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**A COMPARATIVE STUDY OF TEACHAR EFFECTIVENESS OF SCIENCE AND ART
TEACHARS (IN SPECIAL REFERENCE OF BLOCK DHABHARA, DISTRICT
JHANJGIR-CHAMPA, CHHATTISGARH)**

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Abstract

The study was intended to investigate the significance of difference in Teacher Effectiveness of Science and Art teacher. The study was conducted on a sample of 80 teachers (40 Science and 40 Art teachers) of block Dhabhara at Janjgir-Champa district in Chhattisgarh. The self constructed Teachers Effectiveness questionnaire was used to collect data. Some statistical techniques i.e, mean, Standard deviation, t-test, critical ratio were used for statistical analysis of the data. The result of the study shows that there is no significant difference in Teacher Effectiveness of Science and Art teachers of block Dhabhara,district Janjgir-Champa, Chhattisgarh.

Introduction: “A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continuous to burn its own flame.” - Rabindra Nath Tagore
A teacher present the past, reveals the present and creates the future. Teachers have greatest potential to influence children education. It is known fact however, that education will never be complete and will never achieve its purpose without its facilitator, the teachers. This is because teachers occupy the most important part in the educational process (Rao & Kumar, 2004) and accountable in the educational process (David & Macayanan, 2010, p.74). Students are the subjects of teaching activities but the key factor of teaching effect is teacher because education quality is influenced by the teacher effect (Andrew & Schwab, 1995; Bents, M. & Bents,

R.,1990). Teacher with good effectiveness usually value teaching performance, maintaining teaching quality, pursue best teaching effectiveness and improve students' learning effectiveness. The term teachers effectiveness is used broadly, to mean the collection of characteristics, competencies and behaviors of teacher's at all educational level that enable students to reach desired outcomes (Hunt, 2009). Barr (1952) explains the teacher effectiveness as a relationship between teacher, pupils and the other persons concerned with the educational undertaking. Awofala (2012) claimed that teacher effectiveness is synonymous to individual teacher's performance and teacher effectiveness is encompassed in knowledge, attitude and performance (Hunt, 2009).

Teacher effectiveness is important because the effectiveness of every teacher is life of every educational institution (Rao & Kumar, 2004). An effective teacher not only imparts the entire educational curricula allotted to her/him in the best and most efficient manner but also ensures the optimum development of students (Usha A.Barkar, 2013). Effective teacher are those who achieve the goals they have set for themselves or which they have set for them by others (Anderson, 2004,). They enable their students to attain specific learning objectives as well as broader goal such as being able to solve problems, think critically, work collaboratively, and become effective citizens (Hunt, 2009). Effective teachers usually are remembered as holding high expectation, pushing students to achieve (Irvine, 2001) and consistently challenging them to do their best (Thompson, Greer & Greer, 2004). Since effective teachers are a must, evaluating teachers to help them be effective is necessary. Evaluating the performance of teachers in educational institution is tantamount to evaluating the learning of students (David & Malayanan,2010) therefore evaluation of teacher effectiveness is important (Hoyt & Pallet, 1999).

The present study aimed the comparative study of Teacher Effectiveness of Science & Art teachers of block Dhabhara, district Janjgir-Champa, Chhattisgarh.

Review of related literature: In past, following research work has been done in national & international level: Kaur, Kamalpreet (2014) conducted a study on teachers effectiveness ,general intelligence and creativity of secondary school teachers and found that teachers

effectiveness is positively and significantly related with general intelligence & creativity among secondary school teachers.

Borkar, Usha A (2013) conducted a study on teacher effectiveness of secondary school teachers in relation to teacher stress and found that less effective teachers are under a high level of stress than the highly effective teacher.

Tyagi, Shweta (2013) conducted a study on teaching effectiveness of secondary school teachers in relation to their demographic characteristics and found that the Demographic characteristics were influenced on different dimensions of their teaching effectiveness of secondary school teachers.

Calguas, Glenn M.(2012) conducted a study on teacher effectiveness school in higher education : Development and psychometric properties and found that teacher effectiveness scale in higher education is a psychometrically sound scale that measure the multidimensional aspects of Teacher Effectiveness in higher education.

Hussain, Liaquat ;Khan, Allah Noor ; Shah, Muhammad; Sibtain, Mahammad(2011) conducted, a study or comparative effectiveness of Male & Female teachers as perceived by their students & founds that there is significant difference. Male teachers are more effective than the female teachers.

Lin, Ruilin; Xie, Tingchen; Jeng ,Yoau-chau ;Huang, Shihan (2010) conducted a study on the Relationship between teacher Quality and teaching effectiveness perceived by students from industrial vocational high school and result of the study shows that teachers quality and teaching effectiveness are positively related.

Goe, Laurea (2008) Summarized a broad class of teacher evaluation instruments used to assess teacher effectiveness encompassing –classroom observations, principle evaluation, instructional artifact, portfolio, teacher self report measure, student survey and value added model.

Stronge, James H. (2002) describes that the qualities of effective teachers are role of caring, listening understanding & knowing students easily.

According to kwon (1994), effective teachers has the following characteristics -Responsibility, competency, Knowledge ability, professionalism, Honesty, Reliability, Intelligence, Trust Worthiness & Willingness to work hard.

Medley (1979) believed that teachers with effectiveness should possess the following characteristics: have a satisfying personality, implement teaching methods efficiently, create a fine learning atmosphere, be proficient in all kinds of teaching abilities and know when to use each kind of teaching ability.

Objectives of the study: Keeping in view of the formulation of the problem for present study, the following objectives were framed –

- (1) To study the Teacher Effectiveness of Science teachers.
- (2) To study the Teacher Effectiveness of Art teachers
- (3) To comparative study the Teacher Effectiveness of Science and Art teachers.

Hypothesis of the study: In order to achieve the aforesaid objectives the following hypothesis of the present study were formulated-

- (1) There would be no significant difference in the Teacher Effectiveness of Science and Art male teachers.
- (2) There would be no significant difference in the Teacher Effectiveness of Science and Art Female teachers.
- (3) There would be no significant difference in the Teacher Effectiveness of Science and Art teachers.

Methodology: For the present study, researcher used the Descriptive survey method.

Sampling technique: For present study, the techniques of random and purposive sampling were employed to select Science & Art teachers from Dhabhara block, District Janjgir-Champa, Chhattisgarh.

Sample and data collection: For present study, 80 teachers from block Dhabhara, District Janjgir -Champa, Chhattisgarh were selected as sample. Out of total sample 40 Science (20 male and 20 Female) teachers and 40 Art (20male and 20 female) teachers were selected. For data collection, self constructed Teachers Effectiveness questionnaire was administrated to teachers individually.

Tool: For present study, self constructed Teachers Effectiveness questionnaire was used to collect data which consisted 58 items.

Statistical technique: Mean, standard deviation, t- test, critical ratio were used for statistical analysis of data.

Analysis and interpretation of data: The mean and standard deviation for Teacher Effectiveness were calculated separately. The t- value and critical ratio were calculated to determine the significance of the difference between means. The value of mean, standard deviation, t-test and critical ratio are presented in table 1, 2 and 3.

Hypothesis 1: There would be no significant difference in the Teacher Effectiveness of Science and Art male teachers.

Table: 1 Teacher Effectiveness of Science and Art male teachers

Subjects	No. of male teachers (N)	Mean (m)	t-value	Level of significance
Science	20	246.35	0.31	0.05
Art	20	249		

Table 1 reveals that the values of mean of 20 Science and 20 Art male teachers are 246.35 and 249 respectively. The calculated value of is 0.31. For 38 degree of freedom and at 0.05 significance level the table value of t is 2.02. Calculated value of t is less than the table value; therefore difference is not significant .This leads to the acceptance of hypothesis 1.

Hypothesis 2: There would be no significant difference in the Teacher Effectiveness of Science and Art Female teachers.

Table: 2 Teacher Effectiveness of Science and Art female teachers

Subjects	No. of female teachers (N)	Mean (m)	t-value	Level of significance
Science	20	249.55	0.09	0.05
Art	20	248.80		

Table 2 reveals that value of mean of 20 Science and 20 Art female teachers are 249.55 and 248.80 respectively. The calculated value of t is 0.09. For 38 degree of freedom and at 0.05significance level, the table value of t is 2.02. Calculated t value is less than the table value, therefore difference is not significant. This leads to the acceptance of hypothesis 2.

Hypothesis 3: There would be no significant difference in the Teacher Effectiveness of Science and Art teachers.

Table: 3 Teacher effectiveness of Science and Art teachers

Subjects	No. of teachers (N)	Mean (m)	Standard deviation (SD)	Critical Ratio (CR)	Level of significance
Science	40	247.97	23.15	0.57	0.05
Art	40	251.17	26.62		

Table 3 reveals that value of mean of 40 Science and 40 Art teachers are 247.91 and 251.17 respectively and the value of standard deviation are 23.15 and 26.62 respectively. The calculated value of critical ratio (CR) is 0.57. For 78 degree of freedom and at 0.05 significance level the table value of CR is 1.99. Calculated CR- Value is less than the table value, therefore difference is not significant. This leads to the acceptance of hypothesis 3.

Result

- (1) There is no significant difference in the Teacher Effectiveness of Science and Art male teachers.
- (2) There is no significant difference in the Teacher Effectiveness of Science and Art female teachers.
- (3) There is no significant difference in the Teacher Effectiveness of Science and Art teachers.

Educational implication: Study of teacher effectiveness is imp in the field of education because of following reason –

- Effectiveness of the educational system largely depends upon the effective teachers.
- Effective teacher believe all students can succeed and have high expectation of them.
- Effective teachers contribute to positive academic, attitudinal and social outcomes for students such as regular attendance, on time promotion, self – efficiency and cooperative behaviors.
- Effective teachers collaborate well with their peers in teams and with administrators, parents and education professional to ensure student success.
- Effective teachers know how to support students with learning difference and difficulties

- Effective teachers ensure that students are actively involved in lessons in various way. The teacher asks a lot of well planned and challenging question and constantly monitors student's progress and understanding.
- Effective teachers create an inviting environment in their classrooms displaying appropriate learning support materials which stimulate students interest.

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