CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.0 Introduction:
Various factors influencing Teacher Effectiveness, Models of Teacher Effectiveness and the Theory of Multiple Intelligences with its implications were discussed in the previous chapter. Teacher Effectiveness, it was seen, depended on a host of factors. Multiple Intelligence strongly affects the way people learn and deal with situations. Multiple Intelligence influences people's learning and choice of careers. Seemingly there is a close relationship between success at work place and an individual's Multiple Intelligence profile. This research is focused on investigating the relationship between Multiple Intelligences and Teacher Effectiveness. For this purpose a number of studies done in these areas were referred to.
Review of related literature is carried out to get a view of what has been investigated in the field. Since effective research is based on prior knowledge, this step eliminates duplication of previous work on the topic and provides guidelines to an investigator. It also helps to formulate one's hypotheses and makes one aware of the status of the problem under investigation.

The studies reviewed are classified under following sections:

1. Components of Teacher Effectiveness
2. Non psychological predictors of Teacher Effectiveness
3. Psychological predictors of Teacher Effectiveness
4. Impact of Teacher Effectiveness
5. Comparison between Effective and Non Effective Teachers
6. Use of Multiple Intelligence in the Classroom
7. Application of Multiple Intelligence in Careers and training
8. Multiple Intelligence and Teacher Effectiveness
2.1 Components of Teacher Effectiveness:

Components of Teacher Effectiveness have been investigated by several researchers. In general these investigations probe into what makes an effective teacher.

A model for investigating teaching, developed by Biggs\(^1\) (1988; 1989) included three classes of variables: presage, process and product. He pointed out that factors within the presage variable include teachers' characteristics and the institutional context. Among teacher characteristics, Biggs emphasized two specific attributes: teachers' conceptions of effective teaching and their acquired teaching skills. He argued that these characteristics have a direct effect on teaching. Dunkin\(^2\) considered the beliefs and knowledge mentioned by Biggs as the teacher's 'orientation' which he defined as the 'patterns of ideas and feelings posed by individuals concerning teaching ... [which] provide the framework of cognitive and affective attributes that presumably underlie an individual's planning, decision making and implementation in relation to teaching" (Dunkin, 1990). Therefore, one might reasonably argue that identifying lecturers' attitudes and orientation toward teaching is important and necessary for improving teaching. This was further emphasized by Candy\(^3\) (1993) who highlighted the strong relationship between teachers' beliefs and teachers' performance in the classroom.


1. Input (what students and teachers bring to the classroom): If input is emphasized, the basis of judging excellence is much of what has occurred before the course even begins. Although input factors need to be taken into account since they may and can influence
student ratings and learning, information focusing on these factors will yield a rather incomplete portrayal or assessment of teacher performance.

2. Process (what students and teachers do in a course): If process is emphasized, the basis for judging effective instruction centers on teacher rather than student behaviors. However, the linkage between what an instructor does and amount learned by students is not always clear, and thus sole reliance on process factors is also not recommended.

3. Product (what students learn or accomplish in the course): If product is emphasized, the basis for judging effective teaching is amount of student learning.

The California Standards for the Teaching Profession\(^5\) takes a slightly different view of Teacher Effectiveness where six standards based on current research and expert advice pertaining to best teaching practice are formulated. The Standards are organized around six interrelated components of teaching practice. They are

- Engaging and Supporting All Students in Learning
- Creating and Maintaining Effective Environments for Student Learning
- Understanding and Organizing Subject Matter for Student Learning
- Planning Instruction and Designing Learning Experiences for All Students
- Assessing Student Learning
- Developing as a Professional Educator

Students being the stakeholders of the educational process their views on effectiveness of teachers hold much weightage. M. Hildebrand, R.C

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Wilson and E.R Dienst\textsuperscript{6} of University of California, Centre for Research and Development in Higher Education (1971) carried out a study in which opinions on effective teaching both from faculty and students were analyzed. They concluded that effective teachers explain clearly, are well prepared; simplify topics, use analogies, metaphors and examples to make the learning material not only understandable but also easy to memorize. They establish a context for the content being learned by making the objectives of the course and each class clear before beginning. Effective teachers have a thorough command over their field. They contrast the implications of various theories and give the student a sense of the field, its past, present and future directions. They present related facts from other fields and discuss viewpoints other than their own. As persons they are enthusiastic, dynamic and love teaching. They bear an aura of self confidence and convey a love of their field. Effective teachers can stimulate, direct and pace interaction in the classroom. They encourage independent thought and accept criticism. They use wit and humour effectively, are good public speakers and are concerned about the quality of their teaching. They are sensitive to student motivation and pick up signals when the students do not understand. Students perceive them as fair in evaluation. Effective teachers are approachable and are a valuable source of advice even on matters not directly related to the course.

Similar views are echoed by Froyen and Iverson\textsuperscript{7} (1994) who state that quality schools are defined by teacher effectiveness and student achievement under the auspices of building strong interpersonal skills. In this light, teacher and student relationships are essential to ensuring a positive school/classroom atmosphere.
Cheng and Tusi\textsuperscript{8} (1996, 1999) while discussing the total effectiveness of teachers, in general, have proposed a seven dimensional model. The dimensions are:

(i) Goal and task emphasizing teacher’s personal achievement goals and tasks and school goals;
(ii) Resource utilization requiring teacher’s effective use and procuring of school resources to achieve goals;
(iii) Process stressing on teacher’s contribution to effective teaching and school process;
(iv) School constituencies’ satisfaction that is expecting teachers to meet the needs of their students, parents, school and community;
(v) Accountability which focuses on teachers’ accountability and professional reputation;
(vi) Absence of problems requires teachers to identify and avoid potential problems, weaknesses, dysfunctions, and crises; and
(vii) Continuous learning which emphasizes teacher’s awareness of environmental changes and continuous improvement and development. However, such a model, because of its effort for comprehensiveness tries to incorporate the teacher’s effectiveness in the context of in-school and out-of-school activities, academic and non-academic duties, professional and personal aspects and administrative and non-administrative domains. This holistic perception reduces its degree of implementation.

In their research based article "Effective Classroom Teacher -- Defining Classroom Skills for the 21st Century" Trevor Kerry and Mandy Wilding\textsuperscript{9} (2000) list some characteristics of effective teachers. They are

- Professional values, professional practice [the ‘aware’ teacher]
• Knowledge, understanding and professionalism [the 'educated' teacher]
• School ethos and class management [the 'affective' teacher]
• A review of teaching skills [the 'thinking' teacher]
• The ICT revolution and its implications for learning [the 'innovative' teacher]
• Planning and target setting [the 'organised' teacher]
• Progress, assessment and mentoring [the 'accountable' teacher]
• Keeping sharp: Professional development in action [the 'self-developing' teacher]
• Professional relationships [the 'managing' teacher]
• Children's self-learning: meta cognition [the 'sensitive' teacher]

Some of the above mentioned traits are reflected in a BBC sponsored research\textsuperscript{10} (2000) which concluded that teachers who are more knowledgeable may give clearer presentations and explanations which in turn could benefit their students' ability to learn more effectively. They may also be more organized and recognize a student's difficulties more easily; this shows that knowledge is necessary but not alone a sufficient condition for effective teaching. The research also reported a correlation between teacher enthusiasm and student achievement gains, but it can not be found that this actually is the cause for higher achievement.

The Interstate New Teacher Assessment and Support Consortium (INTASC)\textsuperscript{11} is a program of the Council of Chief State School Officers in U.S.A. The consortium has listed ten principles for Effective teachers each one with three areas of emphasis: knowledge, dispositions, and performances.

(i) The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can
create learning experiences that make these aspects of subject matter meaningful for students.

(ii) The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.

(iii) The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

(iv) The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.

(v) The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

(vi) The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

(vii) The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

(viii) The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.

(ix) The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

(x) The teacher fosters relationships with school colleagues, parents and agencies in the larger community to support students' learning and well being.
There are consistently high correlations between students' ratings of the “amount learned” in the course and their overall ratings of the teacher and the course. Those who learned more gave their teachers higher ratings. This observation was made by Cohen\textsuperscript{12} in 1981 and Theall and Franklin\textsuperscript{13} in 2001. This same criterion was also put forth by Thomas Angelo\textsuperscript{14}, author of Classroom Assessment Techniques, when he said “teaching in the absence of learning is just talking.” A teacher's effectiveness is again about student learning. However, all teachers realize that what a student learns is not always within the teachers' control.

Langolis and Zales\textsuperscript{15} (1991) developed a profile of an effective teacher by analyzing over 700 research papers from the 1980s. According to this profile effective teaching behaviours make most of the instruction time and involve students in instruction. There are few unnecessary interruptions and students are expected to meet the high teacher expectations. Effective teachers recognize appropriate student behaviour and hold students responsible for inappropriate behaviours. Effective teachers use a sequence of activities as lecture –discussion –application to save time, but also vary their teaching methods and materials so that students do not get bored. There is smooth transition from one activity to another. The structured learning environment created and maintained by effective teachers provides continuity and consistency as well as the freedom for students to carry out their classroom responsibilities. Effective teachers seek ways to create classroom environments that are supportive and co-operative. They are good communicators who treat students with respect so that they feel comfortable in the classroom. They believe in the importance of the subject they teach and also believe that their students can learn and make a difference. Effective teachers know their students and plan lessons according to their needs and interests. They interact appropriately with students to determine the level of understanding and provide feedback as necessary. They take continual measures to ensure
students' success. Effective teachers use praise to point out student achievements and the process used to accomplish them. Students then know what they did correctly so that they can continue to achieve. Effective teachers ensure their accountability by establishing routines, planning accordingly and extending the subject to other disciplines. The result is that effective teachers teach their students to be successful, independent learners. This is the ultimate goal of their classroom instruction.

Pedagogical content knowledge (PCK) is a term used by Lee Schulman to describe what a teacher needs to know to be effective. PCK is concerned with the representation and formulation of concepts, pedagogical techniques, knowledge of what makes concepts difficult or easy to learn, knowledge of students' prior knowledge and theories of epistemology. It also involves knowledge of teaching strategies that incorporate appropriate conceptual representations, to address learner difficulties and misconceptions and foster meaningful understanding. It comprises knowledge of what the students bring to the learning situation, knowledge that might be either facilitative or dysfunctional for the particular learning task at hand. This knowledge of students includes their strategies, prior conceptions (both "naïve" and instructionally produced); misconceptions students are likely to have about a particular domain and potential misapplications of prior knowledge.

A number of studies were undertaken by many researchers to study the effect of Pedagogical Content Knowledge (PCK) on Teacher Effectiveness. Prof John Hattie's analysis of effective teachers showed that effective teachers have strong pedagogical-content knowledge. He studied over 700 numeracy lessons and concluded that the effective teachers were those who were "connectivist". These teachers used their strong PCK to help their students make connections for themselves.
Active listening to the ideas of students and acting from these ideas is a critical aspect of responsiveness of effective teachers. Effective teachers develop independence through sharing learning outcomes with their students, requiring students to make their own instructional decisions, providing regular personalized feedback and encouraging meta-cognition (thinking about thinking). They also provoke high order thinking, such as analysing, justifying and synthesizing through the questions they ask. Effective teachers provide additional resources for students with high needs. They employ a variety of instructional groupings so students can learn from each other. To summarize, teachers make a significant difference to student learning and this is profound in situations where the students are needy.

A preliminary investigation of pedagogical content knowledge and techniques in the teaching of Spanish to native-speakers conducted by Dr. Vickie R. Ellison (2001) of Kent State University delved into pedagogical content knowledge, subject-matter knowledge and cultural awareness knowledge. Hundred teachers teaching Spanish were selected and it was seen that effective teachers’ understanding of the subject-matter pedagogically was demonstrated through the use of advanced organizers, and expectations that are clearly stated to the students. They also fostered a classroom with a safe environment that is conducive to learning. The data from this study indicates that effective teachers were be able to structure their knowledge in ways that facilitate student learning (i.e., moving from simple to more complex concepts). The data also indicates that teachers should also know themselves and have confidence in themselves as teachers and be competent in their ability to teach. Teachers should also realize the need to be flexible and be able to adapt to the needs of the students. Some important factors in the change of the perceptions of teachers appeared to be an understanding of the needs of the students as well have confidence in themselves as teachers and be
competent in their ability to teach, their increasing comfort level in teaching and pursuing continuing education in their field.

A quantitative examination of teacher's self efficacy and knowledge of the nature of science conducted by Sajin Chun and J. Steve Oliver (1996), University of Georgia investigated the process of change in teacher's knowledge and beliefs with regard to the nature of science and teacher's efficacy beliefs about their science teaching. Data was collected over a period of three years after conducting regular summer workshops for the teachers. There was found a growing positive relationship between the teachers' knowledge about the nature of science and teacher's self perceived effectiveness as the workshop went on. At the beginning of the first year workshop, the teachers' efficacy beliefs were not related to their level of knowledge about the nature of science. It was thus concluded that PCK is a type of knowledge that is unique to teachers, and is based on the manner in which teachers relate their pedagogical knowledge to their subject matter knowledge. This description requires teachers to understand the elements of teacher's knowledge, beliefs and functions of the knowledge in teaching practices.

Kenneth Elbe studied Components of Effective Teaching as Perceived by Students and found that effective teachers follow an Analytic/Synthetic Approach by discussing points of view other than their own. They contrast implications of various theories, discuss recent developments in the field, present origins of ideas and concepts, give references for more interesting and involved points. They present facts and concepts from related fields and thus emphasize conceptual understanding. They display organization and clarity by explaining well, coming prepared, summarizing major points and stating the objectives for session. Their classes display instructor – pupil interaction where they invite pupils to share experiences and encourage class discussions. Their interest in students is genuine and
they also interact well in ‘out of class’ situations. Students value their advice for matters not even directly related to the course.

Helen Pate Bain, Nan Litz and Elizabeth Word\(^{21}\) (1988) have conducted a research entitled “A study of effective teachers whose class average gain scores ranked in the top 15 % of each of the four school types in Project STAR”. The teaching practices, materials used, professional and personal characteristics of 49 effective teachers were studied to determine what effective teachers do to promote learning in reading and mathematics. Teachers selected for the observation/ interview were those whose students ranked in the top fifteen percent of scaled score average gains in reading and mathematics. Inter–rater reliability of 90% was achieved by pairing two observers and checking their independent judgments. They reported that effective teachers display following characteristics.

(i) High expectations for student learning
(ii) Clear and focused instruction
(iii) Close monitoring of students learning process
(iv) Re-teaching using alternate strategies when students failed to learn
(v) Use of incentives and rewards to promote learning
(vi) High efficiency in classroom routines
(vii) High standards enforced for classroom behaviour
(viii) Excellent personal interactions with student

The researchers classified the practices used by effective teachers into six categories.

(i) **Pre-planned instruction**: Instruction was guided by a pre-planned curriculum which was adapted to the needs of students. The teachers used a broad range of resources and activities.

(ii) **Expectations**: The observers determined that effective teachers had high expectations for students learning. They set and
maintain quality standards consistently. They used a variety of strategies to ensure that all students will be at the level of learning necessary to be successful in the next grade. The strategies mentioned most often were parent involvement, individualization, use of teacher assistant where available, peer tutoring and praise and encouragement.

(iii) Strategies for accomplishing expectations: Using representative survey questions, responses and discussion specific to teaching strategies for accomplishing expectations, it was found that effective teachers use strategies to orient their students to lessons by communicating objectives and referring to them to keep the students focused. They established relationship between the current lesson and previous study, reminding students of key concepts previously learned. They challenged students to learn especially at the start of difficult lessons. They reviewed lesson plans and gave clear instructions, repeated key points and checked students' understanding. Students were given ample opportunity for guided and independent practice with new skills and concepts. All students got a chance to respond. Effective teachers discerned which students were not performing at their maximum level by observations of behaviour patterns deterrent to learning, students' performance and by intuition. They required that students were accountable for their academic work by setting standards that students could understand and accomplish, praised and rewarded completed work. In general they set high grading scales and mastery standards to promote excellence. They encouraged students to keep track of students' progress. Effective teachers repeated priority lesson content until students displayed mastery. They conducted regular, focused interviews of key concepts throughout the year to check on it and strengthen student
retention. If students had not mastered a skill, they found time to re-teach the same individually or in small groups, involved an aide to teach in groups or on a one to one basis. They arranged after school work sessions or peer tutoring. Rewards were given to reinforce desirable behaviour. Rewards were appropriate to the level of students. 98% of effective teachers used a variety of learning resources to facilitate learning.

(iv) **Organization and Classroom management:** Effective teachers had their assignments, activities and learning materials ready when the students arrived to learn. Students were familiar with the routine established and hence no time was wasted in transition from one activity to another. Rules for classroom behaviour were well communicated and 43% teachers used the Lee Cantor’s Assertive Discipline Technique.

(v) **Personal Interaction:** 84% effective teachers maintained excellent personal relations with the students and let their students know that they really cared by group sharing time, one to one sharing time, praising students, making them feel important and telling them that they were special.

(vi) **Family involvement:** Effective teachers believed that families of students should be involved in the students’ continuous learning process. They believed in open communication between home and school. 95% teachers said that they encouraged families of students to keep up with the progress in school. They invited family members of students to serve as volunteers in school. Effective teachers explained to family members the necessity of becoming involved in student learning. To prevent failure among students 37% of effective teachers involved support from students’ families.
The effective teachers were asked to identify two factors they believed contributed to their effectiveness. 76% felt it was their love for teaching and for children. High expectations from students, patience and understanding and good organization were some other noteworthy factors. A profile of the effective teacher revealed a median age of 38.5 years. The Median of teaching experience of effective teachers was 10.5 years. The teachers consistently displayed enthusiasm. Demonstration and role play were commonly used methods. Having positive attitude towards children, emphasizing positive behaviour and praising success were noticed. They had a good sense of humour and use it optimally to foster learning. Their love for children seemed to permeate the entire professional repertoire in nearly all observations.

Teacher Effectiveness has been examined from different perspectives by many researchers. One study 'Models and Predictors of Teacher Effectiveness by Harris and Rutledge' (2005) throws light on what should be considered in research on Teacher Effectiveness. They compared research on the theoretical models and predictors of teacher effectiveness with those of other occupations, focusing on three specific predictors of worker effectiveness: cognitive ability, personality and education. The comparison of the teacher and other worker studies yielded a variety of ways in which research on teacher effectiveness might be improved and expanded: First, the worker literature illustrates specific theoretical models, such as job-organization fit, that complement existing models regarding the work of teachers. The potential value of extending worker models to teaching in this way is reinforced by the fact that the three teacher characteristics mentioned above predict effectiveness in similar ways among teachers and other workers. Second, by outlining multiple models of effectiveness, it is possible to identify the important dimensions on which they vary, such as the unit of analysis and the assumed roles of the individual worker in relation to the organization. Third, research on
other workers highlights some ways to improve the measurement of the three predictors and teacher effectiveness, going beyond the use of student test scores.

From the above studies, it is obvious that Teacher Effectiveness is a combination of what transacts in the classroom by way of teaching – learning and the effect that a teacher has on the students’ learning and personality. An in-depth understanding of these studies helped to form the theoretical basis for Teacher Effectiveness. Teacher Effectiveness is impacted upon by several factors some of which are inherent in the teacher and some of which are a by-product of the system where the teacher teaches. Factors inherent in the teacher may be psychological factors as the teacher’s intelligence, aptitude, personality, motivation and the like. These have been referred to as psychological correlates. There is also a host of other non psychological, personal factors such as gender, teacher’s academic background, health and experience which could be classified as non psychological correlates of Teacher Effectiveness. The next sections scrutinize studies dealing with predictors of Teacher Effectiveness both non psychological and psychological.

2.2 Non psychological predictors of Teacher Effectiveness:
Non psychological predictors of Teacher Effectiveness are both of the personal type and institutional type. Among the personal characteristics such as age, gender, socio-economic status and academic achievement are considered. The institutional factors influencing Teacher Effectiveness include type of school, motivation offered by work place, workload and leadership. Some factors like job satisfaction and job morale would be a combination of personal and institutional features.

Dr. Tilak Raj\textsuperscript{23} (1980) carried a study entitled “An Empirical Study of Correlates of Teacher Effectiveness of Secondary School Teachers” to
study the teaching effectiveness of teachers with relation to work motivation and job satisfaction. 100 secondary school teachers from 22 schools, both rural and urban, of Shimla district, were administered Work Motivation Scale by K. G. Agarwal, Job satisfaction Questionnaire by Kumar and Mutha, and Teacher Effectiveness Scale by Kumar and Mutha. Data was analyzed using a 2x2 factorial design in two levels each, for job satisfaction and work motivation. The conclusions were that teacher effectiveness is positively affected by the level of motivation to work but is not significantly related with job satisfaction. Those having higher level of motivation to work, do more effective teaching. Job satisfaction does not affect teachers' effectiveness significantly. Thus teachers with a high job satisfaction are not significantly better than their counterparts with low levels of job satisfaction. There is no significant interactional effect of work motivation on teacher effectiveness.

Kaul Balbir's\textsuperscript{24} (1983) investigation into Dimensions of Teacher Effectiveness as perceived by Secondary School, College and University students explored the dimensions of teacher effectiveness in Science, English, Hindi, Mathematics and Social Sciences at three levels viz. School, College and University separately. Descriptive Survey method was used and the perception of teacher effectiveness in each subject was found. It was seen that the perception of teacher effectiveness in each subject varied from level to level.

Bhalchandra's\textsuperscript{25} study (1981) identified some factors associated with effective teaching through student evaluation of teachers. The factors were subject mastery, intellectual kindling, responsiveness, and integrity, commitment to teaching, impartiality and informal academic help.

In a study entitled "Teacher Effectiveness in relation to Sex and Type of schools" conducted on 137 teachers (81 males and 56 females) working

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in Higher Secondary schools in Tuticorin, Dr. S. Santhana Krishnan and Dr. V. Usha\textsuperscript{26} (1984), studied the impact of teacher's gender and the type of school on teacher effectiveness. Normative survey method was used and Kumar and Mutha's Teacher Effectiveness scale of 68 items was utilized for data collection. Two way ANOVA (2x3) factorial design was employed to study the main and interactive effect of independent variables on teacher effectiveness. The study showed that F ratio for gender was significant at 0.01 level with female teachers being more effective than the male teachers. Influence of different types of schools shows F ratio to be highly significant at 0.01 level. Interactive effect of sex and types of schools is significant at 0.01 level, thus concluding that gender of teachers has an impact on teacher effectiveness, different types of schools have influence on teacher effectiveness and gender and different types of schools in their interaction have impact on teacher effectiveness.

Singh R.S\textsuperscript{27} (1987) in his study "A Study of Teacher Effectiveness and its Correlates at Higher Secondary stage in Eastern Uttar Pradesh" found that there is no significant difference in the mean scores of male and female teachers in their effectiveness, the difference in the mean intelligence scores of male and female teachers was not significant and rural female teachers secured better scores as compared to their male counterparts in teaching effectiveness. He also concluded that there is no significant difference in the mean scores of urban male and female teachers in their effectiveness and there is no significant difference in the mean scores of male and female teachers belonging to rural and urban areas.

Prakasham D\textsuperscript{28} (1988) studied Teacher Effectiveness as a function of School Organizational climate and Teaching competency. His findings show that open school organizational climate positively affects both teaching competency as well as Teacher Effectiveness. Teachers of urban
schools significantly excelled over those in semi urban or rural schools both in case of teaching competency and effectiveness. Female teachers scored invariably higher with insignificant difference in all types of schools and other categories as territory, management type and organizational climate. Moderately higher Teacher Effectiveness was seen in case of schools with Christian management. There is significant relationship between teaching competency and Teacher Effectiveness.

Similar results were reported by Veeraraghavan Vimala and Bhattacharya Rina\textsuperscript{29} (1989) whose objective was to study school achievement as related to different types of schools and teacher effectiveness. The sample consisted of students from government run schools, missionary schools, public schools, urban and rural schools. This study on school achievement, student motivation and teacher effectiveness in different types of schools showed that Teacher Effectiveness was positively correlated to school achievement, the public and missionary run schools had highest achievement and student motivation bore no relationship to school achievement.

Virendra Singh’s\textsuperscript{30} (1990) study on “Analysing teaching behaviour of effective teachers in different types of school climates in Etah (Uttar Pradesh)” found that female teachers teaching Arts faculty were conventional in their style of teaching. Also subject, culture and place of living had no bearing on teacher effectiveness.

In a Survey of University and Pre University Teachers, Maurya H.C\textsuperscript{31} (1990) found that frequent changes in curriculum adversely affected teaching efficiency. Teaching attitude and achievement have no bearing on teaching efficiency.
Pathak K.H\textsuperscript{32} (1998) studied the effectiveness of training in dramatics on Teacher Effectiveness. He used Experimental Method with Pretest-Posttest Control Group Design. The sample consisted of 78 teacher trainees drawn from two teacher training colleges affiliated to North Gujarat University. He found that training in dramatics enhanced Teacher Effectiveness.

Nautiyal A.K\textsuperscript{33} (1992) studied the efficiency of teachers' performance as related to their values, effectiveness, morale and student perceived teacher characteristics and found that there is significant difference between female teachers of government and private colleges for Teachers' Performing Skills and Effectiveness. There is difference in morale between teachers with high performing skills and low performing skills for teachers of Government schools. Significant difference was seen in the theoretical values for male teachers with high performing skills and those with low performing skills in both Government and private colleges. In case of female teachers such difference was not seen. There is no significant difference observed in student perceived teacher characteristics of teachers with high performance skill and those with low performance skill in Government colleges. However in private colleges, this difference was significant.

Robert Norton's\textsuperscript{34} (1994) study on 'Teacher Effectiveness as a Function of Communicator Style' shows behaviors most associated with teacher effectiveness by working through a communication frame of reference. A communicator style consisting of 12 variables was developed. The variables included precise, contentious, relaxed, impression leaving, voice, dominant, dramatic, open, attentive, animated, friendly, and communicator image. Then 65 professors and 596 students at Michigan State University gave their perception of the relationship of the variables to effective teaching. The communicator style variables that respondents
identified as being most related to effective teaching included: Good communicator image, seen as being a good communicator in most situations and finding it easy to communicate on a one-to-one basis. Effective teachers are attentive suggesting that the person is empathetic, tolerant, caring, and other-oriented. They leave good impressions centering on the way in which the teacher presents what he/she has selected to present to influence the students to remember the content or the teacher. Effective teachers are relaxed and perceived as being without annoying nervous mannerisms, relaxed, and comfortable. They are not dominant. They are precise and perceived as eliminating ambiguity in subject matter, and eliminating confusion about work expected. The research provides strong evidence that perceived teaching effectiveness is related to these six identified communication behaviors of the teacher. Furthermore, teaching effectiveness can be improved by improving specific communication behaviors related to the communicator style variables.

Sass and Harris\(^{35}\) (1998) have found that pre-service and in-service training that combines pedagogy and content is positively associated with teacher value-added in some subjects and grades. In addition, more experienced teachers appear more effective in teaching elementary and middle school reading. There is no evidence that other forms of pre-service (undergraduate) training or the scholastic aptitude of teachers influences their ability to increase student achievement.

Lorin Anderson's\(^{36}\) study on Increasing Teacher Effectiveness (2004) concludes that effective teachers have a sound understanding of standards that define student learning. They use this understanding to design appropriate and effective learning units. They are aware of the need for curriculum alignment that is the connection between objectives, assessments and instructional activities. Their classroom climates are
inviting and well organized. They consider classroom diversity as an asset to be built on rather than an impediment to be despised. Their form of instruction is inclusive and active. These teachers are leaders of learning who transmit a passion for ongoing learning. They use an effective blend of three types of classroom organizations i.e whole class learning, individual learning and small group learning. Consistent and equitable rules of discipline are applied to all without any bias.

While considering non psychological correlates of Teacher Effectiveness, teacher inherent and institution inherent factors have been looked at. No doubt that the work place setting has an important role to play in determining Teacher Effectiveness. All the same it is also true that the teacher’s personal traits, aptitude, interest and attitude have an impact on their effectiveness. The next section deals with studies conducted on such psychological correlates of Teacher Effectiveness

2.3 Psychological predictors of Teacher Effectiveness:
Psychological correlates of Teacher Effectiveness include Teacher’s personality, social intelligence, motivational level, adaptability, introversion-extroversion, neuroticism, job satisfaction, intelligence, creativity, self concept, self esteem, aptitude and attitude.

Chanchal Bhasin (1988) studied “Teaching aptitude and its relationship to Teacher Effectiveness of Higher Secondary School Teachers in relation to modern community” and concluded that teaching aptitude has significant correlation with teaching effectiveness but no direct relationship with teacher community participation. Significant difference was found between Arts and Science teachers with respect to teaching aptitude. No significant difference with respect to aptitude and effectiveness was found between teachers teaching in urban and rural areas, government and non government schools and male and female teachers.
Diametrically opposite results were reported by Shah Beena\textsuperscript{38} (1991) in the study "Determinants of Teacher Effectiveness". The objectives were to predict the effect of aptitude, intelligence, values, self concept, attitude, personality, job motivation, job satisfaction and school climate on Teacher Effectiveness of Secondary School Teachers. 1907 teachers of secondary schools of Garhwal district, selected through multi stage random sampling, formed the sample for the survey. It was seen that Teacher Effectiveness was significantly affected by aptitude, intelligence, values, self concept, attitude, personality, job motivation, job satisfaction and school climate. Variables like locality, type of school, level of educational qualifications, grade and experience also affected Teacher Effectiveness. Teachers' satisfaction with the nature of the work, working conditions, positive attitude towards work and students, adaptability, mental ability, professional information, intelligence, political values and self concept were paramount determinants of Teacher Effectiveness.

Reddy I.V.R.\textsuperscript{39} (2001) conducted a study on Job Satisfaction and Teacher Effectiveness of Primary School Teachers. The sample comprised of 258 teachers of Primary Schools from Visakhapatnam District. Job Satisfaction & Teacher Effectiveness Scales were developed and standardized by investigator for data collection. The data were analyzed by computing correlation. The study found that high Job Satisfaction led to effectiveness in teaching to initiate desirable learning outcomes. Age of the Teachers had a significant positive relationship with Job Satisfaction, but it had no relationship with Teacher Effectiveness. Job Satisfaction and Teacher Effectiveness had no relationship with Service Experience of Teachers. Income had a significant positive relationship with Job Satisfaction and Teacher Effectiveness. Sex, marital status, location of the School, type of management, age, income and in–service training programmes influenced the level of Job Satisfaction and Teacher Effectiveness. General educational qualifications and service experience had no impact on Job
Satisfaction and Teacher Effectiveness. Teachers with high Job Satisfaction differed significantly from Teachers with low Job Satisfaction with regard to Teacher Effectiveness. Teachers with high Teacher Effectiveness differed significantly from Teachers with low Teacher Effectiveness with regard to Job Satisfaction.

A study conducted on 250 Primary School Teachers and 750 students of class V from 160 selected School of Vizianagarm District by Jayaramanna K.40 (2001) attempted at studying Teacher Effectiveness in Relation to Work Orientation and Achievement of Students at Primary Level. The Work Orientation of Teachers was measured with the help of Indiresan’s Work Orientation Inventory. Tools were developed by the Investigator to measure Teacher Effectiveness and Student’s Academic Achievement. Statistical techniques such as Critical Ratio and Correlation were used to analyze data and it was seen that among the five dimensions of Teacher Effectiveness studied personal aspect is significant. It was noticed that teachers who are undergraduates with T.T.C. excel well than graduate trainees. Sex, age, professional cadre and teaching experience did not make a mark on entire Teacher Effectiveness as well as personal aspect of Teacher Effectiveness. So far as professional aspect of Teacher Effectiveness, T.T.C. holders have an edge over B.Ed. trainees. There is no influence at all to any of demographic and professional variables on Intellectual aspect of Teacher Effectiveness. Regarding the dimension – Strategies of Teaching, it was noticed that teachers working in rural localities excel well than their tribal counterparts. So far as social aspect is concerned, undergraduates possess more perception than graduate Teachers. Regarding Work Orientation of teachers as perceived under two sub scales – Affiliation and Achievement Orientation which are opposing ideologies, all demographic variables except urban versus rural have a vital influence on Achievement Orientation and all Professional variables except professional cadre did not possess any influence. All Demographic
variables did not exhibit any impact on Affiliation Orientation, while all the other Professional variables except Teaching Experience have impact on it. Substantial positive relation prevails between Achievement Orientation of students and Teacher Effectiveness. The positive relation between Academic Achievement of student and both the sub – scales of Work Orientation of Teachers reveal that both the Work Styles of Teachers evidently influence Academic Achievement of student. Values of correlation between Teacher Effectiveness and both the sub – scales of Work Orientation among Teachers reveal that Achievement Orientation than Affiliation Orientation vitally influenced Teacher Effectiveness.

Mutha D.N⁴¹ (1980) studied attitude and personality of effective teachers and found that effective teachers have more scores on anxiety, teaching aptitude, neuroticism and job satisfaction. Personality variables like extroversion, neuroticism, job satisfaction, teaching aptitude and value beliefs had an impact on Teaching Effectiveness.

A similar study by Gupta B.D⁴² (1982) delving into the intelligence, adjustment and personality needs of effective teachers in Science and Arts Intermediate Colleges of Aligarh reported the following conclusions: All distributions were normal. Science teachers were significantly more effective than their Arts counterparts. There was no significant difference between Arts and Science teachers with respect to adjustment. Effective Arts teachers were better adjusted socially, psychologically and physically than effective Science teachers. Effective Science and Arts teachers did not differ with respect to professional adjustment. Effective Arts teachers were better adjusted in personal life than effective Science teachers. Effective Arts teachers were significantly higher than effective Science teachers on financial adjustment and job satisfaction. Effective Science teachers had significantly more n-achievement, n-abasement, n-endurance, n-aggression than effective Arts teachers. Teacher
Effectiveness was related to age. Most effective teachers were between 30 to 39 years of age. Most effectiveness was seen in 10 to 15 years of experience. Thereafter there was a decline. Teacher Effectiveness was not related to gender.

Bhagiliwal S. (1982) studied personality characteristics associated with Teacher Effectiveness seen through Rorschach Technique. He found more effective teachers had higher intellectual level, fairly higher level of original thinking and more creative potential than those with less effectiveness. Both effective and less effective teachers had same levels of emotional responsiveness.

While studying and identifying specific qualities and characteristics of effective and ineffective teachers, Vasistha K. C. and Verma Jagdish (1991) also used "Rorschach Vignette of Effective and Ineffective Teachers’ Personality". They found that effective and ineffective teachers had sharp distinction in relation to the following personality traits namely emotional construction, marked inhibition of sexuality, dependency and difficulty in establishing close personal relationship. Effective teachers were superior in emotional construction. Effective teachers had dependent personality characteristics while ineffective teachers had difficulty establishing close personal relationships. Ineffective teachers also had a poor type of introspection of their inner characteristics and potential as compared to their effective counterparts.

While exploring the Relationship between Teacher Effectiveness, Teaching Aptitude and Personality traits, More R.T (1988) reported that only six out of the sixteen factors of personality given by Cattell were found to be positively correlated with teacher effectiveness of which intelligence was the most important. Teacher Effectiveness and teaching
ability have positive correlation. The total personality of the teacher had a bearing on effective or ineffective teaching.

Agarwal S.⁴⁶ (1988) studied Teaching Efficiency on a sample of female teachers of primary schools and found that more effective teachers had adjustment problems arising out of social factors while in case of less effective teachers emotional problems were more dominant.

Daljit Singh⁴⁷ (1991) in his investigation entitled “Creativity and intelligences as correlates of Teacher Effectiveness of Secondary School Teachers” found that among both male and female teachers, Teacher Effectiveness was positively correlated to fluency, flexibility, originality, composite creativity and intelligence. Also Creativity and intelligence taken jointly were considered better predictors of Teacher Effectiveness than when taken separately.

Investigation of psychological correlates of successful teachers by Kukreti B.R.⁴⁵ (1992) reported a significant positive correlation between teaching success and teaching aptitude. Successful teachers scored significantly higher mean scores on intelligence than their unsuccessful counterparts. Knowledge and creative values are higher in successful teachers while economic values are higher in unsuccessful teachers. For social and aesthetic values both types of teachers were more or less similar. Successful female teachers had more religious values than unsuccessful female teachers. In case of intellectual self concept, character self concept and total self concept; successful teachers were higher than the unsuccessful ones.

Agarwal R⁴⁹ (2003) studied the relation between Social Intelligence and Teacher Effectiveness. Comparative Descriptive Method was used in research. The sample comprised of 557 Teachers of Secondary School of
Banda District. The studied revealed that female teachers were found to have more social intelligence than male teachers in respect of sensitivity, tactfulness, sense of humor and memory dimensions of social intelligence as well as in respect of global social intelligence. The male teachers were found better only in respect of recognition of social environment i.e. dimension of social intelligence. The rural teachers were found better in comparison to urban teachers in respect of recognition of social environment, while urban teachers were more socially intelligence in respect of sense of humor and memory dimensions of social intelligence. The junior class teachers were found high in patience, tactfulness and sense of humor dimensions of social intelligence as well as in respect of global social intelligence, while the secondary teachers were high in recognition of social environment dimension of social intelligence. The missionary school teachers were found high in patience, sensitivity, sense of humor and memory dimensions of social intelligence as well as in respect of global social intelligence. The private school teachers were found highly tactful and the aided school teachers were high in recognition of social environment dimension of social intelligence. The private school teachers were high in academic, professional, emotional and personality dimensions of teacher effectiveness as well as in composite teacher effectiveness. The missionary school teachers were high in academic, professional and moral dimensions of teacher effectiveness as well as in composite teacher effectiveness. Thus it was concluded that social intelligence is not good predictor of teacher effectiveness.

Harry Murray\textsuperscript{50} (1983) while exploring Effective Classroom Teaching Behaviors found that three dimensions of teaching behavior have consistently emerged as strong predictors of instructional outcomes: enthusiasm or expressiveness, clarity of explanation and rapport or interaction. Murray proposed that teacher enthusiasm plays an attention-getting role in information-processing, whereas teacher clarity facilitates
the encoding of information in long-term memory, and teacher interaction encourages active responding and memory retrieval. Teaching behaviors have typically shown an uneven profile of correlations with different instructional outcomes. For example, behaviors that correlate with affective outcome measures often fail to correlate similarly with cognitive outcomes, while behaviors that predict cognitive gain may fail to predict affective development. It remains to be seen whether classroom behaviors found to be effective in the lecture method of teaching are similarly effective in non-lecture contexts. Within the traditional lecture method, available evidence suggests that specific teaching behaviors contribute similarly to overall teaching effectiveness in different academic disciplines. Following are general conclusions drawn from experimental studies regarding low-inference classroom teaching behaviors: Classroom teaching behaviors, at least in the enthusiasm and clarity domains, appear to be causal antecedents (rather than mere correlates) of various instructional outcome measures. Low-inference teaching behaviors have been shown to influence not only student instructional ratings, but objective measures of student learning as well. Teaching behaviors accounted for a sizable proportion of outcome measure variance. As a general rule, teaching behaviors accounted for more variance in student instructional ratings than in objective measures of student learning.

Mort Harslett, Bernard Harrison, John Godfrey, Gary Partington and Kaye Richer of Edith Cowan University, Western Australia (1997) investigated Characteristics of Effective Teachers of Aboriginal Middle School Students. They found that effective teachers have an understanding of aboriginal cultures and histories and of their students’ home and family backgrounds and circumstances, an ability to develop good relationships with Aboriginal students and their families, and a capacity to be empathetic and flexible and to adjust to the dynamics of student behaviour and need. Effective teachers are appreciated by aboriginal students and
their parents as good listeners who take time to find things out and don’t jump to conclusions, understand that aboriginal students are often more independent than other students, are non-confrontational and don’t chastise or embarrass students in front of others, and negotiate classroom behaviour rules and consequences. These teachers adopt a student-centered approach to learning and program student-work at appropriate levels, set challenging and achievable standards, provide support, and include cultural relevance and recognition in the curriculum and classroom environment.

Comparable behavioral characteristics were investigated by Floyd G. McCormick Jr.\textsuperscript{52} (1990) in “Behavioral Characteristics of Effective Teachers”. He found that those teachers who understand and practice the power of positive teaching demonstrate specific behavioral characteristics. They are willing to change their ideas, dress, and behavior when appropriate and are able to see the others person’s point of view and are open-minded. They complain only when there is a real grievance. These teachers enjoy working with people and are cooperative. They have faith in the worth of an individual and faith in the value of teaching as a help to developing individuals. They are honest about situations and do not make excuses. They use tact when criticizing others; maintain good eye contact when talking with other people, knowing that the eyes are one of their most effective teaching tools. Effective teachers respect opinions and ideas of other individuals, yet make it clear that they are also allowed to have opinions. They have a wide variety of interests and the ability to utilize their interests to excite and motivate students. Such teachers smile easily and gave a good sense of humor, accept responsibility, understand people and their development. They exhibit desirable moral character, have the ability to communicate effectively and exhibit good citizenship in the school and community. They have the ability to evaluate objectively. They also have the ability to establish and maintain standards. Effective
teachers are sincere, dedicated, and committed and set a positive example for students. They are committed to professional development.

Lamont Flowers\textsuperscript{53} (2001) lists the four C's of effective teachers as being concerned, committed, creative, and competent. The concerned teacher operates on a zero-reject system in which every student is valued despite situations, circumstances, or scenarios that create student diversity. Committed teachers are committed to every student because they are committed to the ideals and principles of democratic participation. Creative teachers are also interested in their discipline and enthusiastic about presenting information to students in exciting ways. Hence, a creative teacher models behaviors that reflect creative thought. Students coached by a creative teacher learn to discover, produce, and maintain a state of intellectual ebullience by which learning is enhanced. A competent teacher realizes that his or her ideas and values are important but also asks his or her students to recognize and analyze competing ideas and values. In addition, the competent teacher knows that the textbook and statistical data are important sources of information but also demands that students learn about and become familiar with various sources of data to answer questions and improve learning. Moreover, the competent teacher demonstrates knowledge of effective learning practices such as cooperative learning. Furthermore, competent teachers participate in workshops, seminars, and conferences that allow them to learn new ways to solve old problems.

Remedios T. M.\textsuperscript{54} (1997) in a study regarding Teacher Effectiveness at Secondary School level in Mumbai in Relation to Achievement at B.Ed and Commitment to the Profession observed that there is a significant difference between Teacher Effectiveness and Teacher Commitment for Secondary School teachers. No significant difference exists between Teacher Effectiveness and different levels of achievement in general.
Gender wise too there is no significant difference in Teacher Effectiveness. Teacher Effectiveness was not significantly different for Secondary school teachers of varying levels of experience. Positive correlation is seen between presage and process variables of Teacher Effectiveness and between Teacher Commitment and presage and process variables of Teacher Effectiveness. Teacher Commitment contributed to Teacher Effectiveness. Teacher Achievement did not affect Teacher Effectiveness.

Taylor, Pearson and Walpole\textsuperscript{55} (1999) found that effective teachers spend more time working in small groups throughout the day. They have higher rate of communication with parents. Effective teachers have more students in their classes engaged in learning.

Elliott, Kratochwill, Littlefield Cook and Travers\textsuperscript{56} (2003) too found that effective teachers are characterized by related behaviors which include lesson clarity, instructional variety, task orientation and engagement in the learning process, praising students appropriately, and reflection. Clearly articulated objectives make learning more meaningful and useful by providing a structure for planning, delivering, and assessing instruction. Subject matter knowledge is one of the essential characteristics of an effective teacher, and subject matter experts agree that skillful delivery of fundamental concepts include the use of a conspicuous strategy, strategically integrated training, scaffolding, and structured review sessions. Researchers indicate that using technology, such as multimedia and the Internet, can also significantly improve instruction and students' learning in the classroom.

After conducting meta-analysis of effective teaching practices, Robert Marzano\textsuperscript{57} wrote in 'Classroom Instruction That Works' that an individual teacher can have a powerful effect on students and a profound influence
on student learning, even in schools that are relatively ineffective. Jennifer King Rice's work on 'Understanding the Attributes of Teacher Effectiveness' included five broad categories of measurable and policy-relevant indicators to organize the teacher characteristics assumed to reflect teacher quality. It is notable that conclusions for these characteristics frequently differ for teachers at the elementary school level and teachers at the high school level and that the body of research on the subject of teacher quality suggesting that the context of teaching matters. Rice stated that there is a positive effect of experience on teacher effectiveness; specifically, the "learning by doing" effect was most obvious in the early years of teaching. Research suggested that the selectivity/prestige of the institution a teacher attended had a positive effect on student achievement, particularly at the secondary level. Evidence suggests that teachers who have earned advanced degrees have a positive impact on high school mathematics and science achievement. Evidence regarding the impact of advanced degrees at the elementary level is mixed. Pedagogical coursework seemed to contribute to teacher effectiveness at all grade levels, particularly when coupled with content knowledge.

Studies on psychological correlates of Teacher Effectiveness reveal that qualities of a teacher such as concern, commitment, emotional integrity, intelligence and empathy add to their effectiveness. School teaching being a job that deals with children who are yet in the formation stage is governed by the relationship shared with the students and hence the effect of psychological factors cannot be undermined. The above paragraphs dealt with studies pertaining to what affects Teacher Effectiveness. It is also important at this juncture to examine the impact of Teacher Effectiveness.
2.4 Impact of Teacher Effectiveness:

The ultimate aim of education is the holistic development of the student. Considering the fact that the teacher is an influential factor in this development the effects of Teacher Effectiveness are studied through the following researches.

Good teachers make all the difference. According to research by academic-testing expert William Sanders and others (1990), the effectiveness of the individual classroom teacher is the single biggest factor affecting students' academic growth. Sanders found that students who had been taught by three ineffective teachers in a row scored below the 50th percentile in mathematics by the end of the third year. By contrast, those with three highly effective teachers scored above the 80th percentile. Teachers' effect on academic growth dwarfed other factors, such as class size, that have been given so much attention.

Research conducted by Kemp and Hall (1992) shows that students achieve more when teachers employ systematic teaching procedures. Greater academic progress occurs when lessons begin with review. Effective teachers run orderly class rooms. Achievement is high if climate is neither too harsh nor overly lavish with praise. Teachers who adjust the difficulty level of material to student ability have higher rates of achievement in class. Classrooms in which engaged learning occurs have higher rate of student cooperation. Effective teachers articulate rules and include students in discussions about rules and procedures for classroom management. Effective teachers provide a variety of opportunities for students to apply and use their knowledge and skills in different learning situations. They are able to pace the amount of information presented to the class, check student progress continually by asking questions to all, relating new learning to prior learning.
Stanford University economist Eric Hanushek\textsuperscript{51} (1997) found that having good teachers five years in a row could eliminate the average achievement gap between poor students and their higher-income peers. To give all children a chance to succeed, there is the need to invest in the quality of teachers. Teachers need good preparation before they enter the classroom as well as continued support and opportunities to develop their skills after they begin teaching.

Harris, Rutledge, Ingle and Thompson\textsuperscript{52} (2005) were probing into what Principals look for while hiring teachers and they found that principals prefer teachers with a mixture of personal and professional qualities—what is called the "individual mix." They also prefer an "organizational mix," hiring teachers who differ from those already in the school in terms of race, gender, experience, and skills. Finally, these principals want an "organizational match" in which teachers have similar work habits and a high propensity to remain with the school over time. Some findings have immediate implications for teacher quality-related policies: (1) the principals' frequent references to the needs of their individual schools (organizations) highlights the potential need for local control over teacher quality; and (2) the principals' preferences were clearly influenced by policies such as school accountability, teacher certification and teacher tenure, though not always in the intended ways. These findings are significant given that principals are likely to minimally comply with centralized policies that conflict with their preferences and that principals generally play some role, and often a significant one, in teacher quality-related decisions.

Thus it is evident that Teacher Effectiveness is instrumental in bringing about students' progress. Institutions have placed a premium on Teacher Effectiveness as it is a decisive factor in achievement of educational objectives. After considering the impact of Teacher Effectiveness certain
other studies are discussed below. The focus of these studies has been to establish the differences between Effective and Non Effective teachers.

2.5 Comparison of Effective and Non Effective Teachers:
Arora R.K.\textsuperscript{63} (1976) conducted a study to find differences between Effective and Ineffective teachers. The characteristics, educational background, occupational background, job motivation, present work load, professional growth, job satisfaction, attitudes and socio economic backgrounds of 160 teachers (80 Effective and 80 Ineffective) were studied and he concluded that age and tenure were the differentiating characteristics. Greater number of ineffective teachers passed examinations while in service. The groups of effective and ineffective teachers differed in attitude to teaching, teacher-pupil relationship, discipline, punishment, use of teaching aids and curriculum transaction with the effective teachers scoring significantly higher than their ineffective counterparts.

Chawla S.\textsuperscript{64} (2005) studied Interactional Analysis of Classroom Behaviour of Effective and Ineffective Hindi Teachers. He found that the proportion of 'teacher talk' in case of Ineffective Hindi Teachers was significantly higher than that of Effective Hindi Teachers. The extent of 'Pupil talk' was found to be higher in the Classroom managed by Effective Hindi Teachers than that of Ineffective Hindi Teachers. The Effective Hindi Teachers were found to make more use of the ideas of Pupils and try to build and develop their discussion on ideas suggested by Pupils. The Ineffective Hindi Teachers on the other hand discouraged their Pupil from expressing or suggesting any idea. It has been found that Ineffective Hindi Teachers spent more than 75% of the total interaction time in lecturing whereas Effective Hindi Teachers spent about 33% of the total interaction time in lecturing inside the Classroom.
Sanders and Rivers\textsuperscript{65}(1996) analyzed data for third-grade, fourth-grade, and fifth-grade students in 54 Tennessee school districts found that highly effective teachers were generally effective with all students, although lower-achieving students were the first to benefit from an assignment given by an effective teacher. Using data from two large Tennessee districts, these researchers also studied "residual" effects of teacher effectiveness on later student achievement. It was seen that students who were assigned to the classrooms of relatively ineffective teachers, and the next year were in classrooms of very effective teachers made excellent academic gains, but not enough to offset previous less-than-expected gains. The effects of teachers appeared to be cumulative, with the difference of almost 50 percentile points between a student who had effective teachers for three consecutive grades and a similar student who had a low-effectiveness teacher for all three grades. In general, effective teachers were extremely aware of what was happening in their rooms. They were virtually always in a position where they could see everyone in the room. They were extremely attuned to intervening before a problem escalated in the classroom. Like good parents, these teachers seemed to possess a power of intuition.

Fu-in Tang\textsuperscript{66} (2005) while studying Students’ Perceptions of Effective and Ineffective Clinical Instructors found large differences in scores between effective and ineffective teachers in the interpersonal relationship category, followed by the category of personality characteristics. Smaller differences in scores between effective and ineffective teachers were found in the professional competence category, followed by the teaching ability category. The findings of this research show those teachers' attitudes toward students, rather than their professional abilities, are the crucial difference between effective and ineffective teachers.
A research carried out by Richard Walls and Anne H. Nardi\textsuperscript{67} (2002) entitled “The characteristics of effective and ineffective teachers” studied the characteristics of three categories of teachers namely prospective teachers (beginning a teacher-education program), novice teachers (finishing the student-teaching experience), and experienced teachers (teaching in public schools). The affective domain figured prominently in the descriptions of all three groups. The overall emotional environment was a dominant theme. Caring about students was particularly prevalent in the descriptions of effective teachers. They were described as warm, friendly, and caring. Conversely, ineffective teachers often were said to create a tense classroom and were described as cold, abusive, and uncaring. A greater proportion of these emotional-environment responses, however, described their best teachers. In the category of teacher skill, effective teachers were said to know how to create an effective learning environment. They were organized, prepared and clear. Ineffective teachers consistently were indicted for their inept pedagogy, boring lectures, and unproductive learning environment. A higher percentage of statements was devoted to describing their best teachers. In the category of teacher motivation, effective teachers were described as caring about learning and teaching. “Enthusiasm” or “enthusiastic” often appeared in these descriptions. In contrast, a common statement was that their worst teachers hated teaching. Some were faulted for being burned-out or just going through emotional crises.

Bonnie Gourneau\textsuperscript{68} of the University of South Dakota (2002) reported a research on Attitudes of Effective Teachers with Implications for Teacher Education. The five attitudes prominent in effective teachers were demonstrating kindness and caring, sharing responsibility, accepting diversity sensitively, fostering individualized instruction and encouraging creativity.
Studies dealing with Teacher Effectiveness, its psychological and non psychological correlates, its impact on the system and the differences between Effective and Non effective teachers have helped the researcher to organize different aspects about Teacher Effectiveness. As the study aims at looking at Teacher Effectiveness from the perspective of Multiple Intelligence, it was necessary to examine studies in Multiple Intelligence.

2.6 Use of Multiple Intelligences in Teaching – Learning situation:
Research in Teaching Practices in the past few decades has been influenced by other disciplines as Psychology, Managerial Sciences and Technology. The application of Multiple Intelligences in the Classroom has been an area of special interest to educators and several studies have been conducted to see how the Theory of Multiple Intelligences affects learning and teaching. A discussion of some of these studies follows.

Bruce Campbell (1990) reported an action research project undertaken to explore student reactions to a multiple intelligences-based instructional model. Student behavior, attitudes, and abilities to work in non-traditional ways such as with music, movement, visual arts and cooperation were studied. The information was gathered in three ways: a daily journal was kept with specific entries, a classroom climate survey was administered eighteen times during the year and a student assessment inventory of work at the seven centers was administered nine times during the year. Data was analyzed on a weekly basis and observations were made. The students displayed increased independence, responsibility and self direction over the course of the year. Students previously identified as having behavioral problems made significant improvement in their behavior. Cooperative skills improved in all students. Ability to work multi-modally in student presentations increased throughout the school year with students using a minimum of three to five intelligence areas in their classroom reports. The more kinesthetic students particularly benefited
from the active process of moving from center to center every fifteen to twenty minutes. Leadership skills emerged in most students. Several students who had not previously displayed leadership abilities took the lead with their groups in the Music Center, the Building Center, the Art Center and particularly in the Working Together Center. Parents reported frequently that behavior improved at home, more positive attitudes about school were exhibited, and attendance was increased. Daily work with music and movement in content areas helped students retain information. The role of the teacher changed as the year progressed, becoming less directive and more facilitative, more diversified, less of a taskmaster and more of a resource person and guide. Students became progressively more skilled at working effectively in this unique and non-traditional classroom format. The results of the study indicate increased multimodal skills, improved attitudes, behavior and other benefits.

Cromwell R.R\textsuperscript{70} (1994) described in his paper that when sessions were provided for teachers on Gardener's Theory of Multiple Intelligence and its application to instruction and curriculum, teachers experienced, planned and reflected on the intelligences and their use in their lives as well in the classroom. A four step model developed by David Lazear\textsuperscript{71} involving awakening, amplifying, teaching and transferring intelligences was employed. Participants in the sessions believed that the multiple intelligences material would help them do a better job of teaching and/or supervising staff.

Coleman K\textsuperscript{72} and others (1997) described a programme for decreasing the gap between achievement among the primary and secondary level students in target schools. Students came from varied socio economic and cultural backgrounds. They showed discrepancy in achievement levels. Some probable causes for the same were identified by the teacher and intervention strategies based on teaching with multiple intelligences were
utilized. This included cooperative learning and projects. Meta cognitive processing was enhanced due to the exercise.

Dare M.\textsuperscript{73} et al (1997) reported a programme to reduce disruptive behaviour that interfered with students' academic growth. The problem of disruptive behaviour was documented by use of behaviour checklist, teacher observation and academic assessment. Among the various interventions used was the employment of multiple intelligence strategies. Post intervention data showed a decrease in disruptive behaviour.

Greenhawk\textsuperscript{74} (1997) found that application of Multiple Intelligence in White Marsh Elementary School, Maryland increased the student performance on standardized tests and produced a school wide culture of achievement. The teachers also reported that MI based curriculum helped students understand their abilities as learners, build confidence, take risks and retain better. Greenhawk opines that “MI turned the school to a learning community and helped teachers and students strive towards excellence by valuing excellence, diversity and achievement” (cited in Johnson, 2007). Similar findings were reported by Kristen N.\textsuperscript{75} (1995) in an article “Seven Ways of Being Smart” where she employed MI in the classroom and found that students showed improved performance, put more effort in their weak areas and in general felt better about themselves.

An experiment was carried out jointly by the teaching staff and librarian of Zydus School for Excellence, Ahmedabad (2003). The approach used here is the practical application of Multiple Intelligence Theory in evaluating a resource by roughly 360 students of K-2 standard. In this experiment the student selected a particular resource and the teacher checked whether various multiple intelligences developing activities were available in the resource. If at least 4-5 such activities were available, the student could take home the resource and share it with his/her parents.
Then an effort was made to collect feedback from parents as to how the child and the parent utilized the resources effectively and what was the learning outcome. Based on the feedback, the child was reinforced regarding the choice of right resources. Since this exercise involved both children and parents and was structured in approach, there was an observation that the students looked forward for the library periods in the school quite enthusiastically. The results showed that Multiple Intelligence Theory helps in developing skills to analyze a resource logically and use it effectively to increase the success level of the students. The exercise helped in stimulation of various faculties of the brain/intelligences and also the child's confidence level got a boost since he/she could self evaluate a book and make the most of it. This resulted in increase in the student achievement level due to knowledge gain and application, which resulted from such evaluation. The experiment defocused use of only verbal and mathematical intelligences and encouraged students to go beyond these traditionally acclaimed intelligences. This helped building the overall personality of the child to a greater extent. The findings of this research were published at the World Library and Information Congress, Seoul, 2006 by Rashmi Kumbar76.

Hickey77 (2004) reported that when teachers enrolled in a Multiple Intelligence Course developed MI based units and used them in the classroom. Five case studies revealed that students were more actively engaged, retained better and used higher order thinking skills. Students took ownership for their own learning and produced better quality work. Emig78 (1997) supported the same by reporting that students retain better because they understand matter in a more meaningful way. Sue Treetle79 (1996) paralleled this saying “intrinsic motivation, positive self image and a sense of responsibility develop when the students become stakeholders in the educational process and accept responsibility for their own actions”.

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An action research by Michelle Acosta\textsuperscript{80} (2005) aimed at determining if MI based instruction had an effect on students' attitudes toward learning and on students' academic achievement in English. Students' responses to the MI profile before the experiment indicated that 62 percent of the students were weak in the logical-mathematical intelligence and 56 percent of the students were weak in the verbal-linguistic intelligence. Since the logical-mathematical and verbal-linguistic intelligences heavily influence the ability to analyze literature and the verbal-linguistic ability influences the ability to effectively communicate through the written word, majority of students wrote compositions which were rated in the middle and low categories. Students were reminded that their own intelligences had changed drastically from early childhood throughout their school years, and it was emphasized that their intelligences makeup would continue to change with age and with experience. It was impressed upon students that they were not locked into one or two intelligences and that they should never label themselves (or their peers) as being low in one intelligence or another. During the course of the study, students were taught using lessons, activities, and projects based on the multiple intelligences. Students were required to use their interpersonal skills to defend their positions, first with their group members, then with the entire class. Students also needed to use their intrapersonal intelligences because the emotional level of this discussion required a sense of self-awareness and self-understanding. Students also needed to use their logical-mathematical and verbal-linguistic intelligences for analysis and their verbal-linguistic intelligence for communication. The improvement in analytical and written communication abilities demonstrated on the post-tests indicated that MI based instruction had an impact on students' learning. This improvement over a six week time period implied that students' analytical and written communication abilities would likely continue to improve with continued exposure to instruction based on the multiple intelligences.
Kronhaber and Moren\textsuperscript{81} (2006) concluded that the greatest potential of an MI based approach to education grows from the concept of a profile of intelligences. An MI based approach requires that teachers construct rich activities in which the student can engage with the material personally rather than just absorb it in an abstract or de-contextualized manner.

Summarizing the studies done on use of MI in the classroom, it is very evident that students stand to benefit the most from learning activities that have an MI base. Teachers find it easier to deal with classroom discipline and get better results. A very reassuring conclusion is that Multiple Intelligences are trainable. There has been a thrust on such studies in the last two decades and MI based strategies are definitely shaping the classrooms of the 21\textsuperscript{st} century. Just as the benefits of the Theory of Multiple Intelligence were evident in the classroom, so were they quite profound in the workplace as was seen from a few studies that investigated Multiple Intelligence and its role in career choice and development.

2.7 Application of Multiple Intelligences in Careers and Training:
This section deals with the studies conducted in the area of application of the Theory of Multiple Intelligences in the workplace or at training.

John Holland's Theory bears some resemblance to the MI Theory. An Application of John Holland's Vocational Theory to an Empirical Study of Occupational Mobility of Men Age 45-59 was conducted by George Parsons\textsuperscript{82} (1980). This study was designed to investigate the occupational movement and reasons for movement of men aged 45 to 59 between their first and current jobs, and more precisely to examine: (1) change and stability of various occupational personality types, (2) the effect of selected variables on change and stability of personality types, and (3) the relationship between job satisfaction and worker attachment to an
occupational personality type by use of John Holland's theory of career selection. A multi-stage probability sampling technique was used. Major findings indicated that Realistic types were the most stable personality types and that occupationally mobile individuals were different from occupationally stable individuals, blacks from whites vocationally, and Realistic types from the other five personality types. The most significant implication of this study for career development research was that it indicated the relevance of Holland's theory of vocational selection and to the study of occupational mobility.

Lessem, R., and Baruch, Y. (1998) studied managerial types focusing particularly on interpersonal and intrapersonal intelligences needed in the contemporary workplace. Their Spectral Management Theory describes eight management styles in terms of cognitive, affective, and behavioral characteristics: innovator, developer, analyzer, enterprising, manager of change, people manager, action manager, and adoptive manager. It incorporates multiple intelligences theory and can be applied to managing across cultures.

Dario Nordin and Pam Fox Rollin (2003) found Multiple Intelligences to be a powerful perspective for supporting adult learning, including coaching in business and personal contexts. MI was useful whenever clients wanted to know how to recognize and leverage their talents, blaze their own path to high performance, develop and appreciate themselves, and value and guide others. Multiple Intelligences could be applied to coaching by helping the client recognize and value the distinctive ways he or she is smart. This may include talents that are typically ignored in business. For example, the technology director may have peers with more activated Verbal intelligence, which is highly prized in most cultures. Yet his combination of Visual-Spatial competence and Interpersonal skill may enable him to enter the conversation with a diagram that incorporates
diverse views on the issue, enabling the group to see a shared solution. It is necessary to work with the client to diagnose the situation so as to consider what result is needed and in what alternative ways may that result be achieved. They invite the client both to lead with strengths and to activate lesser-used intelligences. For example, in coaching clients on improving relationships they seek to activate their Intrapersonal and Interpersonal intelligences. For a client with highly-developed Logical smarts optimum use of deductive reasoning and creative problem-solving is considered. Coach training and practice draw intensively on Intrapersonal, Interpersonal, and Verbal-Linguistic intelligences. People learn to be aware of and manage their own thoughts and emotions, to understand how people view their world, to relate with an open heart, to listen more fully and talk more clearly. Progressive practice increasingly incorporates Bodily-Kinesthetic intelligence through somatic awareness and movement. Some coaching methods activate Visual-Spatial intelligence through imagery, Logical-Mathematical intelligence through well-reasoned distinctions, even Naturalist and Musical-Rhythmic intelligences through guided experiences. The study concluded that Multiple Intelligences may invite an even higher standard of practice as one defines a definite community and develops the next generation of coaches and thought-leaders. The MI model was found to be clearly consistent with coaching values of self-discovery and honoring others.

Angela Burton85, Assistant Professor and Director of Children's Rights and Family Law Clinic at Syracuse University College of Law and Joyce Martin, a lecturer at the Australian Catholic University, Sydney Australia, and author of “Profiting from Multiple Intelligences in the Workplace” conducted a study on Multiple Intelligence in the legal profession. Martin (2004) asserted that lawyers come into the profession with hopes of actualizing themselves and serving justice. Their self actualization dreams included financial remuneration, social status, and the power to make a
difference using their knowledge and skills. She surmised that part of the dissatisfaction in the profession may be that lawyers accept a "mechanistic view" of themselves, seeing themselves "as machines hired out to run for so many hours a day." During these billable hours they relied almost exclusively on the power of logic and language to move them through their tasks. Their other intelligences remained untapped resources. Use of these resources might not only make them more efficient at what they do but also provide them with opportunities for replenishment. Lawyers typically had strong linguistic skills. Many, especially those in more technical fields, had strong mathematical reasoning skills.

While reporting the results of an investigation into the influence of self-knowledge on career confusion among college students and strategies to enhance career and academic planning, C. Branton Shearer\textsuperscript{86} (2006) stated that Low Intrapersonal intelligence scores were found to be a significant characteristic of undergraduates with moderate and high levels of career confusion. Students reported that gaining an understanding of their multiple intelligences profile enhanced their career planning and selecting a college major. Eighty-two students in a Career Exploration course at a large mid-west university participated in this project during three semesters.

Commenting on Leadership and Multiple Intelligence Profile, C. Branton Shearer\textsuperscript{87} (2006) said that there are four main scales that pertain directly to the essential tasks of managers and leaders: Interpersonal, Linguistic, Intrapersonal and Logical-mathematical. Strengths in all four of these areas indicate a full range of abilities required by many leadership situations. Limitations may suggest areas in need of improvement if they are required by the desired position or situation.
Sandra Kekra\textsuperscript{28} in an article collating research on Multiple Intelligences and careers stated that a profile of an individual's strengths and weaknesses in the intelligences could be developed using a tool such as the Multiple Intelligences Developmental Assessment Scales (MIDAS) created by Shearer (1997, 1999). The use of MI theory could assist the career development and counseling process in a number of ways: Self knowledge that is awareness of one's MI strengths and weaknesses added to the self-knowledge that was a prerequisite for successful career choice. Students who completed the MIDAS profile had a clearer sense of their skills and abilities. As with John Holland's personality and interest categories, potential career options for each intelligence could be identified. Success in careers needed enhancement of self-esteem. Schools historically had valued verbal and mathematical intelligences over all others. Vocational subjects and related occupations had sometimes been denigrated because the spatial, kinesthetic, and other intelligences needed in these areas had not been recognized (Smagorinsky 1996). At-risk students and adults who may not have experienced career success have benefited from recognizing that they are intelligent and that they can identify jobs that match their strengths (Shearer 1999; Taylor-King 1997).

The close relationship between Multiple Intelligences and workplace efficiency is evident all through the above researches. This study deals with Multiple Intelligences in relation to the teaching profession. Hence studies that look into the relationship between Multiple Intelligences with special focus on the teaching career were probed into to see if there is an impact on teachers' effectiveness and his/ her Multiple Intelligence. Few studies of this type were available. Theses studies are discussed below.
2.8 Multiple Intelligence of Teachers and Teacher Behaviour:

Gary A. Gunst (1997) from Wayne State University conducted a study entitled “A study of multiple intelligences among teachers in Catholic elementary schools in the Archdiocese of Detroit (Michigan)”. The findings of the study are: Academic subjects have been taught in ways that largely involved two named intelligences-verbal-linguistic and logical-mathematical. Students who were strong in these areas usually did well on standardized tests, ensuring a tendency towards success at school because teachers and teaching materials were dependent on these two intelligences. The use of multiple intelligences had proven to be beneficial to students and teachers in private school settings. As assessment is reliant on standardized testing, multiple intelligences are often relegated to the status of abilities, sensitivities, or skills. A non-experimental, descriptive research design was used to determine teachers’ perceptions and use of multiple intelligences. The population defined for this study were Archdiocese of Detroit Catholic elementary (grades PK - 8) school teachers (n = 622). Three surveys were used in this study: the Intelligence Survey, Teaching Strategies Survey, and a short demographic survey. Catholic elementary school teachers in this study tended to exhibit logical-mathematical, interpersonal, intrapersonal, and naturalistic intelligences, while not using verbal-linguistic, visual-spatial, bodily-kinesthetic, and musical intelligences. What was unexpected was that teachers generally were not using verbal-linguistic intelligence. Teachers’ self-reported strongest intelligence differed significantly from the mean scores for the eight multiple intelligences. Teachers’ self-report of their strongest intelligence were most likely to have the highest mean scores for the associated intelligence. These findings reflect that teachers were aware of their strongest intelligence and were providing instruction using that type of intelligence. Teachers tend to use teaching strategies that are aligned with their self-reported multiple intelligences. Teaching strategies were
intended to foster student learning and help them develop their different intelligences. However, teachers needed to be able to move beyond their strongest intelligence and incorporate several approaches in classrooms where students have varying abilities, interests, and aptitudes. Students could benefit academically from teachers who use MI theory to make learning more productive by sharing opinions and problem-solving strategies. Active learning was facilitated by teachers' use of instructional strategies to present new concepts and develop skills to meet their students' cognitive and affective needs. Teachers needed to consider learners' interests, skills, and aims to create a positive learning environment.

C. Branton Shearer\textsuperscript{90} (1997) has developed MIDAS (Multiple Intelligences Developmental Assessment Scales) which is used widely in career counseling. While discussing Multiple Intelligences Assessment to Facilitate Teacher Development, he says "The first step in adopting the MI approach is to generate an in-depth understanding of the multiple intelligences by teachers." Having teachers complete their own MI profile was found to be an effective means to provide a personal experience with all the intelligences and their dimensions. Teachers reported that they benefited from the process of verifying their own MI profiles and then reflecting on how their profile impacts on their teaching approaches. One teacher described this benefit saying "An MI profile can sensitize teachers to their own weaknesses and help them to empathize with their students who are struggling. It helps to enhance that relationship so teacher and student can see each other as 'real people' and take one step closer to each other in a positive way. The teacher isn't the unapproachable only intelligent person in the classroom."

It was found that teachers were able to understand the MI profile not as a simplistic set of labels but rather as a richly descriptive narrative of their
intellectual and creative life. This insight was useful when it came to reviewing their students’ MI profiles. Teachers reported a number of benefits of reviewing their students’ MI profiles and becoming aware of students’ strengths. Another powerful experience for promoting acceptance occurs when teachers see how the use of MI influences students. Acceptance can assist teachers in bringing a positive MI approach to their teaching. Intrapersonal awareness includes a realistic appreciation for one’s multiple intelligences abilities (and limitations) which are correlated with success in various careers. Second, an essential Intrapersonal skill is the ability to use good judgment in managing one’s decision-making to promote one’s own best interests including both educational and career planning.

Issues in the use of MI include not "labeling" people by their preferred intelligences, not matching intelligences to careers too early, and encouraging individuals to develop less-preferred intelligences (Armstrong 1994; Shearer 1999). The MIDAS for Adults version has been included in the curriculum of college career exploration classes for four years and has been found to increase student’s self awareness to assist in career making and major selection according to Shearer. Various private and public schools are currently using the MIDAS to build an appreciation for the educational applications of MI Theory. The MIDAS is also being used extensively in teacher training, including the preparation of new teachers in university training programs. For example, the MIDAS is being used as a teacher training tool at the University of Calgary and at the University of Manitoba. Many American universities, including Harvard and Kent State University are also using the MIDAS as a preparation tool with novice teachers.

Regarding the expansion of career possibilities Mantzaris91 (1999) found that adults involved in MI activities broadened the parameters of their
career choices. Rather than focusing on the "right fit," learners found that the self-discovery inspired by MI added multiple dimensions to the process of career choice.

Dr. Marjorie Halley's\textsuperscript{92} (2006) MI Study involved creating and disseminating a collection of instructional strategies and alternative forms of assessment that activated all eight intelligences. Participating teachers were familiarized with their own strong intelligences and encouraged to share ideas with each other, enriching classroom instruction at all project sites. Background materials and planning tools provided by the researcher helped teachers develop lessons and alternative assessments. Project participants noted that these methods impacted student achievement and attitudes in positive ways. For this study, each student's intelligence profile was identified with an informal MI survey. The survey was adapted from Seven Kinds of Smart (Armstrong, 1993). The results raised student and teacher awareness of the multiple intelligences. For research participants, this experience was an introduction to MI Theory and an opportunity to learn more about their own learning preferences. Survey results provided teachers with a valuable reference for instructional planning. To determine the effects of interventions, qualitative and quantitative data were collected and analyzed. Qualitative data consisted of electronic communication with the researcher, weekly activity logs, lesson plans and project descriptions and participants' comments at the end of the study. Quantitative data consisted of student grades before and after the MI study. Results indicated that teachers were profoundly affected as they developed and implemented alternative presentation methods and assessments. Students demonstrated keen interest in multiple intelligences concepts and showed positive responses to the increased variety of instructional strategies utilized in their classes. An unanticipated outcome of the research project was the positive impact it had on student motivation. Applying Multiple Intelligence Theory in a foreign language classroom is
meaningful because it promotes a change in the methodologies of teaching languages through the sole use of drill worksheets, dialogue memorization, and verb conjugation charts. Activities that appeal to multiple intelligences can also promote the use of the target language as it is used in real life. For example, instead of filling in a verb worksheet, students are asked to perform using the verbs in authentic tasks, that model "real-life" situations. From role-playing to journal writing, students can show what they know by performing in the target language. Thus in-service training input on one’s own MI profiles and applying the same to one’s teaching transactions enhanced the teacher’s functioning.

A study on Multiple Intelligence Levels of Primary Teacher Trainees in Tamil Nadu was conducted by M. Rajendran\textsuperscript{93} (2007). He reported that the Multiple Intelligences of Second Year teacher trainee was significantly higher than that of First year teacher trainee. In the first year, female teacher trainees reported significantly higher MI as compared to the male trainees. Teacher trainees from the urban teacher training college showed significantly higher MI than those from the rural teacher training college.

All the above researches focus on the relation between Multiple Intelligences and Career Development. There is clear evidence that choice of a vocation and success in the same, depend significantly on the Multiple Intelligences of a person. There is also adequate evidence to show that Multiple Intelligences can be trained so as to be utilized to optimum level and bring about an enhancement in learning as well as in job performance.

**Conclusion:** Studies on Teacher Effectiveness reveal a host of impacting factors. Effective teachers are not simply effective in the classroom; they have a positive influence on the students' thinking, value system and personality in general. Effective teachers have a thorough command over
their field and are well acquainted with the importance of Pedagogic Content Knowledge. Among the psychological correlates of teacher effectiveness, concern, commitment, emotional integrity, intelligence and empathy stand out strikingly. Effective teachers positively influence their students and students reported better academic gains when tutored by effective teachers. Comparison between more effective and less effective teachers showed significant differences in their approach to teaching. Effective teachers used more student friendly and interactive methods as compared to the less effective teachers. Effective teachers were generally more enthusiastic in their dealings. Studies done to see the effect of Multiple Intelligence in the teaching –learning situation revealed that students stand to benefit the most from learning activities that have an MI base. Classroom discipline and academic performances were better with the introduction of MI based activities. A very reassuring conclusion is that Multiple Intelligences are trainable.

Research on career development, career planning and use of Multiple Intelligences is still in the nascent stage. Studies conducted so far show a lot of promise in the use of Multiple Intelligences in career planning. Thus use of Multiple Intelligences during the pre-service and in-service stages, of any profession, will help to avoid wastage and stagnation in a. It will ensure best use of human resources bringing satisfaction to individual and benefit to the society. Developing a profile of an effective teacher based on Multiple Intelligences, therefore, is the focus of the study.
References:


26. Dr S Santhana Krishnan and Dr V Usha (May/ June 1997). *Teacher Effectiveness in relation to Sex and Type of schools*, The Educational Review.

27. ibid 25

28. ibid 25


30. ibid

31. ibid


37. ibid 25

38. ibid 29


40. ibid

41. ibid 25

42. ibid

43. ibid

44. ibid 29

45. ibid 25

46. ibid 29

47. ibid

48. ibid
49. ibid 33


54. ibid 33


64. Sansanwal (Ed), Sixth Survey of Research in Education, NCERT, New Delhi, Retrieved on 11th December 2006 from the World Wide Web: http://eduresearch.dauniv.ac.in/


73. ibid 65


78. Emig A.T (1997) *A Multiple Intelligences Inventory*. Educational Leadership, 55 (1)


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http://www.learnenglish.de/Teachers/multipleintelligences2.htm


www.renaissancelawyer.com/multiple_intelligences.htm


