.05 level
Female	1358	14.02	1.26		

From the above table it is noted that the calculated t-value is 1.40 is less than tabulated t-value 1.96 for 2195 degrees of freedom. Hence the null hypothesis, "There is no significant difference

between male and female students in their awareness of Water Pollution is accepted. Therefore it is concluded that Water pollution awareness of male and female students are found to be same.

Hypothesis-2

There is no significant difference between Urban and Rural students in their Awareness of Water Pollution.

Table-2: Mean, SD and 't' Value of Rural and Urban higher secondary students

Location	N	Mean	SD	t-value	Result
Urban	240	14.04	1.20	0.587	Not Significant at 0.05 level
Rural	1957	13.99	1.34		

From the above table it is noted that the calculated t-value is 0.587 is less than tabulated t-value 1.96 for 2195 degrees of freedom. Hence the null hypothesis there is no significant difference between Urban and Rural students in their awareness of Water Pollution is accepted. Therefore it is concluded that Water pollution awareness of Rural and Urban Students are found to be same.

Hypothesis-3

There is no significant difference between students studying in Government and private schools in their water pollution awareness.

Table-3: Mean, SD and 't' Value of Government and Private higher secondary students

Type of School	N	Mean	SD	t-value	Result
Government	1636	13.94	1.36	3.42	Significant at 0.05 level
Private	561	14.16	1.21		

From the above table it is noted that the calculated t-value is 3.424 is greater than tabulated t-value 1.96 for 2195 degrees of freedom. Hence the null hypothesis there is no significant difference among students in the water pollution awareness with respect to their type of school studying is accepted. Therefore it is concluded that Water pollution awareness of Government and Private school students differed significantly.

Findings

- ✓ Water pollution awareness of Male and Female students are found to be same.
- ✓ Water pollution awareness of Rural and Urban students are found to be same.
- ✓ Water pollution awareness of Government and Private school students differs.

Conclusion

Exposure to Environmental pollution in everyday life could be another factor contributing to an individual's level of awareness of Environmental pollution. In this factor cannot be used in campaigns to enhance the level of Environmental awareness as long as deteriorating the state of nature is not considered as a desirable mean.

To protect and conserve the Environment, emphasis should be given to Environmental Education in both formal and non-formal system of education. In formal system of education, teachers play a very significant role in developing a greater awareness about environment among students.

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Research Paper

5

A STUDY ON OPTIMISM OF ADOLESCENT STUDENTS

Abstract

Education is mainly considered as a process of human development. Educational processes are adapted to the age and maturity of children. All round development consists of social, emotional and intellectual development. Education is often regarded as synonymous with learning, as the required experience of any sort like intellectual, emotional, or sensory motor. It is the product of experience. It is the process by which knowledge, skills and attitudes are transmitted to the members of the community. Optimism is the tendency to believe, expect or hope that things will turn out well. The purpose of the present study is to examine the level of optimism among adolescent students and to find out the differences pertaining to selected personal variables such as Gender, Region, Medium of Instruction, Type of school and monthly income of parents in Chennai district. The sample constitutes of 500 adolescent students, where 250 boys and 250 girls drawn from 10 different schools in Chennai district. The investigator carried out the study using the Life Orientation Test-Revised scale prepared and standardized by Michael F. Scheier and Charles S. Carver (1985). The data was analysed by using parametric tests-critical ratio test and One-way analysis of variance (ANOVA) and Non-parametric tests Mann-Whitney and Kruskal-Wallis test. The findings of the study showed that there is significant difference in optimism of adolescent students with respect to gender favoring girls. The results showed that there is significant difference in optimism with respect to region favoring students in the urban areas. The results also showed that there is significant difference in optimism of adolescent students with respect to medium of instruction favouring English medium students. There is significant difference in optimism of adolescent students with respect to monthly income of parents favoring students from low monthly income. Teachers, parents and society play a major role in the development of optimistic attitude of the students.

Keywords: *Optimism, Adolescent Students and Human Development.*

Introduction

Education is one process which has attracted the attention of everyone whether rich or poor, male or female, learned or illiterate and has acquired importance irrespective of region, religion or creed. Education is often regarded as synonymous with learning, as the required experience of any sort like intellectual, emotional, or sensory motor. It is the product of experience. It is the process by which knowledge, skills and attitudes are transmitted to the members of the community. Humans are the only beings having all the emotional developments and the changes which are responsible for their well-being. The way of thinking about the work to be performed has a remarkable influence on the end result. Optimism is a skill of emotional intelligence, which translates to a better career and greater success in life.

Optimism

Optimism is the tendency to believe, expect or hope that things will turn out well. Even if something bad happens, like the loss of a job, an optimist sees the silver lining. It is like getting laid off the catalyst that allows to start own business. The emerging field of positive psychology studies the positive impact that optimism has on mental

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health. Other research shows that optimism may be good for physical health too - optimists are less sick and live longer than pessimists.

Benefits of Optimism

- Finds the opportunity in a difficult or challenging situation
- Looks for partial solutions, even in the midst of conflict
- Better health
- Longer and happier life
- Less stress and anxiety
- Better educational qualifications and successful career.
- Better relationships
- Better at problem-solving and Cope better with failure
- More resilient in the face of adversity.

Objectives

- To study the level of Optimism among adolescent students based on gender.
- To study the level of Optimism among adolescent students based on region.
- To study the level of Optimism among adolescent students based on medium of instruction.
- To study the differences pertaining to Optimism with respect to type of schools and monthly income of parents.

Need and Significance

The main aim of education has always been the total development of the student's personality. In the present generation, the adolescents are facing many difficulties in life. These difficulties have given rise to many problems such as anxiety, tension, and frustration and emotional upsets in day-to-day life. Optimism is a skill of emotional intelligence, which translates to a better career and greater success in life.

Hypotheses

There is no difference in Optimism among adolescent students owing to the differences in Gender, region and medium of instruction.

There is no difference in Optimism among adolescent students owing to the differences in Type of school and monthly income of parents.

Method

The present study has been designed as a descriptive survey method.

Selection of the Sample

The sample constituted of 500 students of Class IX were selected from 10 different schools of Chennai. Random sampling technique was used to select the sample for the study.

Tool

Life Orientation Test-Revised (LOT-R) scale prepared and standardized by Michael F. Scheier and Charles S. Carver (1985).

- Personal Data Sheet prepared by the investigators.

Statistical Techniques

The data were analyzed by using parametric and nonparametric tests.

Parametric tests include

- Critical ratio (t-ratio) (Parametric alternative to Mann-Whitney test)
- One-Way Analysis of variance (ANOVA) (Parametric alternative to Kruskal-Wallis test)

Non-parametric tests include

- Mann-Whitney test
- Kruskal-Wallis test

Analysis and Interpretation of Data

1. Critical ratio or Mann-Whitney tests were computed to test the difference in Optimism of adolescent students owing to the differences in Gender, Region and Medium of instruction.

Table 1.1: Table showing the Mann-Whitney test difference in Optimism among Adolescent Students with respect to Gender and Medium of Instruction

Variable	Category	Sample Size	Mean Rank	Wilcoxon W	Mann-Whitney U	z-value	P value	Result
Gender	Boys	250	224.41	56102.500	24727.500	-4.055	0.000	Sig
	Girls	250	276.59					
Medium of instruction	English	250	267.88	47833.000	25467.000	-3.161	0.002	Sig
	Tamil	250	226.70					

From the above table 1.1, the P-values (0.000) and (0.002) are less than 0.01, which is significant at 1% level. So the null hypothesis is not accepted. Hence there is significant difference in optimism among adolescent students owing to the differences in gender and medium of instruction. The difference in optimism among adolescent students is favoring girls and English medium students. This may be due to the strong positive attitude of the girls studying in English medium schools can face any difficult situation.

Table 1.2: Table showing the critical ratio difference in Optimism among Adolescent Students with respect to Region.

Variable	Category	Mean	Sample Size N	Std. deviation	Degrees of freedom	't'-value	P-value	Result
Region	Urban	14.93	250	3.711	498	1.206	0.005	**Sig**
	Rural	14.57	250	2.999				

From the above table 1.2, the P-value (0.005) is less than 0.05, which is significant at 5% level. So the null hypothesis is not accepted. Hence there is significant difference in optimism among adolescent students owing to the differences in region of the school. The optimistic attitude is found to be more in the case of students in urban region when compared to the students in rural region.

1. One-Way Analysis of variance (ANOVA) or Kruskal-Wallis test are computed to test the difference in Optimism among adolescent students owing to the differences in Type of school and monthly income of parents.

Table 1.3: Table showing the Kruskal-Wallis Test showing the Difference in Optimism among Adolescent Students with respect to Type of School

Variable	Categories	Sample Size N	Mean Rank	Chi-Square	Degrees of freedom	P-value	Result
Type of school	Govt	170	271.34	6.553	497	0.038	NS
	Govt-aided	170	234.96				
	Private	160	254.78				

From the above table 1.3, the P-value (0.038) is greater than 0.01, which is not significant at 1% level. So the null hypothesis is accepted. Hence there is no significant difference in optimism among adolescent students owing to the differences in type of school.

From the above table 1.4, the P- value (0.044) is less than 0.05, which is significant at 5% level. So the null hypothesis is not accepted. Hence there is significant difference in optimism among adolescent students owing to the differences in the monthly income of parents.

Table 1.4: One-way ANOVA showing the Difference in Optimism among Adolescent Students with respect to Monthly Income of Parents

Variable	Category	Sample size	Mean	Std. Deviation	Degrees of freedom	Mean Square	F	P-value	Result
Optimism	Between Groups	164	14.40	3.111	3	30.589	2.712	0.044	Sig
	Within Groups	183	14.50	3.068	496	11.278			
	Total	153	15.36	3.857	499				

Findings

- ✓ There is significant difference between girls and boys with respect to optimistic attitude favoring girls. This is due to the reason that the girls are brought up in different situation when compared to boys.

- ✓ There is significant difference between the adolescent students from rural and urban areas with respect to optimistic attitude which favors students in urban areas. This may be due to the fact that the style of living in urban areas makes the students more optimistic.

- ✓ There is significant difference between the adolescent students of English and Tamil medium with respect to optimistic attitude. The English medium students have more optimism because of the various activities they perform in the school.

- ✓ There is no significant difference among the students of government, government-aided and private schools with respect to optimistic attitude.

- ✓ There is significant difference among the students from different monthly income of parents with respect to optimistic attitude favoring students from low monthly income. The students from low income group (Rs.1000-Rs.5000) have a positive attitude about their future developments.

Educational Implications

Optimism is believed to be associated with positive mastery-oriented learning behaviors including engagement, persistence, utilization of appropriate problem-solving strategies, and assertiveness. Students in the early primary school years who view positive events as being long-lasting, under internal control and generalized, and negative events as of short duration, external and specific are more likely to develop task oriented behaviors which lead to higher achievement. Thus, while optimistic explanations for common life events decreased as the students in this study approached adolescence, the level of their achievement increased over time as a result of the instruction they received, the goals that they had set and the constructive work habits acquired in the earlier years. The following tips will help in the development of optimism in adolescent students;

- Be realistic about your expectations.
- Avoid living in self denial.
- Develop a sense of humour.
- Be gracious enough to accept things that cannot be changed.
- Create a positive attitude.
- Improve your physical appearance when necessary.
- Set a goal look forward to when the going gets rough.
- Practice the habit of forgiveness and think positively about the self.
- Develop a strong ambition. Visualize happy thoughts. Walk tall, with the head high up exhibiting confidence. Smile as often as you can.

Conclusion

The purpose of the present investigation to study the level of optimism of adolescent students with reference to some selected variables like gender, region , medium of instruction, Type of school and monthly income of parents. The study indicates the significant relationship among some variables. The study may be found to be useful in the field of education for fostering optimistic attitude in today's life situation. According to this perspective, classroom activities would ideally focus on flow experiences where students are involved in challenging lessons that would help them develop new skills and learn to focus their attention. The findings of this study may serve as a database for the future research.

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Research Paper

6 LEARNING STYLE PREFERENCE OF ENGLISH AS A SECOND LANGUAGE STUDENTS: A CROSS-SECTIONAL SURVEY

Abstract

Learning styles have great appeal for educators and researchers in the field of English as a Second Language (ESL). Proponents of learning styles claim that identifying the distinct ways students learn and tailoring the learning situation to best fit their individual learning styles will make instruction more effective and increase their academic success. Hence the present study aims to identify the learning style preference of ESL students and to analyse the differences in learning styles with respect to the demographic variables namely gender, locality, nature of school and locality of school. The Perceptual Learning Style Preference Questionnaire (PLSPQ) developed by Joy Reid was adapted and administered to 1436 secondary school students. The collected data were analysed using descriptive and differential statistics. Results showed that the primary and secondary learning styles of the students were visual and auditory learning style and there were statistically significant differences existed in the learning styles based on the selected demographic variables.

Keywords: *Learning Styles, Learning Style Preference and ESL Students.*

Introduction

Learning style refers to students' preferences for some kinds of learning activities over others. They are simply different approaches or ways of learning. It is the manner in which a learner perceives, interacts with, and responds to the learning environment. The concept learning style refers how individuals prefer to learn and different ways in which individuals' process information in the course of learning. Rochford (2003) stated that learning style is the way students concentrate on, process, internalise and recall difficult information. It is an individual's natural, habitual and preferred ways of learning and retaining new information. Stevenson (1997) stated that learning styles are a combination of nature and nurture. Though learning styles are considered as inborn characteristics they are affected by learners' personal traits, experience and the learning environment.

Different learning style models described that components of learning style are the cognitive, affective and physiological elements, all of which may be strongly influenced by an individual's cultural background and learning environment especially learning a foreign language. The cognitive aspect includes the ways the learners decode, encode, store and retrieve information. The affective aspect of learning styles includes emotional and personality characteristics. The physiological aspect of learning includes individuals' sensory perceptions that affect the way they learn and process information.

Research studies disclosed that individuals learn a foreign language best through sensory channels such as vision, hearing, movement, touching, or any combination of these. Joy Reid (1995) has developed a learning style model based

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on learners' perception and social aspects called 'Perceptual Learning Style Model'. This model, particularly framed for learners of foreign languages. According to this model individuals learn best by their perceptions: Visual, Auditory, and Kinesthetic preference, and two social aspects of learning: Group and Individual preferences. According to this model, Visual learners process information more effectively when the information is seen. They learn best through visual means like books, charts, pictures, graphs, and all the symbolic means. They usually rely more on the sense of sight. Auditory learners process information more effectively when spoken or heard. They learn best through by listening, speaking and they tend to prefer hearing the information, listening lectures and involve in discussions. Kinesthetic learners prefer active participation in the learning experience and learn best by being involved in physical activities. They benefit much from doing projects, assignments and involving in learning activities. Group learners prefer studying with others and they learn and acquire knowledge best through interactions with peer groups and classmates whereas Individual learners tend to prefer study alone and learn best independently. They avoid involving in group work or group activities in the learning process.

Background statement

Learning styles have great appeal for educators and researchers in the field of English as a Second Language (ESL). Proponents of learning styles claim that identifying the distinct ways students learn and tailoring the learning situation to best fit their individual learning styles will make instruction more effective and increase their academic success. Identification of an individual's learning style is a complex task and necessary for teachers and parents to improve the learning outcomes of students. Students who understand their own style are likely to be better learners, adopt suitable learning strategies that match their learning styles, feel greater self confidence, achieve higher grades, have more positive attitudes about their studies, and exhibit more skill in applying their knowledge in courses. Understanding students' learning styles is an indispensable element of effective teaching, because students learn best when they taught in accordance with their learning styles. To be successful in educating the diverse population of learners, teachers need to know about students' learning styles and adopt suitable instructional strategies and methods that best fit for effective learning. When these important aspects are understood and matching the learning styles with teachers' teaching styles, learning foreign language becomes more enjoyable and effective for students who struggle in traditional classrooms. Hence the present investigation is carried out to identify the learning style preference of students in learning English.

Literature Scanning

Research on learning style disclosed that individuals differ in their learning style preference and it has associated with their academic performance. Related studies showed factors like gender, locality of students, school environment, brain dominance, language proficiency and personality of individuals affected their learning style preference. Saleh Khatib and Shadia Ghosheh (2013) have found individuals' gender had affected their learning style and male students were more auditory and tactile learners, whereas female students were more group learners. Conversely, female learners tended to be more visual learners (Mohammad and Tazik Khalil, 2011). Differences in learning style preference existed between left handed and right handed students (Ali Mehrdad and Manouchehr Ahghar, 2012). Ravi and Manju (2013) identified school environment affected the learning styles of students and students studied in state board schools preferred visual learning style, whereas students in central board schools showed greater preference to individual learning style.

Studies on learning style revealed that students' academic achievement was directly influenced by their learning styles (Azrinawati Remali et al. and Hemalatha, 2013). Alkhatnai, Mubarak (2011) found students' academic success and satisfaction were correlated with their learning style preferences. Similarly affective dimensions of learning styles, namely directed learning style, reproduction directed learning style and application directed learning style had significantly affected the achievement of learners (Sharma and Surender

Thakur, 2011). Sahoo and Subhash (2013) identified students having independent learning style were academically performed better than those having dependent learning style. Oxford Rebecca (1989) disclosed that students' learning styles and strategies were the most important variables influencing second language performance.

Objectives and Research Questions

The objectives of the present study are as follows.

- To identify the predominant learning style preference of ESL students.
- To identify the differences in learning style preference of ESL students with respect to their gender, locality, nature of school and locality of school.

This study has attempted to answer the following research questions.

- What is the predominant learning style preference of ESL students?
- Is there any significant difference exists in the learning style preference of ESL students with respect to their gender, locality, nature of school and locality of school?

Methodology

This research is carried out by using survey technique by distributing questionnaires. It oversees four demographic variables in students' learning styles based on their gender, locality, nature of school in which they studied and locality of school. The Perceptual Learning Style Preference Questionnaire (PLSPQ) developed by Joy Reid was adapted by the researcher and the questionnaire was validated by the experts in the field of education and psychology. Reliability of the questionnaire was established by using Cronbach alpha method which was found to be 0.72. The questionnaire has 50 items with five dimensions namely visual, auditory, kinesthetic, group and individual learning style preferences and each dimension has ten items. The questionnaire was administered to 1436 secondary school students in Salem district of Tamilnadu state who were randomly selected from 25 schools. The data were analyzed using descriptive analysis (Mean and Standard Deviation) and differential analysis ('t' Test and ANOVA).

Analysis of Data and Interpretations

Table No – 1: Learning Style Preference of Secondary School Students

Maximum Mean - 5 X 50 = 250

Learning Style	N	Mean	SD	Rank
Visual Learning Style	1436	43.33	5.25	1
Auditory Learning Style		39.60	4.94	2
Kinesthetic Learning Style		32.50	8.43	4
Individual Learning Style		34.54	7.10	3
Group Learning Style		29.83	7.80	5
Total	1436	179.80		

It is observed from the table 1 that the most preferred learning styles of secondary school students in learning English are Visual learning style and Auditory learning style followed by Individual learning style, Kinesthetic learning style and Group learning style.

Table No – 2: Differences in Learning Style Preference between Boys and Girls

Variable	Gender				't' value	'p' Value
	Boys (N=735)		Girls (N=701)			
Learning Style	Mean	SD	Mean	SD		
Visual	43.56	4.72	43.09	5.75	1.71 NS	.086
Auditory	39.53	4.68	39.67	5.20	0.53 NS	.597
Kinesthetic	32.49	8.55	32.52	8.30	0.07 NS	.947
Individual	34.82	6.84	34.25	7.36	1.51 NS	.130
Group	30.36	7.82	29.27	7.76	**2.66 ***	.008

** = Significant at the 0.05 level. (p < 0.05)*

NS = Not Significant at the 0.05 level. (p> 0.05)

The table 2 showed the mean score differences in the learning style preference among the students based on their gender. The obtained 't' values of visual learning style (1.71), auditory learning style (0.53), kinesthetic learning style (0.07) and individual learning style (1.51) are lesser than the table value at the 0.05 level of significance. Therefore, it is concluded that there is no significant difference existed between boys and girls in their visual, auditory, kinesthetic and individual learning style preference. On the other hand the obtained 't' value of group learning style (2.66) is greater than the table value at the 0.05 level of significance. Therefore it is concluded that there is a significant difference existed between boys and girls in their group learning style preference.

Table No – 3: Differences in Learning Style Preference between Rural and Urban Students

Variable	Locality of Residence				't' Value	'p' Value
	Rural (N=872)		Urban (N=564)			
Learning Style	Mean	SD	Mean	SD		
Visual	43.68	5.19	42.80	5.30	**3.08 ***	.002
Auditory	39.64	4.90	39.53	5.02	0.41 NS	.691
Kinesthetic	32.20	8.42	32.97	8.42	1.70 NS	.089
Individual	34.50	6.97	34.60	7.31	0.24 NS	.814
Group	29.75	7.66	29.96	8.02	0.49 NS	.623

** =Significant at the 0.05 level. (p < 0.05)*

NS= Not Significant at the 0.05 level. (p > 0.05)

The table 3 showed that the mean score differences in the learning style preference between rural and urban locale students. The obtained 't' value of visual learning style (3.08) is greater than

the table value at the 0.05 level of significance. Therefore, it is concluded that there is a significant difference existed between rural and urban locale students in their visual learning style preference. On the other hand the obtained 't' values of auditory learning style (0.41), kinesthetic learning style (1.70), individual learning style (0.24) and group learning style (0.49) are lesser than the table value at the 0.05 level of significance. Therefore, it is concluded that there is no significant difference existed between rural and urban locale students in their auditory, kinesthetic, individual and group learning style preference.

The table 4 showed that the differences in mean scores of students' learning style preference with respect to the nature of school in which they studied. In order to identify the difference in learning styles preference among the groups F- test (ANOVA) has been calculated and presented in the same table. The calculated 'F' values of visual learning style (47.25), kinesthetic learning style (16.50) and group learning style (25.46) are greater than the table value at the 0.01 level of significance. Therefore, it is concluded that there is a significant difference existed in visual, kinesthetic and group learning style preference among the students with respect to the nature of school. Whereas, the calculated 'F' values of auditory learning style (1.86) and individual learning style (1.02) are lesser than the table value at the 0.05 level of significance. Therefore, it is concluded that there is no significant difference existed in auditory and individual learning style preference among the students with respect to the nature of school.

Table No – 4: Differences in Learning Style Preference of Students with respect to the Nature of School

	DESCRIPTIVE			ANOVA					
Variable	**Nature of School**			**Groups**	**Sum of Square**	**df**	**Mean Square**	**'F' value**	**'p' value**
Learning Styles	**Government (N=572)**	**Aided (N=481)**	**Matriculation (N=383)**						
	Mean	**Mean**	**Mean**						
Visual	42.53	45.16	42.22	Between	2446.429	2	1223.215	**47.25 ****	.000
				Within	37099.788	1433	25.890		
				Total	39546.217	1435			
Auditory	39.32	39.65	39.94	Between	90.824	2	45.412	1.86 NS	.156
				Within	34973.106	1433	24.406		
				Total	35063.930	1435			
Kinesthetic	31.01	33.88	33.00	Between	2292.539	2	1146.270	**16.50 ****	.000
				Within	99554.450	1433	69.473		
				Total	101846.989	1435			
Individual	34.22	34.71	34.82	Between	103.233	2	51.617	1.02 NS	.360
				Within	72255.424	1433	50.422		
				Total	72358.657	1435			
Group	28.06	30.84	31.21	Between	2998.076	2	1499.038	**25.46 ****	.000
				Within	84382.464	1433	58.885		
				Total	87380.540	1435			

*(p < 0.01) ** = Significant at the 0.01 level. (p> 0.05) NS = Not Significant at the 0.05level*

Table No – 5: **Differences in Learning Style Preference between Rural and Urban School Students**

Variable	Locality of School				't' value	'p' value
	Rural (N=703)		Urban (N=733)			
Learning Style	Mean	SD	Mean	SD		
Visual	43.93	5.09	42.76	5.34	4.24 *	.000
Auditory	39.75	5.22	39.45	4.66	1.16 NS	.248
Kinesthetic	33.05	8.39	31.98	8.43	2.43 *	.015
Individual	35.46	6.77	33.66	7.31	4.83 *	.000
Group	30.56	7.66	29.13	7.88	3.48 *	.001

(p < 0.05) ***** *= Significant at the 0.05 level.*
(p> 0.05) *NS = Not Significant at the 0.05 level.*

The table 5 showed that the mean score differences in learning style preference between rural and urban schools students. The obtained 't' values of visual learning style (4.24), kinesthetic learning style (2.43), individual learning style (4.83) and group learning style (3.48) are greater than the table value at 0.05 level of significance. Therefore it is concluded that there is a significant difference existed between rural and urban school students in their visual, kinesthetic, individual and group learning style preference. Whereas, the obtained 't' value of auditory learning style (1.16) is lesser than the table value at 0.05 level of significance. Hence it is concluded that there is no significant difference existed between rural and urban school students in their auditory learning style preference.

Findings and Discussion

It is revealed from the results based on the learning styles of students that the predominant learning style preference of secondary school students in learning English is visual learning style, followed by auditory, individual, kinesthetic and group learning style. It is also found that differences occurred in learning style preference among the students based on the demographic characteristics namely gender, locality, nature of school and locality of school. The related studies quoted in this paper supported the results that students with different demographic characteristics differed in their learning style preferences.

Though students differed in their learning styles, they must be taught about their learning style strengths. They need to be aware of their learning styles. So that they can be empowered to study in the ways that will help them to concentrate on the learning process and retain new and difficult information. The knowledge of one's learning styles may be beneficial in that the learner will be aware of his or her strengths and weaknesses in terms of learning experiences.Students who became aware of their learning styles consciously applied their preferred learning styles to their study skills. It is the responsibility of teachers to manage their classes and teaching methods to facilitate students with different learning styles in order to develop their English language skills and help them to achieve their academic goals. Since learning styles seems to be the significant factor in the success of the students' learning process, matching learning styles and instructional strategies will complement the students' academic performance.

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Research Paper

7

TEACHER VALUES AMONG B. Ed., STUDENTS

Abstract

The survey research investigated to find out the level and whether there is any significance difference in the teachers value among B.Ed. students with respect ot gender and medium of study. Normative survey method was adopted for this study. The present study consists of 250 B.Ed. students studying in B.Ed. colleges in Cuddalore district of Tamil Nadu. The investigator used the Teacher Values Scale, constructed and standardized by Suresh Prabu (2012). For analyzing the data, percentile analysis, mean, standard deviation analysis and 't' test were employed. It is determined that there is high level teacher values observed in the B.Ed. students. The findings suggest that the B.Ed. students had high level teacher values. Also there is significant difference found in accordance with gender and medium of B.Ed. students.

Keywords: *Teachers Value, Student Teachers*

Introduction

The destiny of a nation is decided in the classroom in which teachers play a significant role. A number of external forces act upon a teacher and shapes his/her behavior in implementing the educational policy of a nation. The teacher is the yardstick that measures achievement and aspiration of the nation. The worth and potentialities of a country get evaluated in and through the work of the teacher, "the people of the country are enlarged replica of their teacher". They are the real nation builders. According to Radhakrishnan "the teacher's place in society is of vital importance. He acts as the pivot for the transmission of intellectual traditions and technical skills from generation to generation and helps to keep the lamp of civilization burning". Also according to secondary education recommendations "every teacher and educationist of experience knows that even the best curriculum and the most perfect syllabus remains dead unless quickened in to life by the right method of teaching and the right kind of teachers". John wells (2011) also states that while discussing theories of values and attitudes, and the teaching of values and theories of acquisition, the paucity of such topics in IB text is noted. Sally Glen (2003) also states teaching about values. Cecilia Fierro Evans (2005) lists a set of values in practice of teaching and questions for quality and equity in schools.

Need for the study

Schools play a very central role in the children's development almost all over the world. Schools are an important part of the lives of children although they have never been asked whether they are willing to go to school. Effective classroom management strategies often rely on "foundational" concepts … and it's hard to get more foundational than values. Teaching values effectively to children demands that we first narrow our scope of what we expect of students and focus our efforts there. This is because values are a slippery concept, a concept that changes from one generation, one culture, and one person and another. Teacher is a source of information, a guide, a mentor, a surrogate parent, a motivator all at the same time. Teaching is one of the professions which always deal with the future. For this reason the study has more significance.

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Objectives

- ✓ To find out the level of teacher values among B.Ed. students.
- ✓ To find out whether there is any significant difference in teacher values among B.Ed. students with respect to gender.
- ✓ To find out whether there is any significant difference in teacher values among B.Ed. students with respect to their medium.

Hypotheses

- ✓ The level of teacher values among B.Ed. students in high.
- ✓ There is no significant difference between teacher values among B.Ed. students with respect to gender.
- ✓ There is no significant difference between teacher values among B.Ed. students with respect to their medium.

Methodology

Normative survey method was adopted for this study. The present study consists of 250 students studying in B.Ed. colleges in Cuddalore district of Tamil Nadu. The investigator used the Teacher Values Scale, constructed and standardized by Suresh Prabu (2012). For analyzing the data, percentile analysis, mean, standard deviation and 't' test were employed.

Analysis and Interpretation

Table-1: The level of Teacher values among B.Ed. Students.

Total Sample	N	Mean	SD
	250	117.20	8.33

In order to find out the teacher values of B.Ed. students in Cuddalore District the investigator calculated mean and SD. The mean values of the entire sample are 117.20 and SD is 8.33. The calculated mean value is higher than the percentile. Hence it is inferred that B.Ed. students are having high level teacher values.

Table-2: The mean, SD and 't' values of Male and Female students in Teacher Values

Gender	N	Mean	SD	t-value	Remarks at 0.05 level
Male	19	105.68	15.73	3.42	Significant
Female	231	118.15	6.62		

In order to find out the significant mean difference between male and female student in teacher values score, the investigator calculated t-value. It is given in table – 2 and it is found to be 3.42, which is significant at 0.05 levels. Hence, the framed null hypothesis is rejected. It is inferred that the male and female students differ significantly in their teacher values.

Table No.3: The mean, SD and 't' values of Tamil and English Medium students in Teacher Values

Gender	N	Mean	SD	t-value	Remarks at 0.05 level
Tamil	142	115.73	8.80	3.35	Significant
English	108	119.14	7.26		

In order to find out the significant mean difference between Tamil and English medium students in teacher values score, the investigator calculated t-value. It is given in table – 3 and it is found to be 3.35, which is significant at 0.05 levels. Hence, the framed null hypothesis is rejected. It is inferred that the Tamil and English medium B.Ed. students differ significantly in their teacher values.

Findings

- ✓ From the above Table No.1 it is observed that the mean value of the entire sample is 117.20 and SD is 8.33. The calculated mean value is higher than the percentile. Hence, it is inferred that the B.Ed. students are having high level of teacher values.
- ✓ From the Table – 2, the t-value is found to be 3.42, which is significant at 0.05 levels. Hence the framed null hypothesis is rejected. It is inferred that the male and female students differ significantly in their teacher values.
- ✓ From the Table – 3, the t-value is found to be 3.35, which is significant at 0.05 levels. Hence the framed null hypothesis is rejected. It is inferred that the Tamil and English medium B.Ed. students differ significantly in their teacher values.

Conclusion

The B.Ed. students are having high level of teacher values. So, the teachers, parents and counselors should motivate the students to maintain the level of teacher value. The sub samples of gender and medium differ significantly in their teacher values. So, the persons framing the curriculum should consider the above finding while designing the content for B.Ed. students.

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Research Paper

8 RELATIONSHIP BETWEEN MULTIPLE INTELLIGENCE, TEACHING APTITUDE AND TEACHING ATTITUDE OF PROSPECTIVE TEACHERS

Abstract

The purpose of this descriptive study was to explore the relationship between Multiple Intelligence, Teaching Aptitude and Teaching Attitude of Prospective Teachers. 225 prospective teachers were selected randomly from different colleges located in rural and urban areas of Chennai District of TamilNadu state. The SPSS was used for analyzing the data. Karl Pearson's Product Moment Method was used for Correlational Analysis. The results revealed (i) There exists no significant relationship between Multiple Intelligence and Teaching Attitude of Prospective Teachers. (ii) There exists no significant relationship between Multiple Intelligence and Teaching Aptitude of Prospective Teachers. (iii) There exists a significant relationship between Teaching Attitude and Teaching Aptitude of Prospective Teachers.

Keywords: *Multiple Intelligence, Teaching Aptitude, Teaching Attitude and Prospective Teachers.*

Introduction

Education may be defined as the process of drawing out the best in an individual. The complete process of education must contain four common factors (i) Educator (teacher) (ii) Educand (Student) (iii) the subject matter (iv) the context (setting). If, quality education is a pre-requisite for national, regional and global development, then for delivery of quality education, we need quality teachers who are committed to teaching, having aptitude towards teaching profession and equipped with necessary knowledge, skills and competencies for effective teaching. Many researchers have demonstrated that no system is better than its teachers. Therefore, teacher is a very important person in the process of education. If education should build nation builders, teachers should concern it with providing master builders, well-equipped physically, intellectually, emotionally and spiritually.

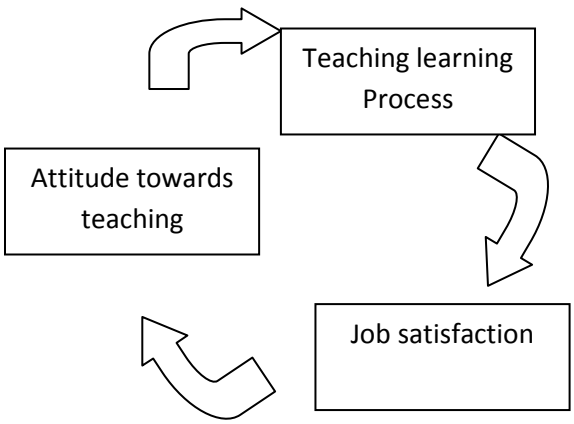

Fig:1 The Cyclical Nature of Attitude

Teachers are expected to use the best practices and strategies to meet challenge demands of their career. If the teachers are well trained and highly motivated, learning will be enhanced. The teaching profession demands a clear set of goals, love for profession and obviously the more favourable attitude towards the profession.

Teacher is said to have a proper professional attitude if he understands and professionally minded, interested in institutions professional growth and other academic activities.

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Need and Significance

Teaching means to make someone learn. The quality of learning is directly proportional to the quality of teaching. For quality learning, *'each teacher must identify and voice his or her own vision, which will foster students' growth* . They also, suggest teachers to have well-defined learning goals, to make very precise decisions about the kinds of learning wanted and [to] share these goals with students. A teacher has to 'be available for *work*, for *planning*, *delivery* and *performance*. Moreover, the teacher's role is changing from that of instructor to that of a leader of learning. They should develop an optimistic approach towards teaching as a profession since it demands to spend reasonably good time in planning diverse and creative lesson to cater for differentiated leaning abilities. A positive attitude would lead them to consider teaching as a high status profession.

Well trained teachers are necessary to impart perfect education. Teachers must possess good subject knowledge, mastery over content areas in order to teach children. The effectiveness of education depends upon quantity of teachers working in an institution. The quality of teacher's in turn depends upon the quality of training received by them in different training institutions. The teaching profession is one of the most important art of guiding students through a variety of selected teaching methods and methodologies, it should therefore, attract the brightest minds, finest personality and most committed young people. As a profession, it requires people who have right type of aptitude and attitude for teaching is bound to be a successful teacher in future. A teacher, should enrich himself with different teaching methodologies in order to change the behavior of learners keeping in view their individual differences. Aptitude is considered to be an important characteristic in order to fulfill above responsibility, because aptitude can predict the future success or failure of an individual in one occupation or areas of occupation. Therefore, one of the primary purposes this study was to examine teaching aptitude of prospective teachers.

The inspiration for undertaking the study came from a realization of its importance and possibilities of its practical utility and also from a number of similar studies conducted. The need for research on multiple intelligences, attitude towards teaching and teaching aptitude of teachers has often been felt by persons directly involved in educational institutions. The investigator finds it relevant to study such a topic which has great significance in our present education system.

Objectives

- To study the relationship between multiple intelligence, teaching attitude and teaching aptitude of prospective teachers

Hypotheses

Ho1: There exists no significant relationship between Multiple Intelligence and Teaching Attitude of Prospective Teachers.

Ho2: There exists no significant relationship between Multiple Intelligence and Teaching Aptitude of Prospective Teachers.

Ho3: There exists no significant relationship between Teaching Attitude and Teaching Aptitude of Prospective Teachers.

Method

The present study has been designed as a descriptive study.

Tools

1**.** Multiple Intelligence Test by V. Chislett., M.Sc., and A. Chapman 2005 based on Howard Gardner's Multiple Intelligences Model.

2. The investigator employed the Teacher Attitude Inventory prepared and standardized by K. Suganthi and D. Kumaran.

3. Teacher Aptitude Test - This test is prepared by the investigator in order to find out the score for Teaching Aptitude of the Prospective Teachers

4. Personal Data Sheet prepared by the investigators.

Selection of Sample

The sample constituted of 225 Teacher Trainees drawn from different Colleges of Education in Chennai City. Student teachers studying D.T.Ed., B.Ed., and M.Ed., courses were drawn randomly.

Analysis and Interpretation

Table 1: Table showing Karl Pearsons Product Moment Co-efficient for Correlation between Multiple Intelligence, Teaching Attitude and Teaching Aptitude of Prospective Teachers

S.No.	Description	Multiple Intelligence	Teaching Attitude	Teaching Aptitude	Result
1.	Multiple Intelligence	1	0.111	0.124	NS
2.	Teaching Attitude	0.111	1	0.310	S
3.	Teaching Aptitude	0.124	0.310	1	S

N-225 Degrees of freedom 223

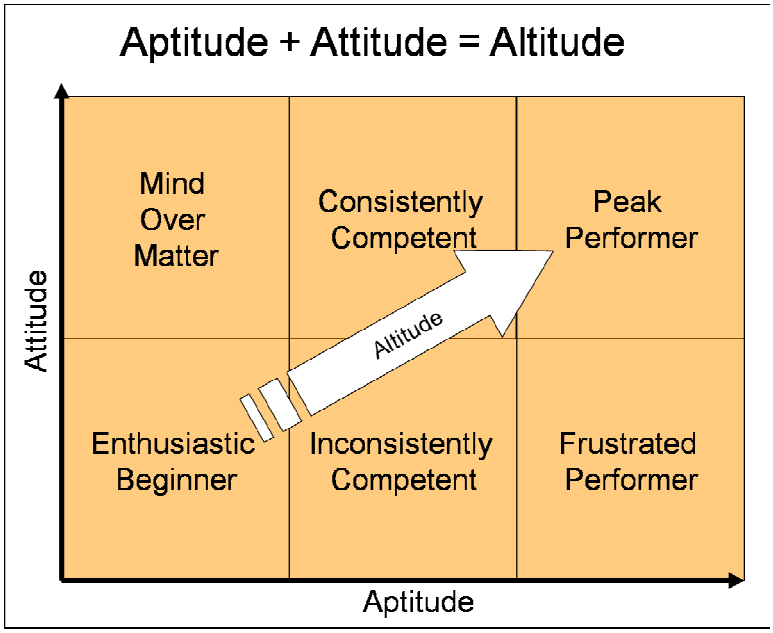
The results of the correlational analysis presented as a matrix in table reveal the following

- Multiple Intelligence of Prospective Teachers is not significantly related to their Teaching Attitude (r=0.111, P>0.05)
- Multiple Intelligence of Prospective Teachers is significantly related to their Teaching Aptitude(r=0.124, P<0.05)
- Teaching Attitude of Prospective Teachers is significantly related to their Teaching Aptitude (r=0.310**, P<0.05)

Educational implications

The present study reveals that there is a significant relationship between Teaching Attitude and Teaching Aptitude of Prospective Teachers.

Aptitude to be a teacher requires proper Attitude, as this word adds up to 100%. If one has good attitude, he will be 100% involved in any field. The persons Aptitude sums upto 96% in life, means 4% less than Attitude. When a person feels that he is 100% ready to become a teacher i.e. his attitude becomes perfectly fitting to be a teacher he should opt to choose this profession. To be a successful teacher one has to possess both attitude and aptitude. Only that will take the education process to new heights.



Conclusion

The environment in the institution should be such that each candidate is able to discover his talents. Every candidate must get opportunities to develop his inner potential to the maximum. Training Programmes are the real best tools for acquisition of knowledge and stimulate the thinking ability of a person. Both the Prospective Teachers as well as the In-Service Teachers will be immensely benefitted by such programmes. This study on prospective teachers lets us to know what are the things available, what is required and what should be planned in the Teacher education institutions. There should be a cooperative work in order to execute proper planning in the entire education system. It is essential to bring reforms for the ever changing scenario and take education towards excellence and put our country in the first place of developed countries.

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Research Paper

9 ACHIEVEMENT IN CHEMISTRY IN RELATION TO EMOTIONAL INTELLIGENCE OF FIRST YEAR HIGHER SECONDARY STUDENTS

Abstract

A study was intended to analyze achievement in Chemistry of first year higher secondary students in relation to emotional intelligence. Fourty schools were randomly selected to fix the population from 159 higher secondary schools in Namakkal district, Tamilnadu. Stratified sampling technique has been adopted to select 800 samples which constitute 39.54 % from selected population. A Normative research methodology and survey technique was adopted for data collection. Null hypotheses have been used to test the framed objectives. Descriptive analysis shows that 10.87 %, 47.51% and 41.62 % of students were higher achievers, average achievers, and low achievers respectively. The overall achievement in chemistry was found as average. The overall average achievers have average emotional intelligence. High achievers in chemistry have average emotional intelligence; average achievers and low achievers in chemistry have high emotional intelligence. The level of achievement in chemistry and emotional intelligence of higher secondary students with respect to sub-samples like gender, residential locality, birth order, attendance, community and socio economic status were found as average. Differential analysis shows that different levels of achievers in chemistry have significant difference with emotional intelligence. The demographic variables like birth order, community and socio economic status influences achievement in chemistry; attendance and community influences emotional intelligence. Correlation analysis shows that there exists positive significant relationship between achievements in chemistry with emotional intelligence. The regression analysis predicts that out of seven independent variables, two variables socio economic status and community have significantly contributed to the achievement in chemistry.

Keywords: *Achievement in Chemistry, Emotional Intelligence and First Year Higher Secondary Students.*

Introduction

The International Year of Chemistry (IYC) 2011 is a worldwide celebration of the achievements of chemistry and its contributions to the well-being of humankind under the unifying theme "Chemistry our life, our future". The goals of IYC 2011 are to increase the public appreciation of chemistry in meeting world needs, to encourage interest in chemistry among young people (school and college students), and to generate enthusiasm, aptitude, attitude and interest for the creative future of chemistry. Studying chemistry at first year higher secondary education play an important role as it is the basis for further study in future. Today's chemistry students achievements are not at expected level because learning could be affected and influenced by various factors.

School education is an important segment of the total educational system contributing conducive environment for development of cognitive, affective and psychomotor domains for all round character development along with achievement. Emotional intelligence is the capacity for recognizing our own feelings and those of others for motivating ourselves and in our relationships. Intelligent quotient accounts for only about 20% of a person's success in life, balance can be attributed to emotional intelligence. Today,

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the problem with the education is more emphasis of cognitive rather than affective.

Emotionally intelligent students make better decisions thereby live with integrity and they are more effective in solving problems. Developing of one's emotional intelligence has a lifelong effect. Emotional aspects help one to understand how and respond to certain events. It has proven better predictor of future success than intelligent quotient. It is believed that problematic behavior of students is due to problems in their emotional development. The problems in turn disturb the students' performance and achievement. The achievement in subject also depends upon the emotional well being of the student (Darsana, 2005).

Objectives

1. To find out the level of achievers in chemistry of first year higher secondary students with respect to their emotional intelligence.
2. To find out whether there is any significant difference among the level of achievers in chemistry of students with respect to their emotional intelligence.
3. To test whether there is a significant difference between achievement in chemistry and emotional intelligence of students with respect to demographic variables.
4. To find out the extent of relationship between achievement in chemistry and emotional intelligence of students.
5. To find out whether there is any significant contribution of independent variables and the demographic variables on higher secondary students' achievement in chemistry.

Hypotheses

1. The level of achievers in chemistry of first year higher secondary students with respect to their emotional intelligence is low.
2. There is no significant difference among the level of achievers in chemistry of students with respect to their emotional intelligence.
3. There is no significant difference between achievement in chemistry and emotional intelligence of students with respect to demographic variables.
4. There is no significant relationship between achievement in chemistry and emotional intelligence of students.
5. There is no significant contribution of independent variables and the demographic variables on higher secondary students' achievement in chemistry.

Methodology and Technique

Normative method and survey technique has been employed for the present study.

Tools

Achievement in Chemistry- ACT (2011) was developed and standardized by the investigator. The reliability of the tool based on test-retest method (measure of stability) was found as 0.85. The face validity of the tool was ensured by arriving jurie opinion from subject experts. The intrinsic validity of the tool 0.85 is 0.9219. The other tool Emotional Intelligence Scale - EIS (2011) was adopted and modified from the emotional intelligence scale developed and standardized by Anukool Hyde and Sanjyot Pethe (2001). The split –half reliability co-efficient was found to be 0.88 for emotional intelligence scale.

Population, Sample and Sampling Technique

The present investigation was conducted in the Namakkal District, Tamilnadu. The population for the present study is first year higher secondary school students studying chemistry as one of the subject under academic stream in selected 40 schools. From the population, the investigator selected 800 sample for the final study. This will constitute 39.54 (800/2023) percentage of sample from the selected population. The sample was selected on the basis of stratified random sampling technique.

Statistical analysis

The major statistical analysis used in the study were Descriptive (Mean and Standard Deviation – S.D), Differential (t and F-test), Correlational (r) and Regression (R).

Analysis and Interpretation

The level of achievers in chemistry of first year higher secondary students with respect to their emotional intelligence is low.

Table-1: Mean and S.D values of level of Achievers in Chemistry with respect to Emotional Intelligence of Higher Secondary students

Level	Main Variables	N	%	Mean	S.D	Level of EI
High Achievers	Achievement in chemistry	87	10.87	38.47	3.85	High
	Emotional Intelligence			81.59	6.07	
Average Achievers	Achievement in chemistry	380	47.51	25.98	3.73	Average
	Emotional Intelligence			67.26	3.35	
Low Achievers	Achievement in chemistry	333	41.62	12.55	3.73	Average
	Emotional Intelligence			56.84	4.56	
Whole Sample	Achievement in chemistry	800	100.00	22.61	8.64	Average
	Emotional Intelligence			64.48	8.82	

From the Table.1, it is known that 10.87, 47.51 and 41.62 percentages of higher secondary students are low, average and high achievers in chemistry. Low and average achievers in chemistry have average level of emotional intelligence and high achievers in chemistry have high level of emotional intelligence. In both the cases, the mean value is lies within the Mean±1 S.D score range. For the whole sample, the level of achievement in chemistry and emotional intelligence of higher secondary students is found as average in nature.

Table- 2: Mean and S.D values of Achievement in Chemistry and Emotional Intelligence of Higher Secondary students

S. No	Variable	Sub-Variable	N	Statistics	Achievment in Chemistry	Emotional Intelligence
1	Gender	Boys	428	Mean	22.59	64.60
				S.D	8.75	8.65
		Girls	372	Mean	22.63	64.35
				S.D	8.53	9.01
2	Residential Locality	Urban	362	Mean	23.18	64.21
				S.D	8.21	8.65
		Rural	438	Mean	22.14	64.70
				S.D	8.96	8.96
3	Birth order	First	664	Mean	22.95	64.41
				S.D	8.43	8.40
		Second	136	Mean	20.95	64.85
				S.D	9.45	10.65
4	Attendance	Less than 180 Days	593	Mean	22.49	63.81
				S.D	8.68	8.24
		Greater than 180 Days	207	Mean	22.95	66.41
				S.D	8.56	10.06
5	Community	OC	122	Mean	22.20	65.51
				S.D	8.34	8.28
		OBC	520	Mean	23.54	63.22
				S.D	8.82	7.17
		SC	98	Mean	19.76	69.79
				S.D	7.33	11.38
		ST	60	Mean	20.03	70.77
				S.D	8.67	11.74

6	Socio Economic Status	Low	376	Mean	21.52	64.35
				S.D	8.35	9.37
		Average	305	Mean	22.79	64.79
				S.D	8.90	8.39
		High	119	Mean	25.61	64.09
				S.D	8.20	8.08

The Table.2 shows that the level of achievement in chemistry and emotional intelligence of higher secondary students with respect to sub-samples like gender, residential locality, birth order, attendance, community and socio economic status are found as average in nature.

H_O1 . There is no significant difference among the levels of achievers in achievement in chemistry of students with respect to their emotional intelligence.

Table – 3: 't' test value for levels of Achievers in Chemistry with respect to Emotional Intelligence of Higher Secondary Students

Variable	High /Average Achievers	Average /Low Achievers	Low /High Achievers
Emotional Intelligence	2.10 S at 0.01 level	1.15	1.80

S-Significant

From the Table.3, it is clear that the t-values for the difference between emotional intelligence mean scores of students of high and average achievers group students is significant whereas difference between students from other two groups are not significant. It may therefore, be inferred that level of achievement in chemistry influences the emotional intelligence

H_O2 . There is no significant difference between achievement in chemistry and emotional intelligence of students with respect to demographic variables.

Table – 4: 't' test and F-test values of Achievement in Chemistry and Emotional Intelligence with respect to Demographic Variables.

S.No	Variables	Gender	Residential Locality	Birth Order	Attendance	Community	SES
	Statistics	t-test	t-test	t-test	t-test	F-test	F-test
1	ACT	0.07	1.68	2.46* S	0.65	7.61**S	10.43**S
2	EI	0.39	0.78	0.53	3.67**S	30.61**S	0.34

The Table.4 shows that birth order, community and socio economic status are found as significant and influencing factor of achievement in chemistry of higher secondary students whereas attendance and community are found as significant and influencing factor of emotional intelligence of higher secondary students.

H_O3 . There is no significant relationship between achievement in chemistry and emotional intelligence of students.

Table- 5: Correlation Coefficient for Achievement in Chemistry and Emotional Intelligence

S.No	Variable	N	Pearson Correlation 'r'	df	Table Value	Level of Significance
1	Achievment in Chemistry	800	0.128	798	0.081	(0.01)S
2	Emotional Intelligence					

The Table.5 shows that there exists significant and positive relationship between achievement in chemistry and emotional intelligence of higher secondary students.

H_O4 . There is no significant contribution of independent variable and the demographic variables on higher secondary students' achievement in chemistry.

Table - 6: Model summary for contribution of Socio Economic Status and Community on Achievement in Chemistry of Higher Secondary students

Model Summary	R	R Square	Adjusted R Square	Std. Error
SES (P)	0.154	0.024	0.023	8.54
SES And Community(P)	0.181	0.033	0.030	8.51

P – Predictor

The above Table.6 shows the results of regression analysis giving details of multiple correlation co-efficient (R), R^2 and inclusion of variables in the regression equation. Multiple R given in the above table shows the multiple correlations co-efficient of dependent variable (Achievement in chemistry) with the independent variable in the analysis. The R values from the Table.6 indicate that a moderate correlation (0.154 and 0.181) exists between the dependent variable (achievement in chemistry) and the set of demographic variables. The R square values which when expressed in percentage, explains that 2.4%, 3.3 % of the variation in the achievement in chemistry is due to two predictor variables such as socio economic status and community in the equation.

Table-7: Analysis of variance for contribution of Socio Economic Status and Community on Achievement in Chemistry of Higher Secondary students

Model		Sum of Squares	df	Mean Square	F	Level of Significance
SES	Regression	1425.51	1	1425.51	19.50	S at 0.01 level
	Residual	58312.80	798	73.07		
	Total	59738.32	799			
SES and Community	Regression	1964.89	2	982.44	13.55	S at 0.01 level
	Residual	57773.42	797	72.48		
	Total	59738.32	799			

From the above Table.7, the values of F-statistic calculated for R used to find whether R value is significant or not. The associated significance level ($P<0.01$) indicates that R is strongly significant at 0.01 level. From the regression table, it is seen that out of 7 predictor

variables only two have significant effect on achievement in chemistry at 0.01 levels. Individually, socio economic status and community score have positive and significant influence cum contribution on the achievement in chemistry.

Table- 8: Relationship between Socio Economic Status and Community on Achievement in Chemistry of higher Secondary students

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	19.489	0.769		25.35	0.000
Socio Economic Status	1.859	0.421	0.154	4.41	0.000
(Constant)	21.935	1.179		18.60	0.000
Socio Economic Status	1.789	0.420	0.149	4.26	0.000
Community	-1.099	0.403	-0.095	2.72	0.007

From the Table.8, The t-statistic values calculated for the regression coefficients also shows that all the variables which were included in the model significantly influence the achievement in chemistry. The first variable students socio economic status is able to predict the achievement in chemistry to a higher level of significant at 0.01 level (F cal 19.50<0.01). The second variable community jointly with socio economic status is able to predict the achievement in chemistry to a higher level of Significant at 0.01 level (F cal 13.55<0.01). The calculated F- Values are significant and it shows that the two variables significantly contribute to the achievement in Chemistry of higher secondary school students.

Findings

1. The level of achievement in chemistry and emotional intelligence of higher secondary students is average.
2. 10.87, 47.51 and 41.62 percentages of higher secondary students are low, average and high achievers in chemistry respectively.
3. The level of achievers in chemistry influences the emotional intelligence of higher secondary students. High and average achievers group students are statiscally significant differed from their emotional intelligence. Low and average achievers in chemistry have average level of emotional intelligence. High achievers in chemistry have high level of emotional intelligence.
4. Birth order, community and socio economic status are found as significant and influencing factor of achievement in chemistry of higher secondary students. First order born students, OBC community students and high socio economic status group students have more achievement than their counterparts.
5. Attendance and community are found as significant and influencing factor of emotional intelligence of higher secondary students. Higher secondary students with more than 180 days of attendance and ST community students have more emotional intelligence than other counterparts.
6. There exists significant and positive relationship between achievement in chemistry and emotional intelligence of higher secondary students.
7. The two variables socio economic status and community are the predictors and significantly contribute to the achievement in Chemistry of higher secondary school students in Namakkal District of Tamilnadu, India.

Educational implications

Higher secondary stage form basis for the students' entry into the professional and higher studies. More self regulated plan of home work, study habits, and positive utilization of the social medias are the constant sources among the students that improves the achievement. The second born students are to be given more personal care with motivation by parents and teachers to improve their performance and achievement. The higher strata community category students have higher achievement in chemistry indicates that achievement also depends upon the basic social

stratification based on Varna ashrama segregation till from the olden days. This is the crucial time by the educationists to revamping and remodifying the existing policies to promote more achievement among the students of socially downtrodden communities. Equal achievement among the students irrespective of the community differences could be promoted. Even though the government provides free education, free scholarship and other students' welfare schemes, the socio economic strata of students' family play a dominant role in influencing the achievement. Government must ensure the average income sources for the poor family in which the student belongs. Higher secondary students with more attendance have more emotional intelligence indicates that the students who attending the school of maximum attendance have the opportunity to learn more form their teachers and peer groups in terms of emotional behavioral relations. The students especially from the lower social stratification group have better emotional intelligence and crucial steps to be taken to improve emotional intelligence among other community students also.

Conclusion

Based on the findings of the present study, it is concluded that there exists positive and significant relationship between achievements in chemistry with respect to emotional intelligence. Socio economic status and community variables are the predictors that have positive influence on the achievement in chemistry. So it is the appropriate time to revise the existing policies in the field of education for developing promotional policies. Now, India is called as young India because it has lot of youth resources (60 %) in which proper utilization of human resources leads to the development of nation. Therefore it is need to develop emotionally balanced students with required qualities who are the future pillars of India. Being a developing country, India should use its young human resources to the fullest extent without wastage. Hence it becomes the responsibility of everyone concerned with education to prevent failure, wastage and ensure proper achievement on the part of the students with all round character development with better emotional intelligence and it is the universal goal ever to be sustained.

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Research Paper

10 MASS MEDIA IN DISSEMINATING ENVIRONMENTAL AWARENESS OF HIGHER SECONDARY SCHOOLS IN ERODE DISTRICT

Abstract

The investigator attempt to study "Mass Media in disseminating Environmental awareness of higher secondary schools in Erode District". The objectives of present study were to find out the Mass Media in Disseminating Environmental Awareness of Higher Secondary Schools students based on Gender, Locality, and Group. The method of investigation was a survey method used the population include 287 students from Hr.sec.school in erode dt.The self-made questionnaire was used to collect the data which was treated with statistical techniques. The major findings are as follows. There is no significant difference between the groups based on Gender, Group, and there is a significant difference between rural and urban students.

Keywords: *Mass Media, Environmental Education, Higher Secondary School.*

Introduction

Environmental Awareness may be defined as to help the social groups and individuals to gain a variety of experience in and acquire a basic understanding of environment and its associated problem. Education is a powerful instrument to control social problems. The programmes conducted should study the level of environmental awareness through mass media. The study of awareness remains an important one. Media plays a vital role in transferring information. Media influences every field including Education. According to National Policy on Education (1986), "Vast program of adult and continuing education will be implemented through various ways and channels including use of radio, TV and Films as mass learning media". So today media plays a very contributory role in creating an informed society.

Literature review

Prasad Shanthi Balraj (2015) have designed the research study on Achieving and maintaining high levels of awareness and understanding of environment media matters among Malaysian youth is essential if the nation has to succeed in effectively conserving our environment and in producing media literate communities. This paper presents the results of the first ever survey of youth aged sixteen in Malaysia of environment media matters. The survey results clearly illustrate the importance of the youth media literacy agenda in Malaysia today, the perceived controversies surrounding Malaysian environment issues and commonly held attitudes towards the role of the media and the role of youth in the protection of our environment. The findings of this survey pose a huge challenge to media organizations who are working to raise awareness of our environment issues. More critically, the results of the study present a cause for concern, optimism and the need for inculcating active media participation of youth voices in making decisions for the future.

Dr. Manju Yadav (2014) has conducted the study Environmental awareness begins since the time of the conception of the child in the womb of the mother. Mother's mental, physical and emotional conditions influence the development of fetus in the womb. The external environment starts from the time of the birth of the child. The present study was to investigate the impact of environmental awareness intelligence and self-

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concept of graduate level student. Four hundred graduate level students, both boys and girls studying in various degree college in Alligarh city formed the sample for the present study. The tools used for collecting the data were first environmental awareness, intelligence and self-concept developed and standardized by Ojha for achievement, the percentage obtained by the student in graduate level.

Vipinder Nagra (2014) has investigated the research study of Developments in the field of science and technology while paving way for too many revolutions on the one hand had resulted in serious environmental problems on the other. At this juncture, the role of mass media becomes pertinent in spreading environmental awareness. The approach to entertainment-education can be a very promising one in creating environmental awareness via the usage of media such as newspaper and magazines, radio, television and internet.

Objectives

- ✓ To find out the difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Gender.
- ✓ To find out the difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Locality.
- ✓ To find out the difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Group.

Hypotheses

- ✓ There is no significant difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Gender.
- ✓ There is no significant difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Locality.
- ✓ There is no significant difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Group.

Methodology

The method of investigation was a survey method used. The sample of the study includes 287 students from higher secondary schools located in and around Erode. The self-made questionnaire was used to collect the data which was treated with statistical techniques by using Mean, standard deviation, 't' test and 'F' test.

Analysis and Interpretation

Table- 1: Mean, SD and Calculated 't' value of Higher Secondary students towards Mass Media in disseminating Environmental Awareness with respect to Gender.

Gender	N	Mean	SD	Calculated 't' Value	Theoretical Value	Level of Significance at 0.05 level
Male	143	29.39	5.42	1.82	1.96	Not Significant
Female	144	28.25	5.19			

From the above mentioned table, shows that the calculated't'- value 1.82, is lesser than the Table value 1.96 at 0.05 level of significance. Thus it is conclude that male and female students do not differ in Environmental Awareness. "There is no significant difference between higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Gender" is accepted.

Table – 2: Mean, SD and Calculated 't' value Higher Secondary students towards Mass Media in disseminating Environmental Awareness with respect to Locality.

Locality	N	Mean	SD	Calculated 't' Value	Theoretical Value	Level of Significance at 0.05 level
Rural	131	30.07	5.18	3.74	1.96	Significant
Urban	156	27.76	5.23			

The above mentioned table, shows that the calculated't'-Value 3.74, which is greater than the Table value 1.96 at 0.05 level of significance. Thus it is conclude that rural and urban students differ in Environmental Awareness. Therefore, there is a significant difference between rural and urban students. **"**There is no significant difference between higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Locality" is rejected.

Table – 3: Mean, SD and Calculated 't' value Higher Secondary students towards Mass Media in disseminating Environmental Awareness with respect to Group.

Group	N	Mean	SD	Calculated 't' Value	Theoretical Value	Level of Significance at 0.05 level
Science	183	29.06	5.52	1.01	1.96	Not Significant
Arts	104	28.39	4.96			

The above mention table, Since the calculated't' Value 1.01which is less than the Table value 1.96 at 0.05 level of significance. Thus it is conclude that Science and Arts students do not differ in Environmental Awareness. "There is no significant difference between higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Group" is accepted.

Findings

- ✓ There is no significant difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Gender.
- ✓ There is a significant difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Locality.
- ✓ There is no significant difference among higher secondary students towards Mass Media in disseminating Environmental Awareness with respect to Group.

Implications

Environmental awareness is the need of the hour. Inculcating an awareness of environment among children is the responsibility of the teachers and to carry out this noble task, education is the perfect instrument. If right attitudes are induced in children, these attitudes will be transmitted to later generations also by them. Therefore every curriculum should emphasize the importance of environmental protection and management. The study revealed the fact that the students even at the higher secondary level have adequate awareness regarding environmental issues and aspects. The activities for enhancing environmental awareness are very limited in our educational institutions. Therefore it is very essential that necessary changes should be made in the curriculum on all levels so that environmental awareness can be enhanced. The learning modules motivate students to actively participate in outdoor activities like nature study, field study, environmental programme etc. The students are also motivated to read books and journals. So the environmental topics should be presented to the students through environment

oriented methods like activity, field trip, nature study etc.

Recommendations

On the basis of the results of this research study the following recommendations are given.

- ✓ Education should accompany and encourage the students in their relations world or reality.
- ✓ Government and institution need to investment on environmental education and promote the use of green technologies.
- ✓ Integrating environmental education into current science classes or teaching Environmental science as a separate discipline in one of the best ways of educates children and teens about environmental problems.
- ✓ Provide "Hands-on" learning like starting a gardening, rally, workshop, seminar, rally, essay competitions, debate and drama etc or taking care of pets.

Conclusion

The major aim of the study is to find out the Mass Media in disseminating Environmental Awareness of higher secondary school in Erode district. This study helps to know the level of Environmental Awareness through Mass Media of higher secondary students. From the present study, it was concluded that Mass Media in disseminating Environmental Awareness is good among higher secondary school students.

Environmental awareness among students was highly influenced by their background, knowledge, attitude and sensitivity towards the environment. Young generations especially teenagers are the group of people who determine the future environment. Formal education in school is among the best tools to convey adequate knowledge and inculcate the right environmental values in young generation specifically students.

The research also revealed that through the role of mass media, the students gained adequate knowledge about environmental awareness. Environmental media programs gained greater benefits to the students and enable them to make the society with better environment.

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Research Paper

11 A STUDY ON ATTITUDE OF TEACHERS TOWARDS CRC FOR QUALITY OF ELEMENTARY EDUCATION AT DHARMAPURI DISTRICT

Abstract

In the present study an attempt is made to investigate the attitude of teachers towards CRC for Quality of Elementary Education at Dharmapuri District. The study was carried out on a sample of 100 teachers. The data were collected through Questionnaire prepared by the investigator. The t-ratio were calculated to find out the significance of difference between the sample means. The results reveal that there exists significant difference in the rural and urban school teachers in their attitude towards CRC functions and the quality of elementary education and there is no significant difference between the primary teachers and upper primary teachers in their attitude towards CRC functions and the quality of elementary education. This study also reveals that the CRC establishes the indivisibility of rights, that we must address all rights equally. The rest of this paper looks at these inter related aspects of the convention as they might be out in educational activities. In total, due to the CRC in Elementary Education was developed as per the sample.

Keywords: *Teachers, Elementary Education and Cluster Resource Centre.*

Introduction

Education is the art of "Leading out". This explanation was proved by the derivation of term "Education-'E' means "out of and "duco" means "I lead". Thus education is to draw out rater to put in.

Education is a process of an individual's development. It carries on the individual's physical, intellectual, aesthetic, moral, economic, spiritual development, so that the human beings may get rid of animal instincts and became civilized.

Emerging Indian society is a learning society by the UNESCO (1972) envisaging the role of teachers in guiding students to be effective members of the society in order to prepare such teachers. The teacher education programme is to be of quality as per the steps of action plan link.

Organizing Instruction in the Elementary School

In the elementary school, the experience of the child with reference to generation, details, time, space and so forth are very limited. Consequently, an individual's attention span is short he knows and sees little in any situation and moves quickly to the next interest. He wants to handle things, to try them out, to explore, and to play with them in make believe fashion upto his limit to understanding. As he grows and develops, his ability to generalize, to think abstractly and to be concerned with details and relationship increases.

District Institutes of Education and Training (DIET)

DIET; provide academic and resource support to elementary education to teachers and non-formal instructors in the districts. The SCERT, DIETs and the resource groups have been contributing in the areas of developing training packages and materials for training, curriculum and textbook development, supervision and provision

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of academic inputs to the Block Resource Centres (BRCs) and Cluster Resource Centre (CRCs). District Resource Groups (DRGs). Wherever they are functional, are helping Block Resource Centres (BRCs) and Cluster Resource Centre (CRCs). In the regular academic support to teachers.

To supplement the efforts of SCERTs and DIET, state and district level resource groups have been constituted comprising representatives from the state departments of education, SCERT, DIET, NGOs, BRC, CRC, etc.

The State Resource Groups (SRGs) have often included 'good' primary school teachers who undergo an intensive selection process:

Block Resource Centre (BRC)

In Tamil Nadu, there are 385 Community Development Blocks and 27 Urban Blocks. 385 Block Resource Centres function in 29 Districts. In Chennai, 10 CRCs in the Corporation Zones play the roles of BRCs to cover 10 Urban Blocks. In the remaining 27 Urban Blocks, 27 urban BRCs are functioning.

BRCs have been supplied with computers and they have also been connected with Satellite Interactive Terminals (SITs). These SITs have been helpful for the conduct of State level training programmes through EDUSAT. Resource Books have been provided to all BRCs which remain permanent resource materials to be used by BRTEs and Teachers.

The role of BRTEs in Blocks, is primarily providing on-site support to the teachers in schools. They visit the schools frequently in order to help the teachers in the endeavour of improving quality in schools. Block Resource Teacher Educators (BRTEs) have been assigned the responsibility of 10-15 schools. The implementation of all programme activities involving the VEC/ local community is taken care of by them through frequent visits to schools. As these Teacher Educators are trained in ABL Methodology and Active Learning Methodology, their support to teachers on quality improvement is very significant. The practical problems faced by the teachers are solved by the BRTEs then and there. The BRTEs have also undertaken several studies which are used as objective strategy of monitoring the working of the system in place in schools.

Role of CRC in improving education

The country is passing through a profound social transformation. Education must tell the means of adjustment for the sake of survival. To bring improvement in education following hints are to be accepted.

(i) Equal educational opportunity to every child, irrespective of caste, creed, colour and race.

(ii) Providing higher education to every student capable of absorbing it.

(iii) Establishment of youth programmes to carry its fruits to active participation in the community

(iv) Keeping education entirely free from group interests schools should fully co – operative with community agencies, making education apart of the community and the community a part of the school.

(v) It is high time to bring improvement in education for the healthy growth of democracy. The above noted ideas are quire in line with the democratic conception of education.

(vi) To improve the quality of education the CRC plays important role.

Education of children with special needs

Special attention is being given to the education of handicapped with the aim to integrate physically and mentally handicapped children with the general community as equal patterns in order to prepare them to cope with day to day life problems like normal individuals. The following steps are being undertaken to achieve the above mentioned central aim.

- The children having minor handicaps are being encouraged to study with normal children with an objective to develop confidence in there to lead the life like normal children.
- There is a provision of hostels at district level for handicapped children.
- The facilities for vocational and technical education programmes to enable than to deal with the programmes of handicapped children.

- Voluntary organizations are being encouraged for making desirable efforts towards the education for making desirable efforts towards the education of handicapped provision for disabled children motivation fund to BRC provide 1200 per child.
- Children with special needs are guided by two special teachers in every block in a resource room. They are counseled by special doctors (medical camp) Inferiority complex of IED learners is totally driven away by the SSA Scheme.

Statement of the problem

The statement of the Problem is entitled as "A Study on attitude of teachers towards CRC for Quality of Elementary Education at Dharmapuri District".

Objective

1. To find out the attitude difference between male and female teachers in CRC functions and the quality of elementary education.
2. To find out the attitude difference between the functioning of CRC in relation to their primary school teachers and upper primary school teachers.
3. To find out the attitude difference between the functioning of CRC in relation to their primary and upper primary school teachers and primary and upper primary school headmasters.
4. To find out the attitude difference between the functioning of CRC in relation to the working experiences of below 15 year teachers and above 15 year teachers.
5. To find out the attitude difference between the functioning of CRC with regards the rural and urban school teachers.

Hypotheses

1) There is no significant difference between male and female teachers in their attitude towards CRC functions and the quality of elementary education.
2) There is no significant difference between primary and upper primary teachers in their attitude towards CRC functions and the quality of elementary education.
3) There is no significant difference primary and upper primary school teachers and primary and upper primary school head masters in their attitude towards CRC functions and the quality of elementary education.
4) There is no significant difference between teachers working experience of below 15years and above 15 years primary school teachers in their attitude towards CRC functions and the quality of elementary education.
5) There is no significant difference between rural and urban school teachers in their attitude towards CRC functions and the quality of elementary education.

Method

The study was conducted to find out the attitude of teachers towards CRC for quality of elementary education. Hence, the investigator has decided to adopt Survey method for the investigation.

Population and Sample

The area chosen for the present study is the following schools located at primary and upper primary in Dharmapuri District. Male Teachers 39, Female Teachers 61, Totally 100 teachers for the present study. The selection of sample from Primary and Upper primary teachers of Tamil Nadu forms the population for the present study.

Tool

A variety of tools available in educational research such as questionnaire, rating scale, check list etc., and the investigator has decided to use a tool in the form of questionnaire. "Attitude of teachers towards CRC for Quality Elementary Education" tool was used in this study.

Reliability and Validity of the tool

The measures provided by different parts of a test should be comparable. The method used for estimating reliability using this argument is called the "Split-Half Method". This form of reliability is called internal consistency. The scores obtained in the pilot study are calculated taking into account the forty statements which are included in the final study .For each individual the sum of the scores of odd numbered item form one group. The sum of scores of even numbered items forms the other group. Thus two sets of scores are obtained. "Karl Pearson's" correlation coefficient was found to be 0.8. Thus the attitude scale is found to be highly reliable.

For validity of the attitude scale was refined on the opinion of several experts in Sarva Shikshya Abhiyan (SSA) and Block Resource Teachers (BRTs) and on the results of the pilot study. This ensures content validity.

Statistical Techniques

The details of the analysis used are presented here. The types of analysis used are

a) Simple arithmetic mean
b) Standard deviation
c) 't' test

Data Analysis and interpretations

Table - 1: Analysis of CRC functions with regard to Quality of Elementary Education (Gender wise)

Category	Male (N=39)		Female (N=61)		't' value
	Mean	S.D	Mean	S.D	
Planning	32.15	3.55	33.29	6.01	1.19
Infrastructure	108.89	13.8	106.77	12.6	0.77
Teacher participation	31.61	4.14	32.65	4.44	1.76
Teaching Learning Process	32.82	10.21	33.16	4.41	0.19
Evaluation	32.61	4.07	33.73	4.37	1.30

The above table shows that male and Female Elementary teachers 't' values are lesser than the table value of 1.96 at 0.05 level of significant. Hence, the investigator concluded that, there is no significant difference between male and female elementary teachers in their attitude towards CRC functions and the quality of elementary education was accepted. So the null hypothesis is accepted.

Table - 2: Analysis of CRC functions with regard to Quality of Elementary Education (Primary and Upper Primary School Teachers wise)

Category	Primary School Teachers (N= 25)		UpperPrimary School Teachers (N= 55)		't' value
	Mean	S.D	Mean	S.D	
Planning	32.56	3.46	32.34	03.31	0.25
Infrastructure	111.2	13.85	108.18	12.41	0.93
Teacher participation	33.88	04.79	31.72	04.24	1.92
Teaching Learning Process	34.08	04.45	32.90	04.61	1.64
Evaluation	33.56	04.45	32.03	04.30	1.29

The above table shows that primary and upper primary teachers 't' values are lesser than the table value at 1.96 at 0.05 level of significant. Hence, the investigator concluded that, there is no significant difference between the primary teachers and upper primary teachers in their attitude towards CRC functions and the quality of elementary education were accepted. So the null hypothesis is accepted.

Table - 3: Analysis of CRC Functions with regard to Quality Elementary Education (Primary and Upper Primary School Teachers &Headmaster's wise)

Category	Primary &UpperPrimary School Teachers(N= 80)		Primary & Upper Primary Head Masters (N= 20)		't' value
	Mean	S.D	Mean	S.D	
Planning	32.4	4.8	33.01	5.01	0.57
Infrastructure	109.12	13.01	112.62	13.36	1.06
Teacher participation	32.4	3.451	33.05	3.41	0.76
Teaching Learning Process	32.85	3.85	34.4	3.68	1.20
Evaluation	32.51	4.27	32.05	3.24	0.52

The above table shows that primary, upper primary teachers and primary, upper primary head masters't' values are lesser than the table value at 1.960 at 0.05 level of significant. Hence, the investigator concluded that, there is no significant difference between primary, upper primary teachers and primary, upper primary head masters in their attitude towards CRC functions and the quality of elementary education were accepted. So the null hypothesis is accepted.

Table - 4: Analysis of BRC functions with regard to Quality of Elementary Education (Experience wise)

Category	Below 15 years of experienced teaches (N= 59)		Above 15 years of experienced teaches (N= 39)		't' value
	Mean	S.D	Mean	S.D	
Planning	32.55	3.62	31.92	4.01	1.01
Infrastructure	103.61	13.08	109.78	12.83	0.89
Teacher participation	31.33	3.66	32.48	3.49	1.57
Teaching Learning Process	32.98	3.93	33.17	4.22	0.22
Evaluation	32.98	3.93	33.17	4.22	0.66

The above table shows that working experience of below 15 year teachers and above 15 year teachers 't' values are lesser than the table value at 1.960 at 0.05 level of significant. Hence, the investigator concluded that, there is no significant difference between working experience of below 15 year teachers and above 15 year teachers in their attitude towards CRC functions and the quality of elementary education were accepted. So the null hypothesis is accepted.

Table - 5: Analysis of CRC functions with regard to quality of Elementary Education (Rural and Urban Teachers wise)

Category	Rural Teaches (N= 72)		Urban Teachers (N= 28)		't' value
	Mean	S.D	Mean	S.D	
Planning	32.96	4.29	31.90	3.5	2.13*
Infrastructure	114.35	13.49	108.44	13.31	1.97*
Teacher participation	33.39	3.89	30.41	4.52	3.28*
Teaching Learning Process	34.1	4.16	31.4	4.44	2.85*
Evaluation	34.6	4.29	32	4.83	2.62*

The above table shows that area of rural school teachers and urban school teachers ` t' values are higher than the table value at 1.960 at 0.05 level of significant. Hence, the investigator concluded that, there is no significant difference between rural school and urban school teachers in their attitude towards CRC functions and the quality of elementary education were not accepted. So the null hypothesis is rejected.

Educational implications

The educational implications of the study are as follows;

- ✓ It develop innovation in education
- ✓ It help to the training teacher, communicator and administrators
- ✓ It help to the evaluate materials and programs
- ✓ It help to build on information bank on education
- ✓ It help to development of curriculum in elementary education

Conclusion

Education must address the best interests and ongoing development of the whole child. This means that, in addition to being child centered, education is much more than attention to cognitive development. It is also concerned with the child's social, emotional, and physical development. It also calls for more than the conventional integrated approach. Rather education must be conceptualized from the child's point of view and with an understanding of the inter-related nature of the child's needs which vary according to level of individual development.

The CRC also establishes the indivisibility of rights. That we must address all rights equally, and it is here that there are significant further implications that go to the very core of the conduct of educational activities. The rest of this paper looks at these interrelated aspects of the convention as they might be played out in educational activities.

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Research Paper

12

PREFERENCE OF ENGLISH LANGUAGE TEACHING METHODS AND TECHNIQUES OF PROSPECTIVE TEACHERS

Abstract

A study is intended to study about the preference of English language teaching methods and techniques of prospective teachers who undergone pre-service training programme in B.Ed colleges in Coimbatore district. A normative survey research method was adopted to a sample of 130 prospective teachers based on simple random sampling technique. Preference of English language Teaching Methods and Techniques scale developed and standardized by the investigator was utilized to identify the methods preferred by the prospective teachers. It was found that for the whole sample, 46.15, percentage of prospective teachers preferred traditional methods for English language teaching and only 15.38 percentage of graduate and post graduate prospective teachers preferred modern methods for English language teaching. This research paper highlights the present status of preference of English language teaching methods and techniques by the prospective teachers who undergone preservice training in teacher training institutions.

Keywords: *English Language Teaching, Prospective Teachers and Teaching Methods.*

Introduction

Effective Teaching in English provokes excellence of learner with listening, speaking, reading and writing skills. But in reality practices, it is found that students whose second language as English is able to use English for library purposes. The students who learn to use English only as a 'library language' are less competent than the students who acquire competence in all the four skills of English language. There are so many problems which occur in the use of English language in higher education. At present English is being accessed as the common and universal code language that has been an inevitable part of the higher studies and education in every country. Our textbook experts have designed the English textbook in such a way that makes the students to use English proficiently.

The main aim of the English language teaching is to improve the English language ability of the student. But at the present context, the English language ability of the present young generation is not up to the expected level to compete at the international level. Now English language is considered as a universal code for communication and dissemination of the message very easily throughout the world. Many young professionals who are the edges of their professional courses lack good communication skills due to lack of English proficiency as it is given due importance to learn as library subject rather than utility oriented. To the present context, English language gets very importance to the country like India as common official communication language to overcome the multi diversity language systems.

Teaching methods are "a body of methods, procedures, working concepts, rules and postulates employed in the solution of a problem or in doing something. Techniques or strategies represent a complex approach to teaching which often contains a mixture of teaching methods, utilizing a number of techniques with each method. In general method of teaching or technique is a set of methods based on the same rules and having a common aim to encourage students to use the language or involve the students in the lesson or explain the language to students who have to listen attentively.

Traditional method is based largely on a reduction of the integrated process of using a foreign language into sub-sets of discrete skills and

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areas of knowledge. It is largely a functional procedure which focuses on skills and areas of knowledge in isolation. Following on from this, traditional methodologies are strongly associated with the teaching of language which is used in a certain field related to the students' life or work.

Need and Significance

A student who qualified his/her higher education system with distinction lacks fluency in communicative English, and interpersonal skills. Even, a first class graduate and post graduate candidate cannot write his/her own profile properly. A professional trained prospective teacher like B.Ed student teacher is very hard to write his/her own leave application without the mistakes. The areas of problems are considered as very vast. So, it is questionable that whether the English teachers at current situation act as a midsource for the learners and make them to learn the English language effectively through their different teaching methods and techniques. Thus, there is a need to study about the English language teaching practices and techniques practised by the prospective teachers in higher education.

Method

Normative survey method has been followed for the present study.

Tool

Preference of English Language Teaching Methods and Techniques scale constructed and standardized by the investigator (2015) has been used to find out preference of teaching methods of prospective student teachers. It consisted of thirty items. The test – retest reliability co – efficient of the tool was found as 0.86 and the interval consistency between the two halves was found to be 0.69.

Administration of the Tool

After getting prior permission from the head of the institutions, the investigator met the prospective teachers and explained the procedure for answering the tool.

Sample and Sampling techniques

The population for the entire study is prospective teachers who have undergone training in B.Ed colleges in Coimbatore district. The investigator has selected a sample of 130 prospective student teachers from three different colleges including one each from private, government and aided category. The sample has been selected by applying simple random technique.

Objectives

1. To find out the of English language teaching methods and techniques preferred by prospective teachers with respect to educational qualification.

Statistical analysis

Simple percentage analysis was employed.

Findings and Interpretation

Table – 1 Percentage of Prospective student teachers preferring English Language Teaching Methods and Techniques.

S.No	Category	Methods and Techniques	N	Percentage
1	Whole sample	Traditional	60	46.15
		Modern	50	38.47
		Both Methods	20	15.38
2	Graduate	Traditional	30	23.07
		Modern	20	15.38
		Both Methods	10	07.72
	Post Graduate	Traditional	30	23.07
		Modern	20	15.38
		Both Methods	20	15.38

From the table.1, it was confirmed that for the whole sample, 46.15, 38.47 and 15.38 percentage of prospective teachers preferred traditional, modern and both methods for English language teaching. Both graduate and post graduate prospective teachers preferred 23.07 percentages of traditional teaching methods for English language teaching. Only 15.38 percentage of graduate and post graduate prospective teachers preferred modern methods for English language teaching.

Implications

Students of higher education are facing many problems towards English language as they feel fear in learning and speaking English. These students are not having good command over four skills of English language i.e. reading, writing, speaking and listening. Students are not able to read some difficult words properly while reading any passage, news papers or text. It is appropriate time to overcome all those difficulties. Mostly in developing countries, more importance to be given to professional subjects rather than language subject likes English. In our school education system, English subject is given less priority and even the same condition too reflects in higher education.

By using traditional methods, maximum portion of class time will be wasted in exercises and drilling, dealing with grammar and pronunciation which takes away a large portion of class time. These methods were mostly used to develop basic skills of language learning such as Listening, Speaking, Reading, and Writing, but by following these methods listening and speaking skills were neglected as students cannot put their language in practice. In the era of competitive world, where the majority of the students are attempting higher competitive exams, good listening and speaking skills become an absolute necessity. Communicative approach was totally neglected by teachers and learners which has become a global demand where students are supposed to communicate across the globe and for their communicative sustainity.

Evnethough teaching English language is based on the situational aspect, learners expectations and language ability, need and demand supply of human resources for language teachers employability, more and more risks to be taken to handle and train the prospective teachers to select modern teaching methods and techniques rather than traditional. Availability of more financial resources, high expertise and trained teachers, more time for preparation, creativity, available of infrastructure like language laboratories, cooperation of management and other stake holders related to teacher training institutions are the challenging issues to be given more importance to develop preference of English language teaching methods and techniques.

Conclusion

For the present dynamic era, challenges before the English Language teachers especially in developing countries are enormous and apparent. Prospective teachers should be able to cater to the practical needs of learners, to make them competent enough to interact with one another and also to retrieve information all over the world. English has a base in several countries and is considered as the most suitable and convenient tool for International Communication. The people who have proficiency in this language could access large number of jobs and also were seen holding high positions in many National and International Organizations. In the earlier days English was just like a Library language, but now that notion has changed totally. At present the challenges visible before the English language teachers in India are diverse and it is necessary for them to shape up accordingly to meet the demands of the day. It is the appropriate time to know that prospective teachers should know about the various teaching practices, methods, techniques, approaches in teaching English and make of using appropriate methods to motivate the learners to develop expected skills.

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Research Paper

13 A STUDY OF ATTITUDE TOWARDS E-TEACHING AMONG GOVERNMENT SCHOOL TEACHERS

Abstract

Technological advancements have changed many traditional methods of teaching-learning process into a more dynamic and forward looking concept. E-teaching is one such new concept in the field of education. In order to enhance the success of e-teaching, teachers must fulfill several non trivial conditions. Hence it is necessary for a teacher to have certain level of proficiency in the concept of e-teaching. The present study was under taken to investigate the study on attitude towards e- teaching among Government school teachers. The sample of the study comprised of 150 Government school teachers who were selected through random sampling technique to measure attitude towards e- teaching. A questionnaire on attitude towards e- teaching with seven factors i) Technology ii) e-teaching iii) Training and development) iv) Learning environment v) heterogeneous group vi) Student management vii) Infrastructure was developed by the investigator. The findings of the study revealed that i) There is no significant difference in the attitude towards e-teaching between the Government school teachers based on their qualification. ii) There is a significant difference in the attitude towards e-teaching between the arts and science Government school teachers for the factors technology, student management, training and development iii)There is no significance difference in the attitude towards e-teaching between rural Government school teachers and urban school teachers. The present study has revealed that there is a high level of attitude towards e-teaching among Government school teachers.

Keywords: *E-Teaching, Attitude, Technology and Learning Environment*

Introduction

Arrival of computer and internet in the field of education has changed the procedure and pattern of education. Now education knocks at the door of student or learners. Technological advancements have changed many traditional methods of teaching-learning process into a more dynamic and forward looking concept. Thus e-teaching is one such new concept in the field of education. In order to enhance the success of e-teaching teachers must fulfill several non trivial conditions. Hence it is necessary for a teacher to have certain level of proficiency in the concept of e-teaching. In the present study the researcher has made an attempt to study the attitude of Government teachers towards e-teaching.

During the past few years a revolution has taken place in the teaching learning process of education. Technology plays a significant role on imparting education at all level i.e., from primary to higher. Now a day the alphabet "e" being attached has become more popular with relative ease, "e" has been attached to activities like real estate, retailing banking, entertainment and now in education. The "e" transfer electronic and it relates to the use of internet to undertake wide range of activities. As we become more familiar with a language of the internet refined how it pervades our daily lives in the dot.com age. Educators are now beginning to hear terms like e-teaching, e-learning and e-education as it subtly becomes a part of our regular vocabulary.

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Significance of the study

The explosions of ICT development have a great impact in the application of different technology and electronic media in the teaching learning process with the advancement of science and technology. Teachers have started to supplement their teaching with new technologies. A wide range of technologies are available today for the teachers, through which they could impart instruction to students. Both Central and State government have formulated many schemes and programmed to popularize the utilization of ICT among school teachers. As a result of this concept like smart class room, virtual classroom, digital library, electronic community and multimedia learning are gaining the attention of teaching community. All these innovations in the field of educational technology have contributed to the birth of a new concept called e- teaching. The purpose of the study is to analyze the attitude towards e-teaching among government-school teachers.

Objectives

To study the attitude towards e-teaching among Government-school teachers based on their locality of school, qualification and subject.

Hypotheses

1. There will be a significant mean score difference in the attitude towards e-teaching between the rural and urban Government school teachers.

2. There will be a significant mean score difference in attitude towards e-teaching between the UG and PG Government school teachers.

3. There will be a significant mean score difference in attitude towards e-teaching between Arts and Science school teachers

Methodology

Survey method was adopted to collect the data. Attitude towards e- teaching schedule was prepared by investigator under the seven factors technology, e-teaching, training and development, learning environment, heterogeneous group, student management and infrastructure. 150 government school teachers were used as samples to collect the data. The obtained data were subjected to necessary statistical computation.

Statistical techniques

Thus the collected data were screened and scrutinized by the investigator. After screening ,the data were analyzed using descriptive statistics (mean, standard deviation) and the test of significance t-test were employed for testing the hypotheses to arrive the meaningful conclusion.

Table – 1: Shows the mean score difference between the Rural and Urban Government School Teachers

Factors	Variable (LOCALITY)	N	M	SD	df	't'	LS
Technology	Rural	52	19.83	2.83	148	0.23	NS
	Urban	98	19.71	2.78			
E teaching	Rural	52	20.02	3.05	148	1.43	NS
	Urban	98	20.77	3.01			
Training and development	Rural	52	21.35	3.30	148	0.25	NS
	Urban	98	21.20	3.16			
Learning environment	Rural	52	20.21	3.31	148	0.01	NS
	Urban	98	20.20	3.14			
Heterogeneous group	Rural	52	20.33	3.41	148	0.39	NS
	Urban	98	20.11	2.99			
Student management	Rural	52	17.42	2.11	148	2.24	S
	Urban	98	16.61	2.10			
Infrastructure	Rural	52	21.06	2.90	148	0.34	NS
	Urban	98	20.89	2.80			

**NS Not Significant at 0.05 level*

**S Significant at 0.05 level*

**LS Level of Significance*

Accounting to the table t-value is not statistically significant at 0.05 levels for all the factors except student management. Hence the hypothesis is rejected for all the factors except student management and it can be concluded that the locality difference of the Government school teachers does not influenced their attitude towards e-teaching.

Table – 2: Mean score difference between the UG and PG Government School Teachers

Factors	Variables Qualification	N	M	SD	df	't'	LS
Technology	UG	70	20.06	2.53	148	1.25	NS
	PG	80	19.49	2.98			
E teaching	UG	70	20.36	2.99	148	0.56	NS
	PG	80	20.64	3.08			
Training and development	UG	70	20.84	3.63	148	1.47	NS
	PG	80	21.61	2.74			
Learning and Environment	UG	70	20.29	3.47	148	0.28	NS
	PG	80	20.14	2.94			
Heterogeneous Group	UG	70	20.54	3.22	148	1.30	NS
	PG	80	19.88	3.04			
Student Management	UG	70	17.00	2.25	148	0.57	NS
	PG	80	16.80	2.04			
Infrastructure	UG	70	20.77	2.92	148	0.70	NS
	PG	80	21.10	2.75			

**NS- Not Significant at 0.05 level*
**LS Level of Significance*

According to the table the t-value is not statistically significant at 0.05 level for all the factors. Hence the hypothesis is rejected and it can be concluded that the Government school teachers qualification does not influence their attitude towards e-teaching.

According to the table the t-value for the factors like technology, student management training and development is statistically significant at 0.05 level. Hence the hypothesis is accepted. The remaining factors like e-teaching, learning environment, heterogeneous group, infrastructure is not statistically significant at 0.05level. Further it can be concluded that, the variable art stream and science stream Government school teachers influence the factors technology, student management, training and development.

Findings

- There is no significant difference in attitude towards e- teaching between the rural and urban government school teachers except the factor student management.
- There is no significant difference in attitude towards e-teaching between UG and PG government school teachers.
- There is significant difference in attitude towards e-teaching between the arts and science government school teacher only for the factors technology, student management, training and development.

Table- 3: Mean score difference between the Arts and Science Government School teachers

Factors	Variables Arts and Science	N	M	SD	df	't'	LS
Technology	Arts	86	19.24	2.90	148	2.64	S
	Science	64	20.44	2.49			
E-teaching	Arts	86	20.27	2.86	148	1.11	NS
	Science	64	20.83	3.24			
Training and Development	Arts	86	20.62	3.52	148	2.89	S
	Science	64	22.11	2.48			
Learning environment	Arts	86	20.03	3.07	148	0.76	NS
	Science	64	20.44	3.36			
Heterogeneous group	Arts	86	20.12	3.17	148	0.31	NS
	Science	64	20.28	3.10			
Student Management	Arts	86	16.58	2.19	148	2.09	S
	Science	64	17.31	1.99			
infrastructure	Arts	86	20.59	2.75	148	1.78	NS
	Science	64	21.42	2.87			

**NS- Not Significant at 0.05 level*

**S- Significant at 0.05 level*

**LS Level of Significance*

Conclusion

The present study has revealed the fact that there is high level of attitude towards e- Teaching among government school teachers for the factors technology and student management. Hence the concept e-teaching should be included in the school education system.

- One of the major benefits of e- teaching is saving time and money.
- Rain or shine, the students do not have to leave their comfortable homes to receive tutoring.
- Student can avail tutoring from any place where they have internet access, being it a school or public libraries. They can have a session at any time suitable to them.
- E-teaching shall facilitate optimum utilization of ICT device by providing training to in- service teachers.
- E-teaching shall be the platform for transacting an e- curriculum

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Research Paper

14

Perception on Smart Classroom and Performance of School Teachers in Madurai District

Abstract

Joyful and interactive learning lead the pupils to their maximum level of achievement. This study focuses on the perception on smart classroom and performance of school teachers in Madurai district. The investigator used 200 samples for the study. The collected data were subjected to 't' test between the means of samples. Meaningful conclusions were drawn, educational implications worked out and suggestions were given.

Keywords:

Introduction

Education aims at the highest level of acquisition of knowledge. There are various methods and techniques used to attain this goal. Joyful and interactive learning lead the pupils to their maximum level of achievement. The educational system, the curriculum designers, the management and the teachers in particular, design ways of disseminating knowledge more effectively to the students. Over the years, technology has been used to improve the quality of instruction. However, effective use of technology to enhance the quality of teaching is a very challenging problem.

Technology can be used to improve the quality of teaching in many ways. For example, it can improve the interactions between the instructor and the students, or in-group collaboration among the students. Pervasive (or ubiquitous) computing technology makes the actual computing and communication essentially transparent to the users. This transparency, although only partially possible in the current state of art, important to allow easier interaction of computers with humans.

A pervasive computing environment is a collection of embedded, wearable, and handheld devices wirelessly connected, possibly to fixed network infrastructures such as the Internet. The two major characteristics of pervasive computing are: situation- awareness and ad hoc group communications. Situation-awareness is the capability of a device to determine "What's going on?" in its surroundings. On the other hand, multiple devices can use their ad hoc group communication capabilities to dynamically form networks, which may facilitate different types of collaborative computing. Although there exist some systems to improve classroom learning, using various emerging computing and communication technology, only a few have addressed collaborative learning among students. For example, in Interactive Classroom, the students share a virtual whiteboard, electronic textbook, and the World Wide Web over a networked environment to actively participate in-class discussions. On the other hand, projects that use pervasive computing technology have so far mainly focused on facilitating the note- or exam-taking or student-tracking applications in a classroom. For example, Smart Kindergarten uses sensor data collected from children or toys to make a record for the instructor to review children's activities and track their learning progress.

Gradually, classrooms across campus are being upgraded and remodeled to become smart classrooms. Some classrooms have been completely upgraded, while others may have one or

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two new features. “Smart” classrooms have at least some of the following features:

• Redecorated interiors
• Enhanced lighting controls
• A gyro wireless mouse to control the computer and projector from anywhere in the classroom
• Switching controls to easily change projector output between the PC, laptop, document camera, and

DVD/VCR

- New projectors
- Laptop plugs so you can bring your own computer and hook it up instantly
- A document camera to show transparencies, papers, or small objects on the projector and even take snapshots of them
- A SMART Sympodium that allows you to make electronic notes and images appear
- The Classroom Performance System (CPS) to get real-time answers from students in class by means of wireless multiple-choice response devices.

Need for the Present Study

Teachers are able to enjoy greater freedom and control over the classroom with more user friendly technology. It’s very easy for a teacher to bring their own computer into a classroom (or access their data from a network drive, USB key, CDs, etc.), adjust the lighting, and walk and talk while controlling the presentation. It is to simplify life for teachers so they can focus on teaching and keeping students more involved.

On the other hand, other people making presentations—faculty, staff and students—enjoy the vast array of new possibilities presented by a smart classroom. Using the document camera, an art teacher can quickly put student’s sketches up for all to see, or a chemistry teacher could project a small plastic model of a molecule onto the screens. Then the teacher could take a snapshot on the computer and use the SMART Sympodium to make annotations on the screen to label parts of the image. Then the CPS could be used to deliver a pop quiz to students or survey them to keep the students involved. Hence the investigator felt the need of conducting present study.

Smart Classroom

The classroom is a physical environment which should provide support for the implementation of the curriculum. In the information age, new kind of classroom should be effective to present teaching contents, convenient to acquire learning resources, able to promote classroom interaction, with contextual awareness and environmental management, which may be called smart classroom.

Concept Model of Smart Classroom

A smart classroom relates to the optimization of teaching content presentation, convenient access of learning resources, deeply interactivity of teaching and learning, contextual awareness and detection, classroom layout and management etc.. It may be summarized as Showing, Manageable, Accessible, Real-time Interactive and Testing, which nicknames’ "S.M.A.R.T

Showing

Showing dimension represents teaching information presentation capabilities of the classroom, which requires not only showing the contents can be clearly visible, but also showing content suitable for learners 'cognitive characteristics, to the learning process to enhance the learners' learning materials understanding and processing.

The existing research shows that: multi-screen display can reduce the cognitive load and improve learners’ achievement, Colvin (2007) pointed out that the multi-screen better than single-screen in the improvement of learners' achievements; Chen Chang sheng (2011) developed a theory of dual channel dual teaching platform, and put forward a twin-track teaching mode. Displaying the teaching content by multiple-screen, smart classroom can effectively overcome students' thinking discontinuity problem which causes by the single screen. The Smart classroom can be equipped with light sensors to judge the intensity of the ambient light intelligently, even can

automatically control the curtains opening and closing and opening and the intensity of lighting, which maintaining the brightness of the screen is suitable.

Manageable

Manageable dimension represents diverse layouts and the convenience of management of the Smart classroom. The equipment, systems, resources of Smart classroom should be easy managed, including layout of the classroom management, equipment management, physical environment management, electrical safety management, network management etc.

In terms of seating arrangement, rows are the typical environment for a teacher-centered classroom and/or individual learning. However, this layout severely limits the interaction between students, resulting in the students' passive learning (Su Hong, 2003). The layout of the Smart classroom should be flexible, diverse, supporting a variety of teaching and learning activities, give full consideration to the placement of various devices to improve the space utilization efficiency, the design of desks and chairs should consider the material, structure, color and other factors. Furthermore, the desks and chairs must be applied ergonomic principles consistent with adolescents' body scale (Sun Shanshan, 2011).

Accessible

Accessible dimension represents convenience of resources acquisition and equipment access in the Smart classroom, which involves resource selection, content distribution and access speed. Chen Shijian (2003) pointed out that the rich network of learning resources is conducive to independent learning, interactive cooperative learning, personalized learning, the implementation of educational socialization.

Real-time Interactive

Real-time Interactive dimension represents the ability to support the teaching interaction and human-computer interaction of the Smart classroom, which involves convenient operation, smooth interaction and interactive tracking. In convenient operation, the Smart classroom should be able to support the man-machine natural interaction, interactive equipment and interface with a simple, full-featured, clear navigation, consistent with the operating habits and characteristics, touch, visual and voice interaction can improve the mouseman-machine interactive experience of the keyboard, the interaction tends to be more natural. In smooth interaction, the Smart classroom hardware should meet the interactive needs of the multi-terminal, and a large amount of data.

Testing

Testing dimension represents perception of the physical environment and learning behavior in Smart classroom. The physical environment factors, including air, temperature, light, sound, color, odor etc, affect the physical and mental activities of teachers and students (Li Bingde, 1991). With the development and popularization of sensor technology, a variety of sensors can be used in Smart classroom to detect indoor noise, light, temperature, odor and other parameters timely, automatically adjusts the blinds, lamps, air conditioning, fresh air system equipment in the light of default ideal parameters, which maintain sound, light, temperature, air regulator suitable for students' physical and mental health status in the classroom

Three Typical Smart Classroom

According to 'SMART' model, Manageable and Testing dimensions are the common requirements of the smart classroom. Manageable dimension requires Smart classroom should be achieved for all equipment, system, resource monitoring and management.

Testing dimension includes two aspects. On the one hand, by monitoring the indoor air, temperature, light, sound, color, odor and other factors, Testing become reasonable. On the other hand, teachers can use classroom recording and broadcasting system records the teaching process and the use portable computing devices to record interactive process and to monitor learning outcomes, thus completing the tracking of the learning process.

The traditional classrooms, originally supports imparting knowledge, unable to meet the

actual needs of the classroom teaching nowadays. The redesign of traditional classrooms, multimedia classroom and networked classrooms is urgently needed. We propose three types of smart classroom, which is high definition smart classroom, deep experience smart classroom and rich interactivity smart classroom.

Terms and Definitions

Smart Classrooms: refers to the Classrooms that allow presenters network access and the ability to project data and video onto a screen via a video data/video projector or flat screen installed in the classroom.

Perceived: refers to the process of attaining awareness or understanding of sensory information on the basis of their experience, expectations, competencies.

Performance: refers to the pass percentage of the students in a highest class the teacher handles.

School Teachers: refer to persons working as teachers in a Government, Government Aided, Matriculation schools and imparts the knowledge, provides learning experiences to the pupils.

Madurai District: refers to one of the district of Tamil Nadu State in India.

Objectives of the Study

1. To find out the level of perception on smart classroom among the school teachers.
2. To find out whether there is a significant difference in perception on smart classroom among the school teachers in terms of select population variables.
3. To find out the performance of school teachers.
4. To find out the relationship between the perception on smart classroom and the performance of the school teachers.

Hypotheses of the Study

Based on the review of literature and the experience, following hypotheses were proposed

1. School teachers have high level of perception on smart classroom.
2. There is a significant difference between the male and female school teachers in their perception on smart classroom.
3. There is a significant difference in the perception on smart classroom among the school teachers in terms of their Locality of the School.
4. There is a significant difference in the perception on smart classroom among the school teachers in terms of their Computer Knowledge.
5. Performance of the school teachers is high.
6. There is a significant positive relationship between perception on smart classroom and performance of the school teachers.

Tool used for Measurement of Perception on Smart Classroom

A tool on 'perception on smart classroom' was developed and standardized by Manny-Ikan, Dagan (2007) was used to assess the perception of school teachers on smart classroom. The tool consists of 30 statements.

Smart Classrooms among the School Teachers

Hypothesis no.1:

School teachers have high level of perception on smart classrooms. Average score of perception on smart classrooms among school teachers is 33.8, while the theoretical average is 30 only. Hence the school teachers have above average level of perception on smart classrooms. In other words, school teachers have high level of perception on smart classrooms.

Hence the hypothesis no.1 is accepted.

Perception on Smart Classrooms among the School Teachers: Gender-Wise

Hypothesis no.2:

There is a significant difference between male and female teachers in their perception on smart classrooms. The details of statistical measures and results of test of significance of difference between mean scores of perception of school teachers on smart classrooms in terms of gender are given in table no.1.

Table no.1: Statistical measures and results of test of significance of difference between the mean scores of perception on smart classrooms: Gender- wise

Variable	Sub- Variables	N	M	σ	t value	Significance @0.05 level
Gender	Male	96	29.225	10.464	6.481	Significant
	Female	104	38	8.599		

It is evident from above table no.4.1 that the obtained 't' value 6.481 is greater than the table value 1.96 at the 0.05 level of significance. This shows that there is a significant difference between male and female teachers in their perception on smart classrooms.

Further it is noted that female teachers have high level of perception on smart classrooms than the male teachers.

Hence the hypothesis no.2 is accepted.

Perception on Smart Classrooms among the School Teachers: Locality of the School – Wise

Hypothesis no.3:

There is a significant difference in the perception of school teachers on smart classrooms in terms of locality of the school. The details of statistical measures and results of test of significance of difference between mean scores of perception of school teachers on smart classrooms in terms of locality of the school are given in table no.2

Table no.2: Statistical measures and results of test of significance of difference between the mean scores of perception on smart classrooms: Locality of the school - wise.

Variable	Sub- Variables	N	M	σ	t value	Significance @0.05 level
Locality	Rural	112	32.857	10.630	1.440	Not Significant
	Urban	88	35	10.212		

It is evident from above table no.2 that the obtained 't' value 1.440 is less than the table value 1.96 at the 0.05 level of significance. This shows that there is no significant difference in the perception of school teachers on smart classrooms in terms of locality of the school.

Hence the hypothesis no.3 is rejected.

Perception on Smart Classrooms among the School Teachers: Computer Knowledge-Wise

Hypothesis no.4:

There is a significant difference in the perception of school teachers on smart classrooms in terms of computer knowledge.

The details of statistical measures and results of test of significance of difference between mean scores of perception of school teachers on smart classrooms in terms of computer knowledge are given in table no.3

Table no.3: Statistical measures and results of test of significance of difference between the mean scores of perception on smart classrooms: Computer knowledge – wise

Variable	Sub-Variables	N	M	σ	t value	Significance @0.05 level
Computer knowledge	Yes	94	32.319	10.929	1.895	Not Significant
	No	106	35.113	9.925		

It is evident from above table no.4.8 that the obtained 't' value 1.895 is less than the table value 1.96 at the 0.05 level of significance. This shows that there is no significant difference in the perception of school teachers on smart classrooms in terms of computer knowledge.

Hence the hypothesis no.4 is rejected

Performance of School Teachers

Hypothesis No.5: Performance of the School Teachers is high.

The calculated score is 84 while the theoretical average value is 50. It is observed that the School Teachers have above average level of performance. In other words their performance is high.

Hence the hypothesis no.5 is accepted.

Hypothesis no. 6:

There is a significant positive relationship between Perception on smart classroom and performance of school teachers Result of relationship of perception on smart classroom with performance of school teachers is presented in table no.4

Variables	Correlation coefficient (r) Total N =200
Perception on smart classroom with Performance of school teachers	0.0981*

denotes Significant at 0.05 level

The above table no.4 shows that the calculated value 'r'= 0.0981 is less than the critical value i.e 0.0707, Hence there is a significant positive relationship between perception on smart classroom with performance of school teachers

Hence the hypothesis no.6 is accepted.

Conclusions

The major conclusions emerged out of the present study are presented below

1. School teachers have very high level perception on smart classrooms.
2. Perception on smart classrooms among school teachers is dependent upon
   - Sex
3. Perception on smart classrooms among school teachers is independent upon
   - Locality of the School
   - Computer knowledge¬

Educational Implications

It is inferred from the findings that the school teachers have high level of perception on smart classrooms. It reveals the standard of the present day school teachers that they are ready to accept and implement any innovations in the field of education. Hence it is the responsibility of the government to come forward with many innovative approaches in the field of education to sustain the standard and to develop further to the advanced level in the world arena.

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15

EMPOWERING TEACHER TRAINEES WITH INTEGRATED PERSONALITY TRAITS IN TEACHER EDUCATION

Abstract

The job of the teacher is to bring out hidden gem-like potentialities in pupils and to make all possible efforts to ensure that the tender plants (tender pupils) do not waste their sweet fragrance(innocent smiles) in wilderness (in unattractive and uncongenial environment) . Thus a teacher needs to understand the basic principles of psychological approaches in classroom management. So that optimum development of his pupils takes place in its natural setting Psychological strategy or approach in classroom management is considered compulsory. Students personal, social and academic functioning , as well as on teacher effectiveness and well being are depend upon the psychological approach of the teacher . This paper seeks to demonstrate the need for applying integrated personality traits a psychological strategy in classroom management in order to enhance well being and job performance both in teachers as well as in their future students. Emotions and skills affect learning processes, mental and physical health, the quality of social relationship and academic and work performance.(Brackett & Caruso 2007).Teaching is considered to be one of the stressful occupations, especially because it involves daily work based on social interactions where the teacher must make great effort to regulate not only his or her own emotions, but also those of students. Today we know that positive emotions encourage learning and the attainment of significant interpersonal relationship (Lyubomirsky, diemer & king, 2005), as well as many other benefits, It is therefore important to ensure that teachers must adapt Integrated personality traits a psychological strategies like motivation, good personal attributes, democratic teacher behavior, discipline control in classroom ,respect for the personality of the children, maintaining cordial relationship with students ,having positive attitude, emotional stability, good mental health, timely guidance and counseling, and being impartial to promote a good classroom management in order to encourage development and learning.

Keywords: *Empowering, Teacher Trainees, Integrated Personality and Teacher Education.*

Introduction

The term“ Personality has been derived from the latin roof ‘ Persona’ which refered to the facial mask worn by Roman actors on the stage and perhaps this mask determined how a person is perceived by others and how he affects other people. Psychologically every individual whatever be his status in society is a personality or has a distinct personality. Integrated personality refers to the “totality of what a person is” which includes all traits(physical psychological as well as a variety of acquired habitual traits) blended or organised within him in a characteristically unique manner that determines his modes of behaviour and his adjustments to the environment

Integrated personality

Allport points out Inegrated personality implies harmony between five important aspect of personality namely harmony between ones abilities and capabilities,hormony among ones interest, harmony between one’s self concept and social constraints and lastly between ones life goals and social codes of conduct. According to skinner the characteristics of an integrated personality are - harmonious development of thought feelings and intentions to activity affection sympathy and a desire to co- operate with others.

- confidence in ones abilities as well as awareness of one’s weakness.

Hence self- actualized personality emotionally and socially mature individual well adjusted personality, integrated personality are all almost synonymous. Such a person has realistic assessment of himself, his strength and weakness

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has a stable self concept involving a higher level of self esteem and fewer feelings of in adequency fewer evidences of compensatory behaviour and accepts himself leading to himself being accepted by others.

Integrated Personality traits

G.W Allport R.B cattell and H.J Eysenck are the chief exponents of the trait theory of integrated personality. A trait is a dimension of personality which can be measured and must describe the consistent behaviour of an individual . A trait in order to be a meaningful measure of the human personality must be a distinctive and enduring characteristic of an individual.

Salient traits of Integrated Personality have two important characteristics.

Self extension: Have clear life values and believe them personally and be involved in such values.

Self objectification: Able to evaluate oneself without any bias. These two characteristics will jointly generate a good philosophy of life .They believe and practise the dictum "Be yourself and accept yourself"

1. Determinants of Integrated Personality traits Personal factors: These include

(i) Physical structure of the individual
(ii) Emotional reactions
(iii) Aspirations
(iv) Attitudes
(v) Interests
(vi) Motivation
(vii) Intellectual Level thinking contemplation reasoning etc

2. Family factors.

(i) Discipline protection and rejection
(ii) Value placed on the sex of the child
(iii) Step parents
(iv) Nuclear or joint family
(v) Accommodation in the house
(vi) Economic politicals religious and social status of the family

3. Environment neighborhood community peer groups etc

1. Cultural Environment
2. Political environment
3. Religious environment
4. Social environment
5. Mass media environment
6. School / Institutional environment this includes (i) curriculum (ii) Technology of teaching (iii) co-curricular activities (iv) Disciplines - constructive creative social discipline (V)Teachers personality (vi) General tone of the school (Vii) Physical environment

Character and Integrated Personality traits of the teacher

A Teacher teaches not only by' what he says and does' but very largely by what he is. Children are imitative and suggestive by nature. They imitate the dress voice habits and manners of their teachers. The likes and dislikes of the teachers become their likes and dislikes . Gandhiji strongly denounces those teachers who teach one thing with lips and carry another in their heart. ' Man know thyself' is the advice given by Socrates in Greece. 'Self analysis on the part of a teacher is a necessary equipment'

Love for the profession

The teacher should feel that importance of his profession . He must be a teacher first and the teacher last. In the words of Secondary Education Commission 'They will not look upon their work as an unpalatable means of earning a scanty living but as an avenue through which they are rendering significant social service as well as finding some measure of self fulfillment and self expression.

Respect for the individuality of each child:

The child has his own individuality He thinks and feels .His sense of respect should not be injured. Emerson has rightly stated "The secret of education lies in respecting the pupil".

Teacher as a Guide

Child being the " Hero in the drama of Education" must be allowed to play and an active role in the process of education . Aurobindo writes "The first principle of true teaching is that nothing can be taught. The teacher is a helper and a guide. His business is to suggest and not to impose. He does not impart knowledge to him he shows him how to acquire knowledge for himself.

Fostering Integrated Personality traits among Student Teachers

In a simple and straight way it may be said that fostering integrated personality implies the development of the traits of the individual. Here

trait approach of personality comes to our help to have an adequate understanding of the problem. Attempt is made to detail the traits which constitute personality. At the same time it must be observed that personality is the whole individual and it is what one is what one was and what one will be. It includes an individuals past present and future. An individuals personality integration is determined and built in the present on the past and for the future.

Role of the Institution in the Development of Integrated Personality traits in students teachers.

The success of the school systems depends on his headmaster ability and skill as a sound and effective educational leader Great Headmasters make school great. "The reputation of the school and position that it holds in the society depends in a large measure on the influence that he exercises over his colleagues the pupils and their parents and the general public". Observed the Secondary Education Commission. As a leader of the instructional staff and the community the principal is in need of the qualities sought in all teachers. Society has no right to expect the principal to be a paragon of all virtues but qualities such as fairness ,patience, buoyancy, flexibility, sympathy, persistence and native ability must in some degree belong to all successful teachers The principal should acquire the basic philosophy of education professional knowledge and understanding an interest in ideas and interest in people and devotion to the highest ideals that will enable him to lead a faculty and community to the highest levels of co - operative work with youth.

Role of the teacher in the development of Integrated Personality traits of the students

1. Teacher as a "spiritual preceptor" as in the vedic period
2. Teacher as a 'communicator and provider of knowledge'
3. Teacher as a " learning facilitator"
4. Teacher as a ' Manager of learning activity in the pragmatic philosophy of Education '
5. Teacher as an ' Agent of social change' in the Democratic philosophy
6. Teacher as a ' Mediator' between the learner and the subject matter.
7. Teacher as a ' Transmitter of cultural heritage'
8. Teacher as the' Educational Media User'
9. Teacher as the 'Spearhead of change in the society '
10. Teacher as the ' Harbinger' of social change

Conclusion

Integrated Personality, in the sense self-expression of one to the outer world. An individual starts shaping this personality from birth through his interaction with numerous variables. That is, he lays the foundations of his life. In our modern social life, a healthy personality development enables the individual to perform his social role effectively to lead an organized and happy life and to gain a meaning in the society, institution, a social situation are the main environmental factors effective in the development of integrated personality traits in student teachers.

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16 METACOGNITION: A FOOTPATH TO LEARNING LOG DEVELOPMENT

Abstract

Metacognition is the processes that allow the people reflect on their own cognitive abilities. In other words, Metacognition, allows people to know, what they know or to think about their thinking. Metacognition is processes include planning, monitoring and one's own thoughts, problem solving, making decision and evaluating one's thoughts processes. A Learning Log is a journal which evidences our own learning and skills development. It is not just a diary or record of "What we have done" but a record of what we have learnt tried and critically reflected upon. This paper deals the relation between the metacognition and learning log in the learning process of the individual. Metacognition is the ultimate source for developing the learning log of their own learning.

Key words: *Cognition, Metacognition and Learning Log.*

Introduction

Metacognition was originally referred to as the knowledge about and regulation of one's cognitive activities in learning processes. Under the umbrella of this inclusive definition a proliferation of metacognitive terms has unfolded through the years. Learning logs are written records, where learners document their learning frequently (e.g., daily or weekly) reflecting on understanding thoughts and ideas about their study. Traditionally, learning logs were paper-based, but new information and communication technologies enable online learning logs. It is not necessarily a formal 'academic' piece of work. It is a personal record of our own learning. As such it is a document which is unique to us and cannot be 'right' or 'wrong'. A Learning Log helps us to record, structure, thinks about and reflects upon, plan, develop and evidence our own learning.

A learning log is

- Diverse
- Not necessarily written - but most of the time assume written format
- Generally reflective and accumulated over a period of time with the intention to
- Learn, i.e. Not purely descriptive
- Flexible (it can be structured or unstructured)
- A useful back-up to learning
- Something that accentuates favorable conditions for learning - e.g. Space, time,
- Reflection
- Applicable to all disciplines (not just literary).

Structured Learning Log

The example below is a highly structured kind of journal with specific questions that students have to answer in each entry. In particular, these questions aim at leading students to find out difficulties they encountered during the process of learning, also to provide themselves with plans and remedies in order to solve these problems.

This kind of reflective journal is suitable for courses with regular tasks of similar nature, like mathematics. This form of reflective journal is ideal and most effective for helping your students to realize their problems. However, it forgoes the space for them to have personal reflection, which also is an important component for cultivating a lifelong learner.

Unstructured Learning Log

This type of reflective journal is characterized by little prompt questions provided, which gave students the greatest freedom to ponder upon things that had the greatest personal significance to them. This regular writing exercise

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helped students organise their thoughts, reflect on their work, identify problems, and find solution to them independently.

However, students often felt confused and uncertain about what to write in this highly unstructured piece of writing. Therefore, it is recommendable to give simple instructions and jump-start questions to give students a lift, but these questions do not necessarily confine the structure or intrude the personal quality of students' writing.

Cognition

Cognition is the relating to or being or involving conscious intellectual activity (as thinking, reasoning, or remembering).

Metacognition

Metacognition is defined as "cognition about cognition", or "knowing about knowing". It comes from the root word "meta", meaning behind. It can take many forms; it includes knowledge about when and how to use particular strategies for learning or for problem solving. There are generally two components of metacognition: Knowledge about Cognition, and Regulation of Cognition.

Relation between Cognition and Learning Log

Learning log is a reflective thinking and problem solving ideology these are coming under the aspects of cognitive. Learning log is practice and reflective thinking, feelings and thoughts abouttheir learning process. In this regard students have to organize the leaning activities such as what they want to learn? How to learn? What Methodology has to follow? When to learn? Describe the goal and path to the goal. These are all the planning and developmental aspects of metacognitive knowledge.

Critical Reflection

The critical thinking is the attribute of cognitive and the learning log has elicited the reflective thinking about students learning task by means of insight. The reflective thinking is the root to identify the difficulties in their learning. Learning log help students to record the task and critical aspects, such as what I have learnt? What is the usefulness? What are the difficulties? Why the difficulties raised? What is cause for the difficulties? This critical reflection of learning log make their learning activities perfectly and meaningful.

Elaboration

In this cognitive process the elaboration is an important key prospectthe students have toelaborate the different contexts about the given learning task. The critical reflection needs it to elaborate the different contexts with relevant examples and illustrations. The elaboration which needs the skill of intelligence, creativity and performance. These skills are enhanced by learning log strategy to students and these skills have close association with cognition.

Relation between Metacognition and Learning Log

Learning log is the route to metacognition and it enhances the metacognitive skills such as problem solving, self regulation, self- diagnosis and task performance of students.Learning log strategy enhances the metacognitive knowledge and skills and it makes the learning and thinking process effectively to the students.

Problem Solving

The cognitive aspect of learning is the reflective thinking which has discussed earlier and the problem solving is the thinking about solutions for the reflections. The students areacquire the metacognitive skill of solving the problem in their learning process and find the solution themselves which makes them effective learner. Problem solving skill which makes sustainable and lifelong temperament within the individuals. The problem solving is the potentiality of the insight.

Self-Diagnosis

Theself-diagnosis is the components of metacognitive skill and this can emphasized in learning log strategy. The self-diagnosis is process of finding the probable reasons of the learning task. Explain the usefulness and difficulties of the learning task.

Self Regulation

The Self-Regulation is the one the metacognitive skill and in the learning log students can self-regulate their learning task. It helps them to How would overcome their deficiency? Time to time they can regulate their learning activities effectively.

Empirical Evidences

Student responses, as represented in the reflective journals, were analyzed and themes were identified from the data using a Grounded Theory approach (Charmaz, 2000). There was a surprising degree of consistency across the responses from students with a core set of characteristics being identified. These core characteristics can be summarized as follows:

- ✓ Confident in their own skills and abilities
- ✓ Patient and persistent, determined and calm
- ✓ Risk taker, courage to experiment, try new things, not afraid to make mistakes
- ✓ Methodical/ logical thinker
- ✓ Enthusiastic and motivated, enjoy using computers, positive attitude, personal interest;
- ✓ Technical knowledge
- ✓ Love of learning
- ✓ Constant use and deep immersion
- ✓ Problem-solving abilities deduction.

Cognitive Construction of Knowledge with Learning Logs

Keeping a log of learning experiences, insights, and reflections has long been accepted by educators as an effective pedagogical practice to enhance students' learning. the continuous use of weblogs potentially facilitates cognitive knowledge construction of the learning process in the following ways:

Active Knowledge Construction and Representation

Keeping weblogs requires students to actively construct meaning and organize their thoughts. Students learn through constant engagement in mental exercises to analyze and interpretknowledge and information from what they have learned in or outside of the classroom.

Incremental Improvement

The on-going use of weblogs promotes continuous learning insteadOf being exam-focused. Students build their own understanding and knowledge over time.

Self-Direction and Flexibility

Blogging exercises help students identify what they have learnedand the areas in which they need to improve through self-reflection. The self-directed study and(re)search allocates more control and freedom to students, allowing them to expand learning beyond the classroom. Learning log use may potentially enhance the lasting and incremental effect of learning by increasing students' involvement of knowledge construction and sense making in the process of learning.

Conclusion

Metacognition and the learning log have close association. Learning log is path to metacognition and it enhances the reflective thinking, problem solving ability, self-regulation, self-diagnosis and organizing ability. It also enhances the skill of intelligence, creativity and performance among the students. At the end learning is window to metacogition.

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Article

17 SOCIAL NETWORKING AND BEHAVIOUR PROBLEMS OF STUDENTS

Abstract:

Social Networking has paved the way for accelerating the paradigm shift in promoting Flexible Learning Environment to meet individual learning objectives of the subject matter content. It is of no doubt that majority of our teachers are facing difficulty in tackling the behavioral problems of students. The manifestations of behaviour problems of students in classroom with special focus on its varied causes from the perspective of teachers .From the opinion of teachers behaviour problems are manifested by students as disruptive behaviour, aggressive and antisocial, theft ,telling lies, refusal to work and cooperate with others and juvenile delinquency. The important guide lines which teachers can use and understand learners with behaviour problems in the classroom. Teacher attention is one of the most basic of all influences on students behaviour. The teachers smile , words of encouragement, praise, evaluation and silence powerfully affect student behaviour.

Keywords: *Learning Environment ,Classroom Behaviour, Learning Technology and Behaviour Problems.*

Introduction

Education has largely contributed to an increases in developing knowledge, providing an enabling environment for innovation and in building human capital required for a potential future knowledge economy. Global reforms in education and social networking have made a remarkable shift in the structure of technologies in education. Social networking is the concept of life long education covers formal, informal and non-formal modes of education. It encompasses non-institutional aspects of education as well as vocational training and leisure. It highlights the importance of continuous education in the global knowledge economy and gives special attention to program that empower young people.

Strategies of Instruction Based on Social Networking

1. Online Learning

Online Learning provides a convenient and flexible learning environment to learners without restriction of learning space, distance and time. In online forum discussion tutors and learners, and learners would 'meet' virtually and hold discussion a variety of matters such as assignment class tests and subject-matter. The main components of online communication are e-mail, bulletin boards chat rooms and electronic library access.

2. Web Based Learning

The introductory of many web based E-learning tools has made it relatively easy for educators to develop and manage educational content on the web. A large number of learners of all ages can access this advantage. Web based learning can provide an instantaneous dissemination of information to wider audience. The use of web at different level depends upon various factors like availability of technology, technical expertise, competency level of teacher and learner and access to technology by different target groups.

3. Internet – Based Video Conference

This enables an instructor to interact with students through slides and web based lecture notes or visit relevant websites. Internet based video conference from desktop personal

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computer requires, a web cam, a sound card, speakers, a microphone or handset, software and internet access.

4. Tele Conference

A teleconference is any live point to point electronically delivered two way conversation especially involving groups at separate locations. It is an extension of a simple telephone call.

5. E-mail

E- mail provides inexpensive and quick means of obtaining and sharing information amongst learners, with the teacher and with community at large. E-mail is an excellent tool for establishing difficult, cross cultural academic connection. It is a powerful tool to allow learners from various countries to interact.

Benefits of Social Networking in Classroom Instruction

- Improves efficiency both in teaching and learning.
- Increases motivation.
- Paves way for personality development.
- Active participation of student.
- Self-paced learning.
- Very flexible and rich medium for students to access the information.
- Better learning, retention and student performance.
- Multi-sensory learning experience.

Most Common Manifestations of Behaviours Problems Exhibited By Students

Attention seeking behaviour

As per the opinion of the teachers it should come as no surprise that one goal of child's misbehavior is attention. It is probably the most widely used explanation for why children misbehave. Children are generally very ego-centric. Without training, they will see that their world resolves around them and just another planet in their solar system, available to do their bidding. This dynamic begins at birth out of a need for survival but will require modification as the child ages.

Disruptive behaviour

Children attend school to be educated as members of society, capable of making informed decisions and increasing future career possibilities. However, some children have difficulty adjusting to the classroom environment and act out with disruptive behaviours not only distract from the child's education experience, but may also lead to social isolation. Disruptive classroom behaviours include aggressive behaviours, deviant behaviours, social disruptions and emotional disturbances. Aggressive behaviours include intimidating peers, engaging in physical altercations or damaging property. Deviant behaviours include blatant and sometimes vocal disregard of rules, as well as devaluing the teacher's expertise and judgment. Examples of social disruptions include interrupting discussion with off-topic information, engaging in private conversations or passing notes during instructional time. Emotional disturbances are temper tantrums.

Aggressive and antisocial behaviour

Aggressive students will often antagonize others, involves him / herself in fighting or instigating fights or arguments. This type can often be seen as a bully and tends to have just a few friends. He / she likes to solve problems by winning fights and arguments. Aggressive children often threaten others. Other students often fear the aggressor as he/she will be both verbally and physically aggressive.

As per the opinion of the teachers, the aggressor will rarely have self-confidence and gains it through aggressive behavior. Aggressors are attention seekers and they enjoy the attention they gain from being aggressive. Power brings attention and the aggressor has learned this. Due to the child's weaker self-image and the fact that he or she dosen't fit in, they try aggressive behavior and soon becomes leaders, even though they usually know that they are behaving inappropriately.

Refusal to work or cooperate with others

Students with behaviour problems often find it difficult to cooperate with others as opined

by the teachers. They show themselves reluctant in engaging the activities of school. They have an arrogant attitude towards everything. Adolescents of these types never complete their work on time and are usually susceptible to the punishments of teachers. They do not find it difficult to express their negative attitude in front of the authority and always show disrespect to the authority. Teachers opined that these students with behaviours problems deliberately skip themselves from the works vested on them and find it difficult to adjust with parents, teachers, peers and other members of the community.

Conclusion

Social Networking can extend the scope of education and training and be instrumental in providing new educational services at all stages in life. The behaviour problems of students, adolescence is an age they undergo sudden physical, emotional and psychological changes and become intensely aware of their behaviour activities. While passing through this phase, many doubts and questions may arise in their minds.

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Article

16

Role of Teachers in Shaping Group Relationship in the Classroom

Abstract

Every social system influences to a great extent the behaviour of its constituents. Students are not an isolated island. They interact with the environment for their development, which depends on social interaction. It is impossible to imagine the harmonious development of a student without proper socialization. Social interaction plays an important role in the development of intellectual and the abilities in the students. Students interact in groups in the classroom, on the playground and so on. In a classroom situation generally two types of roles are identified teacher's role and student's role. In group dynamics the teachers can provide a leadership role and now shifting from authoritarian to a democratic and participatory one. Teachers must encourage participation of students in all the school activities. To improve the classroom climate students should be taken into confidence and decisions taken democratically. Teacher's role is to facilitate the learning process. They are no more the instructor and the director of learning; they are facilitators of learning of their students. In teaching learning process teachers should act as guide to promote learning and develop group relationship in the classroom. They should motivate students to participate in learning activities individually or in groups enhances their learning. This paper aims to examine the role of leadership in group dynamics and need of group dynamics in the classroom .It also explain the measures can be used to improve the classroom climate.

Keywords:

In a country where nearly half the population is illiterate, a teacher is looked upon as a leader in a community, especially so in a rural areas and small communities. In some of the educationally backward rural regions, a teacher is even now the only literate person who is given high respect and is expected to be the leader of the community. A teacher's teaching expertise is used for spreading literacy, for providing educational leadership and also for providing services during elections, collections of census data and other large scale national activities which require trained educated persons. Teachers are counted upon for responsible and important tasks of public services. Teacher is an important constituent in the instructional process and plays an important role in shaping the behavior of students. The way he teaches and manages the students has an effect on their learning. The climate solely depends upon their relationships. A sound relationships provides a tension free environment to the students to learn more and to compete in the class. To improve the classroom learning climate, the teachers should develop the group relationship among the students. Teachers have the responsibility to be a great leader in the classroom and too many groups of people. The curriculum in primary schools especially has broadened to include many 'extras', and there is very little time to simply talk. But if we want to 'teach' children to form relationships, we should allow them to practice it in the classroom. It may also be difference related to ability, where a child who is very bright, and gets his work done before others, or a child who is weak and is unable to do his work without help, may be singled out by the group. It is essential to create a classroom/school environment where difference is respected and valued.

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The teacher leads by:

- Establishing and following routines and schedules
- Effective Communication
- Listening to others
- Making others feel welcome and giving them a sense of belonging
- Leading by example
- Appreciating and developing the strengths in others

Group dynamics is the study of groups, and also a general term for group processes. Relevant to the fields of psychology, sociology, and communication studies, a group is two or more individuals who are connected to each other by social relationships. Because they interact and influence each other, groups develop a number of dynamic processes that separate them from a random collection of individuals. These processes include norms, roles, relations, development, need to belong, social influence, and effects on behavior

Need to study group dynamics:

A teacher deals with groups of students for five to six hours everyday. A class is a group of students with different social-economic background. The teacher should have a thorough knowledge of the interaction process among the students. Well-equipped with the basic knowledge of group dynamics can provide appropriate guidance to students for their adjustment and also improve the emotional and social climate of the class.

The teacher must know how adolescents from groups and what are the structure of groups and other mechanisms operating in the groups' situation. Students need love and motivation from their groups. Smooth functioning of the group is important for effective learning. A teacher's knowledge of group dynamics can improve the social and emotional climate of the school/class. Teacher can improve group relations to maintain proper mental health of the individual members and group relationships in the class.

Teacher is important in the process of social adjustment to train the students to face personal, social and economic problems in their life. Students' adjustment with society or in school largely depends on their interaction with external environment in which they live.

Students in social situations mostly interact in groups in classroom and on the playground.

Dimensions of group process

- Patterns of communication and coordination
- Patterns of influence
- Roles / relationship
- Patterns of dominance
- Balance of task focus vs social focus
- Level of group effectiveness
- How conflict is handled
- Emotional state of the group as a whole

For an effective participation in a group, specially Leadership role teacher must be able to:

- Communicate
- Construct and maintain trust:
- Identification with the group
- Superiority over the member of the group
- Knowledge of psychology
- Dynamic and flexible

Group Relationship in the class

Analysis of sociometric studies shows the following patterns of relationship among the students of the class:

- **Stars:** Stars are the students in the class whom majority of the students like.
- **Isolates:** The students whom no member of the class likes or wants to associate. They are rejected by all.
- **Mutual pairs:** There are the students who like each other. There is reciprocal relationship among mutual pairs of students.
- **Chains:** There are chains of relationship among students where A chooses B and B chooses C. There is a closed circle where A likes B, B likes C and C likes A.

Relationship Building Tasks

- Laying foundations for trust
- Establishing the structure and form the relationship
- Providing appropriate consent process
- Developing a collaborative and cooperative working alliances
- Developing psychological qualities

Leadership in the Classroom

A classroom is a group of learners and its two basic objectives:

- To complete learning tasks
- To maintain positive and effective relationships among group members

Leadership consists of actions that help the group to complete its tasks successfully and maintain effective working relationships among its members. Teachers should know that, groups function most effectively when leadership tasks are shared among group members. Most students are accustomed to being in classes where the teacher plays all of the leadership roles. Teacher want students to play leadership role and must give them permission to do so, and perhaps guidance in how to best take on the roles. When teachers neglect leadership and do not provide leadership themselves or invite students to take on leadership roles, students may themselves elect to play informal (and frequently inappropriate) leadership roles in the classroom, simply to pull the individuals together as a group.

The Classroom climate should be one in which students' involvement is ensured. A teacher's direct and indirect behaviour influences the personality development of students. Democratic leadership provided by the teachers develops positive traits in students, which help in their adjustments. Group relationship plays an important role in learning. Teacher create conductive and cohesive climate in class. Today education for all the sections of society necessitated teachers to think and develop interest in group dynamics. This has now been incorporated as an integral part of the teacher education programme.

Measures can be used to improve the classroom climate:

- **Teacher's behaviour**: Teachers are models for the students.Their behaviour should be impartial. The classroom climate as a social group can be charged with emotions.
- **Discussions:** To improve the classroom's emotional climate, free discussion should be occasionally arranged for the group. Suggestions should be invited from students to improve upon the existing classroom climate.
- **Effective Communication**: It is an important feature o interaction between students. Lack of proper communication causes disruption in class. Teachers should help students understand each other in formal and informal meetings. They can be encouraged to meet each other and also the teacher freely. The classroom communication should be a two-way process.
- **Cohesiveness:** It refers to the degree to which the members of a group wish to remain in the group. It contributes to the potency and is totality of a group. It also increases the importance of membership for the group members.
- **Counselling**: Counselling is learning-oriented process which usually occurs in an interactive relationship with the aim of helping the person learn more about self, others and situations. It also to learn to put such understanding to being an effective member of the society. Proper counseling can improve the emotional climate of the class.
- **Tours and visits**: Co-curricular activities such as tours, etc., give students opportunities to understand each other and improve the emotional and social climate of the group.

Conclusion

Teacher is the central figure in the school and classroom. They can influence the behavior of students both directly or indirectly. They can also motivate the students to form group as well as develop the relationships among students in the classroom. Teachers can help students build self-confidence, patience, co-operation and adjustment by developing group relationships. Teachers should remember that "Group dynamics" is both the ends and the means of the educational process.

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