

Vol 3 Issue 2 March 2013

Impact Factor : 0.2105

ISSN No : 2230-7850

Monthly Multidisciplinary
Research Journal

*Indian Streams
Research Journal*

Executive Editor

Ashok Yakkaldevi

Editor-in-chief

H.N.Jagtap

IMPACT FACTOR : 0.2105

Welcome to ISRJ

RNI MAHMUL/2011/38595

ISSN No.2230-7850

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken, Aiken SC 29801	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Department of Chemistry, Lahore University of Management Sciences [PK]
Janaki Sinnasamy Librarian, University of Malaya [Malaysia]	Catalina Neculai University of Coventry, UK	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Horia Patrascu Spiru Haret University, Bucharest, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus Pop	George - Calin SERITAN Postdoctoral Researcher	Nawab Ali Khan College of Business Administration

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University, Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU, Nashik
Salve R. N. Department of Sociology, Shivaji University, Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust),Meerut	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Ph.D , Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra
	Sonal Singh	

**Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net**



INTERACTION STYLE OF THE MATHS TEACHER IN THE CLASSROOM

JYOTI BALA

Teacher,
Government High School, Aghore, Jammu.

Abstract:

This article reports a study on the math teacher's interaction with higher and lower achiever girl students of K.Vs in one of the district of Jammu and Kashmir. A sample of 200 girl students of 9th and 10th class was randomly drawn from 4 K.Vs. QTI questionnaire was used for assessing teachers' interaction with the students. The results were analyzed by using the C.R. The results showed significant differences in the interaction for leadership and strictness trait of science teachers as evaluated by higher achiever and lower achiever girl students of K.Vs. further findings show no differences in the interaction for helpful, understanding, responsibility, uncertain, admonish and dissatisfaction trait of math teachers as evaluated by higher and lower achiever girl students of K.Vs.

INTRODUCTION:

Education in the present day context is perhaps the single most important mean for individuals to improve personal endowments, build capacity levels, overcome constraints and in the process, enlarge their available set of opportunities and choices for a sustained improvement in wellbeing. It is not only means to enhance human capital, productivity and the compensation to a labor, but it is equally important for enabling the process of acquisition, assimilating and communication of information and knowledge, all of which augments a persons' quality of life.

The teacher plays an important role in national building that is why he is also known as a national builder. Teacher is the spiritual and intellectual father of the students. The teacher is more important factors in teaching learning process. As one is the best medium of communication between the two. But also the pupil when he has to handle success of the teacher will be revealed, should be by his ability to arouse, increase and maintain interest of pupil in learning by adapting different techniques of motivation. Teaching is the focus of any curriculum and is the most prevalent method used by teachers in all of the primary course, high- School and even high education levels. Teaching is a part of all of us that deeply has its roots among the expectation and methods of thinking not only for teachers but also school Managers and educational units.

RATIONALE OF THE STUDY

The teacher plays a key role in the teaching learning process. He can work miracle in the teaching learning situations. The whole process of learning depends on the effectiveness and value of teacher, his leadership qualities and his ability to make the students. The teacher's effectiveness is very important to make the process of education successful. If teacher is effective, he had clear understanding of concepts, making the best use of time, adapt in motivation, planning of lesson, use of illustrative aid, involving pupils in the lesson, aware of source materials of knowledge and new techniques of teaching, management of classroom in democratic and free atmosphere pupils seek maximum help from effective teacher.

Title : INTERACTION STYLE OF THE MATHS TEACHER IN THE CLASSROOM
Source: Indian Streams Research Journal [2230-7850] JYOTI BALA yr:2013 vol:3 iss:2

The issue of teacher's interaction with the students has long been a topic of interest and concern to researcher in the field of education and psychology. Dubey, B.B. (1979) studied the verbal classroom behavior of the teacher and find out that teacher had positive relation with the pupil and positive relation had a positive effect on the academic achievement of the students. Dholakia, B.B (1985) find out that pupils felt their teachers performed their duties with no sense of belongingness and did not care for pupils' expectations and aspirations. Saha (2007) conducted a study on gender, attitude towards math's cognitive style and achievement in math's and found that all the three contributes in the achievement of the subject. Thomas (2007) conducted a study to determine the attitude towards math's and achievement by combining co-operative learning strategies with instruction delivered using and integrated learning system Kukeri (1992) attempted to find the psychological correlation of teaching efficiency and found that efficiency of the teacher to a large extent depends upon the psychological factor. Burstein (1992) in a comparative study of factors influencing mathematics achievement found that there is direct link between students attitude towards mathematics and students outcome. Koth, Bradshaw and Leaf (2008) drew the conclusion that improving relations between teachers and students on classroom is more important than school level factors. School effectiveness seems highly dependent on qualities in individual classroom environment. Cole and Chan (1994) interaction in teaching is a basic element and it has the fundamental role in efficient teaching. Keeping in view the paucity of Indian researchers on the teachers' interaction style and inconsistent findings, an attempt has been made to study the interaction style of math teacher in the classroom.

OBJECTIVES OF THE STUDY

1. To identify the higher achiever and lower achiever girls of K. Vs of Samba.
2. To identify the interaction style of the math's teachers in the K. Vs of Samba.
3. To study the interaction style of math's teachers with higher achiever and lower achiever among girls.
4. To study the significant difference in the leadership, helping, understanding, responsibility/freedom, uncertain, admonishing, strict, dissatisfied traits in the interaction of the teachers in math subject.
5. To suggest some educational implications on the basis of the result.

HYPOTHESIS OF THE STUDY

1. There is significant difference in the teacher interaction on leadership trait among higher achiever and lower achiever girls.
2. There is significant difference in the teacher interaction on helpful trait among higher achiever and lower achiever girls.
3. There is significant difference in the teacher interaction on understanding trait among higher achiever and lower achiever girls.
4. There is significant difference in the teacher interaction on responsibility/ freedom trait among higher achiever and lower achiever girls.
5. There is significant difference in the teacher interaction on uncertain trait among higher achiever and lower achiever girls.
6. There is significant difference in the teacher interaction on admonish trait among higher achiever and lower achiever girls.
7. There is significant difference in the teacher interaction on strictness trait among higher achiever and lower achiever girls.
8. There is significant difference in the teacher interaction on dissatisfaction trait among higher achiever and lower achiever girls.

DELIMITATIONS OF THE STUDY

1. The present study was confined on the teacher interaction in the project of maths.
2. The study was limited to the sample of 200 students.
3. The study was limited to only girl students.
4. The study was limited to a single district of Jammu Division.
5. The data was collected only from higher achiever and lower achiever among girls.
6. Previous year marks was used to get higher achiever and lower achiever in math.
7. No aptitude test for math was taken for getting higher achiever and lower achiever in math.

TOOLS EMPLOYED

In the present study the tools employed for the collection of data was a questionnaire based on teacher interaction given by Wobbles. The questionnaire consists of 48 items on the various aspects of teacher interactions.

SAMPLING

In the present study 200 girl students of 9th and 10th class of K.Vs of Samba district of Jammu and Kashmir was taken.

STATISTICAL TECHNIQUE USED

The following statistical techniques were employed in the analysis of data.

- Mean
- Standard Deviation
- C.R

RESULTS AND FINDINGS OF THE STUDY

In order to accomplish the objectives of the study, mean and critical ratio is employed to find out the interaction between the teacher and students

Table 1.1
Showing the means difference in the teacher Interaction for leadership trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	17.70	3.20
Lower Achiever Group	14.50	

Table 1.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for leadership trait as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	17.70	2.79	2.18	Significant at 0.05 Level
Lower Achiever Group	14.50	3.72		

Table 2.1
Showing the means difference in the teacher Interaction for helping trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	15.80	2.10
Lower Achiever Group	13.70	

Table 2.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for helping trait as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	15.80	2.56	1.37	Insignificant at both level
Lower Achiever Group	13.70	2.28		

Table 3.1
Showing the means difference in the teacher Interaction for understanding trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	16.50	2.30
Lower Achiever Group	14.20	

Table 3.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for understanding trait as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	16.50	3.98	1.78	Insignificant at both level
Lower Achiever Group	14.20	.94		

Table 4.1
Showing the means difference in the teacher Interaction for responsibility/freedom trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	12.60	1.90
Lower Achiever Group	10.70	

Table 4.2
Showing the interaction of Teachers of CBSE Schools in Math's Subject for responsibility/freedom trait as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	12.60	2.53	1.47	Insignificant at both level
Lower Achiever Group	10.70	3.23		

Table 5.1
Showing the means difference in the teacher Interaction for uncertain trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	9.70	1.10
Lower Achiever Group	10.80	

Table 5.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for uncertain trait as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	9.70	2.28	.87	Insignificant at both level
Lower Achiever Group	10.80	3.28		

Table 6.1
Showing the means difference in the teacher Interaction for admonishing trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	11.9	.20
Lower Achiever Group	12.1	

Table 6.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for admonishing as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	11.9	3.92	.13	Insignificant at both level
Lower Achiever Group	12.1	2.72		

Table 7.1
Showing the means difference in the teacher Interaction for strictness trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	15.3	2.60
Lower Achiever Group	17.9	

Table 7.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for strictness as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	15.3	3.07	2.34	Significant at 0.05 Level
Lower Achiever Group	17.9	1.70		

Table 8.1
Showing the means difference in the teacher Interaction for dissatisfaction trait by Higher Achiever and Lower Achiever Students.

Group	Mean	Mean Difference
Higher Achiever Group	11.80	.80
Lower Achiever Group	12.60	

Table 8.2
Showing the interaction of Teachers of CBSE Schools in Math Subject for dissatisfaction as evaluated by Students

Group	Mean	S.D	C.R	Level of Significance
Higher Achiever Group	11.80	3.60	.63	Insignificant at both level
Lower Achiever Group	12.60	1.67		

FINDINGS

There are significant difference in the interaction for the leadership trait of math's teacher as evaluated by higher achiever and lower achiever girl students. Table 1.2 also clears that high achiever groups evaluate their teachers as high in leadership trait in comparison to lower achiever students.

There are insignificant difference in the interaction for the helpful trait of math's teacher as evaluated by higher achiever and lower achiever girl students.

There are insignificant difference in the interaction for the understanding trait of math's teacher as evaluated by higher achiever and lower achiever girl students.

There are insignificant difference in the interaction for the responsibility/ freedom trait of math's teacher as evaluated by higher achiever and lower achiever girl students.

There are insignificant difference in the interaction for the uncertain trait of math's teacher as evaluated by higher achiever and lower achiever girl students

There are insignificant difference in the interaction for the admonish trait of math's teacher as evaluated by higher achiever and lower achiever girl students.

There are significant difference in the interaction for the strictness trait of math's teacher as evaluated by higher achiever and lower achiever girl students. . Table 7.2 also clears that lower achiever groups evaluate their teachers as high in strictness trait in comparison to higher achiever students.

There are insignificant difference in the interaction for the dissatisfaction trait of math

IMPLICATIONS AND CONCLUSIONS OF THE STUDY

Teacher interaction, as is the saying, it is more or less dependent upon the students perception, the teachers should always be interactive. In this regard, it is always worthwhile, that the interaction makes the teacher more popular and competent. It is important to provide the right environment where the teacher and students may be free to act as per their wishes and full autonomy may be granted to them for proper understanding. It is very important to see that the teachers are given their due rights in accordance of the principles and lines, so that the frustration may not creep, leading to fall of interaction.

In the present study leadership, helping, understanding, responsibility/freedom, uncertain, admonishing, strict, dissatisfied traits in the interaction of the teachers in math subject have been taken.

As for as leadership trait is concerned, an ideal teacher acts as a leader for his students. He keeps in view the psyche of student and plans his/ her instruction accordingly. A successful teacher motivates his students in such a way that they can put their hundred percent and get the work done for the achievement of the ultimate objectives.

Similarly strictness trait among teachers has an effect on his interaction with the students; this trait has a significant impact on the achievement on the students. Thus, the teachers should create a congenial atmosphere in the classroom as the children spend most of their time in the school, so for their proper

development understanding between teacher and students is must. It is also important for the better development of the pupils especially the lower achiever students a limited strictness should be used by a teacher.

SUGGESTIONS FOR FURTHER RESEARCH WORK

The following are the suggestions for further research work:

The present study deals with girls of K.Vs of one district of J&K state. Same type of work can be done on other types of school and also on boys.

The study can be simultaneously conducted in different states of India.

A similar study can be undertaken on rural and urban areas.

A similar study can be undertaken on different levels of education.

A similar study can be undertaken on medical colleges, engineering colleges and some other professional colleges' students.

REFERENCES

- DUNHILL, J. (1961): "A teacher training manual" University of London Press ltd., London.
- GUPTA, VISHNU (2006): "Teacher effectiveness of middle and high school teachers in relation to their introvert" unpublished Dist. M.A. (Edu.) Department of education, Univ. of Jammu.
- KEITH, DAVIS (1982): "Human behavior of work", Tata McGraw, publishing co. New Delhi
- MATHEW, M.J. (1993): "Organization theory and behavior" RBSA publishers, Jaipur.
- QUINA J. (1984): "Effective Secondary Teaching; Going beyond the Bell Curve" Harper and Row publishers, New York.
- SAHA, S. (2007) "A study of Gender Attitude to math's cognitive style and achievement in math's" Journal of experiments in education
- THOMAS (2006): "The effect on students achievement and attitude using integrated learning system with cooperative pairs" Journal of educational technology, research and development.
- WILSON, J.D. (1988): "Appraising Teaching Quality" Hodder and Stoughton, London

WEB REFERENCES

- http://www.tn.gov.in/spc/tenthplan/ch_4_1pdf
- <http://www.csun.edu/education.htn>
- <http://www.cte.illinois.edu/resources/topics/interaction> →
- <http://www.wikipedia.org/wiki/interaction>
- <http://www.wikipedia.org/wiki/mathematics>
- <http://www.shodganga.inflibnet.ac.in>
- <http://ludwing.missokri.edu/405/review.html>

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished research paper.Summary of Research Project,Theses,Books and Books Review of publication,you will be pleased to know that our journals are

Associated and Indexed,India

- * International Scientific Journal Consortium Scientific
- * OPEN J-GATE

Associated and Indexed,USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Indian Streams Research Journal
258/34 Raviwar Peth Solapur-413005,Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.isrj.net