CHAPTER II

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REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The review of related literature is an important aspect in any research. It involves the systematic identification, location, and analysis of documents containing information related to the research problem. The major purpose of reviewing the literature is to determine what has already been done that relates to one’s own problem. Wiersma (1991) says it is a systematic process that requires careful and perceptive reading and attention in detail. In the review of literature the researcher attempts to determine what others have been learned about the research problems and to gather information relevant to a research problem at hand. Another important function of review is that it points out research strategies and specific procedures and measuring instruments that have and have not been found to be productive, investigating one’s own problem.

Knowledge acquired through generation is well displayed in books, which are arranged in libraries. Each new generation of human being makes use of accumulated knowledge as a foundation for building up further knowledge. Hence, the study of related literature is necessary in any field of enquiry.

Review of literature gives us the relevant material published in the problem area under study. The studies conducted during the last few decades in the field of special education that are more relevant to the present investigation are discussed in this chapter.

2.2 TEACHING STRATEGIES OF CHILDREN WITH AUTISM, MENTAL RETARDATION AND MULTIPLE DISABILITIES

We are living in a world of rapid change and growth. The special schools and special teachers have greater demand than ever before. They are an integrated part of education. Problem identification is the first stage of the problem solving process. Snell and Janney (2000) in their report of special teacher problem solving with students having moderate and severe disabilities in elementary classroom began with problems identification. Problem identification involves the
classification of the issue to be addressed. Success in this stage requires a combination of other teacher’s skill and personnel skill. It helps to reduce the job stress of special teacher.

Teachers play an important role in any educational system. Teacher is an artist who moulds and shapes the physical, intellectual and moral powers of the children. The type of classroom learning environment created by the teacher and the instructional approach used can both markedly influence the development in children. A teacher with multi-talents can show his competencies from identification of disabilities to assessment, teaching and training strategies, evaluation process, selection of teaching materials, selection of appropriate skills, and giving appropriate guidance and counseling. Social integration of children with disabilities within the society can be achieved if the teachers have better knowledge about disabilities, attitudes towards children with disabilities and competencies to handle disabled children.

Westling and Fox (1995) stated that the more students with disabilities learn, the more they will be accepted, and the more they will learn. The major objective of special education is to make students with special needs as independent as possible and to be included into society. For this, they need extensive training. Children with intellectual disabilities are unique so they need appropriate teaching strategies to learn skills.

Teaching strategies are those activities that are employed by a teacher to enhance the overall achievement of students. There are number of teaching strategies, which strategy to employ or choose to teach particular task depends on the teacher’s discretion, the degree of learning and characteristics of the learner (Myreddi, 2007).

Instructional strategy is a term which encompasses a variety of procedures which a teacher may use to help a student to achieve an instructional objective. Many of these strategies grew out of research on the application of learning principles to functional academic subjects. In the planning and delivery of instruction, the teacher needs to consider many of these principles and depending up on the response from the learner shift from the use of one strategy to another. All the
strategies do not work equally with all learners but the teacher must analyze the responses of the learner and determine if the strategy is effective or if some aspect need to be changed. The teaching strategies should be preplanned and consistently applied throughout a given instructional programme.

Due to the intellectual impairment, children with mental retardation, autism and multiple disabilities have less capacity to learn skills and maintain and generalize learning skills. Teachers, either general educators or special educators do employ various strategies while teaching children in classrooms. However, special strategies and techniques need to be used with children with autism, mental retardation and multiple disabilities and sometimes individualization of strategies and techniques are also required for teaching.

Treatment and Education of Autistic and Related Communication Handicapped Children/Adults (TEACCH), Auditory Integration Training (AIT), Picture Exchange Communication System (PECS), and Applied Behavior Analysis (ABA), Discrete Trial Training (DTT), Assistive Technology (AT) and Structure, Positive, Empathy, Low arousal, Links (SPELL) Task Analysis, Prompting and Fading, Modeling, Shaping, and Chaining are the most popularly and commonly used teaching strategies in teaching children with autism, mental retardation and multiple disabilities. In addition, reinforcement methods are extensively used to strengthen the learning.

2.2.1 TEACHING STRATEGIES OF STUDENTS WITH AUTISM

No single method for teaching students with autism is successful for all students. Also, students’ needs change over time, making it necessary for teachers to try other approaches. There are number of treatments, which help some, but not all children /adult with autism. The most successful and effective outcomes have been achieved through behavioural, developmental, and cognitive interventions. The methods being used are given below.
Discrete Trial Training (DTT)

Discrete Trail Training is a style of teaching in which opportunities to respond are presented one at a time so that the specific components are discernible to the learner, and so that an accurate recording of the learner’s responses can be made. It is a structural therapy that uses a one-to-one teaching method and involves intensive learning of specific behaviors. This intensive learning of a specific behavior is called “drill”. Drills help learning because they involve replication. The child completes a task many times in the same manner. This repetition is especially important for children who may need a great deal of practice to master a skill. Repetition also helps to strengthen long term memory.

DTT is important to realize that "Applied Behavior Analysis (ABA)” is a broad approach for facilitating behavior change. DTT is one specific training method within ABA. It can be effective when applied to a particular skill and behavior. Some instructional objectives lend themselves quite well to a DTT approach. For example, a receptive labeling task (e.g., “Show me the [noun]”) would be quite easily and appropriately taught through a 10-trial session in which the trial is identically presented and practiced with consequences for successful trials. The next level of planning would involve consideration of specific skills that should be taught through discrete trial training (Bogin, et al. 2010).

Picture Exchange Communication System (PECS)

It is an augmentative communication programme designed for individuals with autism and other disabilities that lack expressive language (Frost & Bondy, 1994). The programme teaches students to exchange a picture for a desired item. Training begins with an assessment of each student’s preferred reinforcers, and children are repeatedly offered several combinations of materials to determine their reinforcement preferences. Reinforcer assessments may be repeated throughout training as children’s preferences change over time. PECS decreased the problem behaviors and increased speech in some individuals (Banda & Hart, 2009). Mothers to be the primary implementers of PECS training (Park et al., 2011).
Applied Behavior Analysis (ABA)

ABA has been defined as “the science in which procedures derived from the principles of behavior are systematically applied to improve socially significant behavior to a meaningful degree and to demonstrate experimentally that the procedures employed were responsible for improvement in behavior” (Cooper et al., 1987). ABA emphasizes proactive antecedent approaches while also providing effective strategies for intervening after a behavior has occurred. This methodology involves an ongoing and comprehensive analysis of an individual’s environment, which encompasses adaptive, meaningful curriculum, appropriate instructional activities, appropriate stimulus control, and positive classroom structure to increase a student’s desired behaviors (Darch, Miller, & Shippen, 1999). ABA is a systematic approach to the assessment and evaluation of behavior and the application of interventions those alter behaviours. ABA focuses on the process of behavior change with respect to the development of adaptive, pro-social behavior and the reduction of maladaptive behavior.

Treatment and Education of Autistic and Related Communication Handicapped Children/Adults (TEACCH)

Treatment and education of autistic and related communication handicapped children, which has come to called “structured learning”, emphasizes structure by using organized physical environments, predictably sequenced activities, visual schedules and visually structured activities, and structured work/activity system where each child can practice various tasks.

TEACCH is based on the fact that people with autism of all levels of ability find it easier to process visual rather than spoken or written information. It is used not only in education but also in providing a structured life especially where choices are necessary. Rather than asking an autistic person whether they fancy a swim or a walk in the park, if photo of each activity is held in front of them, even if they have virtually no language skills, they can point to one photo or the other. Not only they have satisfaction of making choice, they are also quite clear what is going to happen next. This is important in dealing with behavioural problems.
Auditory Integration Training (AIT)

AIT involves listening to specially adapted music through headphones for two half-hour sessions a day for 10 days with a weekend. The theory is that autistic people hear some sounds too well and some too faintly. The distortions in their hearing are analyzed and the music adapts to retrain the ear. This in turn, improves speech and behavior.

Psychotherapies

Mental health providers can play a valuable role in a comprehensive program for a student with autism. For example, mental health professionals within the schools, communities and medical facilities should provide support for families, particularly for families whose child has recently received a diagnosis of ASD. Mental health providers can also consult with teachers, facilitate social skills groups for students, and assist with in-service training for school faculty and community personnel. Although it has been well-documented in the research literature that individualized psychotherapy (e.g., “talk therapy”) is not particularly effective with children with ASD, therapeutic strategies can certainly be geared toward behavioral change and skill-building (Good therapy.org).

Assistive Technology (AT)

Assistive Technology is a broad term used to describe any aid that is used “to increase, maintain or improve the functional capacities of a child with a disability” (Individuals With Disabilities Education Act Amendments, 1997). AT devices can be electronic or non-electronic and can be classified a low-tech, mild-tech, or high-tech. AT solutions include a wide variety of options, ranging from adapted utensils, talking calculators, pencil grips, talking word etc.

Pivotal Response Training (PRT)

Pivotal Response therapy or treatment is a naturalistic intervention derived from ABA principles. Pivotal Response Training is intent to apply educational techniques in pivotal areas of a child’s development such as motivation, responsibility to multiple cues, self management, and social initiations that affect
numerous target behaviors (Koegel, Harrower, & Carter, 1999). The goal of intervention in pivotal areas are: 1) to teach the child to be responsive to the many learning opportunities and social interactions that occur in the natural environment, 2) to decrease the need for constant supervision by an intervention provider, and 3) to decrease the number of services that remove the child from the natural environment (Vismara, 2009). There are multi-component programmes which include pivotal response training as a key element (Ericzen, 2007).

**Joint Action Routines (JARs)**

Joint Action Routines refer natural language paradigm interventions. This involves the arrangement of the child’s environment in such a way that it will support and increase the opportunities for the child to use language. JARs are based on the premise that providing motivating contexts develops communication skills, including opportunities and needs to communicate.

**Sensory-motor Therapies**

Unusual responses to sensory stimuli are more common and prominent in children with autism, although there is not good evidence that sensory symptoms differentiate autism from other developmental disorders. In recent years sensory integration therapy has provided valuable information about how individuals with autism process and respond to incoming sensory stimulation (Baranek, 2002). There is now clear evidence that sensory integration difficulties can significantly influence an individual's behavioral functioning, and that activities which address sensory deficits or excesses can assist students with ASD in developing independent functioning. For example, inclusion of stimulatory and regulatory activities such as rhythmic rocking, sequential body pressure and joint compression input, swinging, jumping, moving to music, and swimming may be beneficial strategies for encouraging attention to task and calming children.

**Play**

Play therapy is a developmentally responsive intervention widely used for children with autism. Play therapy produced the largest effects. Play therapy
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appeared equally effective across age, gender, and presenting issue (Bratton, et al., 2005). Play Therapy uses play as a tool for building skills in children with autism, using the child’s own interests as the starting point. As the core deficits of autism are in the social and communication domains, children with autism find it difficult to relate to others - particularly peers – in ordinary ways. Rather than playing with toys in imaginative or symbolic ways (pretending that a doll is a real baby, for example), children with autism often perseverate on objects, use them for self-stimulation and become self-absorbed. Play can be a useful tool to help children to move beyond the self-absorption of autism into share interactions with others. Because play therapy uses the tools of ordinary, typical childhood (toys and games), it can often allow parents to take an active role in their child’s development and growth and create stronger relationships between the parent and child with autism. Play is a wonderful tool for helping children to move beyond autism’s social barriers into real, shared interaction. Play therapy gives a dynamic, enthusiastic, play-oriented approach to working with children which facilitates socialization and relationship building. Freud (1946-1965) utilized play as a means to facilitate positive attachment to the therapist and gain access to the child’s inner life (Kumari, 2006). Non-directive play therapy may enhance and accelerate emotional/social development of children with severe autism (Josefi & Ryan, 2004).

Play activities have long been included in interventions for children with various psychological and medical disorders. The literature on educational practices has documented the role of play activities as an effective tool for teaching children diagnosed with autism (e.g. Floor therapy, Sensory therapy). Floor time is an integrated model that is centered on the child and involves sensory and motor planning play, and focuses on emotional development rather than cognitive or behavioural development (Menon, 2012).

SPELL

SPELL stands for structure, positive, empathy, low arousal, and links. It aims at providing a structured environment, a positive attitude with realistic expectations, empathy, seeing the world from the autistic person’s view point and low
arousal, an environment and life style that reduces stress and anxiety. SPELL is very good and effective method to teach children with autism. The SPELL framework recognizes the individual and unique needs of each child and adult and emphasizes that planning and intervention be organized on this basis. There are number of interlinking themes are known to be of benefit to children and adults on the autism spectrum and that by building on strengths and reducing the disabling effects of the condition progress can be made in personal growth and development, the promotion of opportunity and as full a life as possible (Siddles et al., 1997).

**Instructional Approaches**

The most strongly recommended approach for teaching students with autism is to use visual aids. Students often demonstrate relative strengths in concrete thinking, rote memory, and understanding of visual-spatial relationships, and difficulties in abstract thinking, social cognition, communication, and attention. Pictographic and written cues can often help the student to learn, communicate, and develop self-control. One of the advantages of using visual aids is that students can use them for as long as they need to process the information. In contrast, oral information is transient: once said, the message is no longer available.

Oral information may pose problems for students who have difficulty processing language, and who require extra time. In addition, it may be difficult for the students with autism to attend to relevant information and to block out background stimulation. Using visual supports enables the individual to focus on the message. Visual aids and symbols range in complexity from simple and concrete to abstract. The continuum moves from real object or situation, to facsimile, colour photograph, colour picture, black and white picture, line drawing, and finally to graphic symbol and written language. Objects are the most simple, concrete form of aid.

Provide precise, positive praise while the student is learning, use meaningful reinforcements, plan tasks at an appropriate level of difficulty, use age-appropriate materials, provide opportunities for choice, break down oral instructions into small steps, pay attention to processing and pacing issues, use concrete examples and hand-on activities, use task analysis, use discrete trial methods, introduce
unfamiliar tasks in a familiar environment when possible, organize teaching materials and situation to highlight, encourage independent effort and incorporate proactive measures to reduce the likelihood of becoming dependent on prompts, direct and broaden fixations into useful activities are other techniques to teach children with autism.

**There are some common simple methods to teach children with autism.**

- Create an environment that is not over stimulating to the child (no loud music)
- Create a structured environment with predictable routines
- Provide visual cues
- Create checklists
- Give fewer choices
- Select repetitive motions when working on projects
- Eliminate stress
- Keep voice low and clear
- Promote one-to-one interactions with other students to promote social skills
- Promote parent involvement
- Limit physical contact
- For visual learners, use signs and pictures as modes of communication
- Allow student to stand instead of sit around a table for a class demonstration

### 2.2.2 TEACHING STRATEGIES OF STUDENTS WITH MENTAL RETARDATION

**TASK ANALYSIS**

Children with mental retardation are unable to learn the task as a whole, but when presented the task in simple steps, they are able to make better progress. The process of identifying these small steps is known as task analysis. Task analysis is a teaching strategy in which the task is broken down into teachable components and arranged in a sequential order. It is a blueprint for instruction/teaching, through which student should proceed to achieve the terminal goal. Generally teaching methodology describes the procedures for teaching a task along with materials to be used. Task
analytic approach facilitates the teacher in pinpointing the students’ functioning level on a specific skill and also provides basis for sequential instruction, tailored to each student’s pace of learning. Task analysis can be constructed in many ways. O’Brein et al., (1972) conducted a programme to teach child with profoundly retarded six year girl to feed herself with a spoon. First the task was divided into six steps. Then the teacher provided manual guidance for each of the steps. Then as the student began to emit the components of the chain, guidance, was faded.

Task analysis is simply a procedure of teaching in small and simple steps. This procedure is especially useful in teaching activities related to sensory-motor; self help skills, or play domains. Different children require different levels of assistance before started on a teaching objective. Task involves discovering the correct level or amount of assistance required to teach a child a behavioural objective. The following are the different methods of task analysis

- **Watch a master**: The method requires watching and writing down all the steps involved in performing a task, when another person performs the task well.
- **Self monitoring**: Teacher performs the task and list down the required steps.
- **Back ward chaining**: Work backward from the terminal objective, making note of required steps.
- **Brainstorming**: This deals with writing down all the component steps, without any order. After listing down, the steps have to be arranged in logical order.

Task analysis serves as an assessment tool and teaching tool (Yesseldyke & Elliot, 1999). Williams, Brown, and Certo (1975) cited that task analysis is critical to teachers of persons with severe mental retardation since the steps must be sequenced with precision and care. The procedures for the task analysis are:

- Identify the terminal objective to be learned as stated in the specific objectives.
- Analyze the terminal objective into its essential components and arrange them in sequential order.
- Determine the entry level of the skill and specify the pre-requisite skills.
- Consider the need for task slicing of component skills.
Once the task analysis is done, appropriate instructional strategy must be used to train the individual. Sailor and Guess (1983) stated that chaining techniques are the most commonly used methods of task analysis and are frequently used as major instructional methods in training of persons with mental retardation.

**PROMPT**

A prompt is a form of temporary assistance used to help a student to perform in a desired manner. When a student does not perform a task a prompt is used to help the student to perform the task and as the students learn the task the prompt will be faded away. Prompt is an additional stimulus which increases the probability of the desired response. Different types of prompt are:

**Instructional Prompts**

Prompts may be defined as “any teacher behaviors that cause students to know how to do behavior correctly” (Westling & Fox, 1995). Prompts are assistance provided by a teacher slightly before or during a learner’s performance to help the students respond in a desired manner (Baine, 1986). Prompt come in many forms and differ in the amount of assistance they provide to student.

**Physical prompt**

For completing a task some children require complete manual or physical assistance. It is the physical assistance or guidance given to the child to do a behavior. For example a child who cannot write a letter is guided physically by the teacher. There should be a verbal request before using each prompt. Physical prompts are usually needed at the beginning of teaching a new behavior. While using physical prompt, teacher need to be sure that student is cooperative and always combine physical prompt with verbal prompt. Physical guidance must be gentle and definite and give as little as needed. The various types of physical prompt are, fully physical prompt, partial physical prompt and shadowing. Shadowing means teacher’s hand may follow the student’s hands without touching.
Verbal Prompt

Verbal prompt is the verbal instruction or guidance given to the child to perform a behavior. The use of specific verbal statements that tells a student what to do and how to do is a verbal prompt. Verbal prompt are instructions about the target skill/behavior that match the student’s ability to understand. Verbal prompt should be clear, as natural as possible and effective. Teacher must see the number of instructions given at one time, adjust the length and complexity of instructions and determine whether additional prompts are needed. Example: for learning washing hands teacher will tell the student put hands under running water and wet hands, pick up the soap, apply it, rub the hands, rinse the hands etc.

Gestural Prompt

Gestures are pointing to an item or movements that draw a student’s attention to something. Gestures differ from physical guidance because the student’s attention is directed without physical contact. Gestural prompts typically are combined with verbal prompt. There are different rules for using gestural prompt. They are

- Make sure have the student’s attention before using prompt.
- Be consistent- If the student response in the desired manner following a gestural prompt use the same gestural prompt each time the task is practiced
- Be brief- do not use extra movements that may distract the student.
- Use gestural prompt only if a verbal prompt is not sufficient.
- Always, state the verbal prompt for example, open the tap, wet hands before or as the gestural prompt is being made.
- Fade the gestural prompt before fading the verbal prompt.

MODELING

Modeling means demonstrating part or whole of the desired behavior to the student who imitates or repeats the action immediately. The prerequisite to modeling is attending to the task or event happenings, the teacher should have to be certain that the child is looking or paying attention. The modeling may be performed by the teacher or peers. Modeling can be done with models and illustrations. Since the
student must see the demonstration in order to imitate, visual attending skills are important and imitative skills are essential. Modeling teaches new behaviors. It influences the frequency of previously learned behaviors.

Many behaviors can be learned, through modeling. Some conditions are necessary for effective modeling to occur. They are

- **Attention**: The student must pay attention to the model
- **Retention**: The student must be able to remember the behavior that has been observed.
- **Motor reproduction**: The student has the ability to replicate the behavior that the model has just demonstrated.
- **Motivation**: The final ingredient for modeling to occur is motivation; learners must want to demonstrate what they have learned (Kumari, 2012).

**CUEING**

Cue is something said or done by the teacher that serves as signal for the child to begin speaking or doing something. While using cues the child has to think. There are two types of cueing:

- **Verbal cue**: It is the verbal signal given to the students. For example, teach to write a word teacher may say first write this word then if it is wrong tell them check whether you missed any letter from the word or do you have all letters in the word?

- **Gestural cue**: Gestural signal or clue given to the students. For example, while teaching hand washing, teacher pointing to the hand that means hands are not clean.

**FADING**

Fading is an extra ordinarily useful procedure in which we attempt to maximize the probability of successful responding by particular artificial arrangements of antecedent stimuli. Then, through careful sequencing, the arrangements are changed until behavior is under control of stimuli natural to the learning environment. The prompt is a crutch which should be dropped as soon as the
need for it no longer exists. Too sudden removal of prompt may result in termination of the desired behavior. Gradual removal of prompt is referred as fading. If it is too fast, the behavior will not occur. If it is too slow, the students may become dependent upon prompt.

**CHAINING**

Systematically teaching the steps of a task analysis is called chaining. Forward chaining, backward chaining, and total task chaining are three ways to systematically teach a task analysis. Chaining combined with strong prompting strategies (e.g., system of least prompts) often leads to faster skill acquisition and skill fluency ultimately leading to an increased quality of life (Spooner, 1984). Chaining involves teaching and linking a series of responses (steps) into a functional sequence. Most skills we usually perform and teach students to perform consist of a chain of small component responses. Learning a chain or sequence of responses involves performing each discrete step of the chain in the correct order and in close temporal succession (Snell, 1983). There are three types of chaining.

**Forward chaining**

In this, the student is taught step 1 in the chain and the teacher will perform all the other steps. Following the learning of step 1, the step 2 will be taught and will link step 1 and 2 and then, step 3 is taught and link step 1, 2, and 3 and so on, until the entire chain has been learned.

**Backward chaining**

In backward chaining, teacher performs entire steps of the task leaving the last step to be performed by the student. It means the last step is taught first to the student. When the student learns the last step, the preceding (second last) step is taught and so on till the student learns all the steps in the chain.

**Total task chaining**

In total task, all the steps are taught concurrently rather than successively as in forward and backward chaining. The teacher provides the amount
and type of prompting and reinforcement required for each step, as the student attempts to perform each step of the chain.

**SHAPING**

Shaping is a procedure designed to teach new behavior that the individual cannot now emit. It does so in an orderly manner, progressing from what the person can do now through a series of steps that culminate in the more complex target response.

Shaping involves the reinforcement of successive approximation of good responses. Teachers provide praise and other reinforcers for better performance over a time. Shaping is a strategy involved in most teaching methods that use positive reinforcement. It is generally used when desired change in behavior are too large to make directly and when a student cannot be simply prompted or instructed to make a change. Shaping involves giving rewards in successive steps as subsets of behavior approximated correctly towards a teaching objective. Select target behavior that intended to teach. Select a powerful reward which work well with the child and which may be used during training.

Many of the shaping programmes are combined with graduated guidance to teach physical skills such as self feeding, dressing, ambulation etc. Others are combined with fading procedures in which antecedent stimuli change over time.

The steps in shaping process are

- Select the target behavior
- Select the initial behavior that the student presently performs and that resembles the target behavior in some way
- Select the appropriate reinforcers
- Reinforce the initial behavior till it occurs frequently
- Reinforce successive approximations of the target behavior each time they occur
- Reinforce the target behavior each time it occurs
- Reinforce the target behavior now and then

Shaping is a slow process but is very effective and powerful technique. It is a great skill, it can acquire by practicing.
REINFORCEMENT

In day today life, we continue to carryout and perform those behaviors and actions where the results are encouraging and motivating, and lesser or gradually decrease those behaviors which are negative or not motivating. Reinforcement describes a relationship between two environmental events, behavior (response) and stimulus (consequence) that follows the response. The relationship is termed reinforcement only if the response increases or maintains the rate as a result of the consequence. Reinforcement is anything that strengthens a response and increases the probability of its occurrence. A reward is an example of reinforcement. Rewards and reinforcement are wonderful way to increase desired behavior in CWSN. Reinforcement is the key to learning. If it is not applied in the right way at the right time, there will be no observable learning. It is frequently the critical component of programmatic attempts to teach new behaviors, to increase existing behaviors that are occurring infrequently and to maintain behaviors at acceptable level. There are two types of reinforcement procedures; positive and negative.

Positive Reinforcement

Positive reinforcement refers to a process whereby a stimulus event that is delivered and subsequent increase in the probability of a response occurs. Positive reinforcers are consequences that when paired with behaviors cause an increase in or strengthen the state of response. Positive reinforcers are enhanced when teachers match the most effective reinforcers to specific learners.

It is the contingent presentation of a stimulus, immediately following a response, that increases the future rate and/ or probability of the response. Presentation of pleasant or a desirable stimulation that increases the likelihood of the response to reoccur. The stimulation that increases the likelihood of the behavior or the response to occur in the future in similar situation is known as reinforcer. The reinforcement is provided when the student demonstrates or achieves a desired response for increasing the future probability of the response occurring again.
Negative Reinforcement

Removal of an undesirable or an unpleasant stimulation that increases the likelihood of the response to reoccur. It is the contingent removal of an aversive stimulus immediately following a response that increase the future rate and/or probability of the desired response. When the student demonstrates an undesired response a negative reinforcement is provided and the teacher will remove the negative reinforcement only when the undesired response decreases and required response is produced.

Differential reinforcement

Differential reinforcement is the procedure of the application of reinforcement to one of the two alternatives. Differential Reinforcement is the implementation of reinforcing only the appropriate response (or behavior you wish to increase) and applying extinction to all other responses. Extinction is the discontinuing of a reinforcement of a previously reinforced behavior. A basic principle of differential reinforcement is the concept of discrimination. Discrimination is developed through differential reinforcement by determining when reinforcement is and is not received. An example of differential reinforcement is rewarding a child for brushing their teeth before bedtime and withholding the reward when the child does not brush their teeth before bedtime.

Goal of differential reinforcement is to increase desirable behaviors and decrease undesirable behaviors without the use of punishments. Instead of punishments, differential reinforcement uses extinction, which is the removal of the positive reinforcer that maintains the undesirable behavior. There are four types of differential reinforcement.

**Differential reinforcement of incompatible behavior (DRI).** This is also called as differential reinforcement of opposite behavior. The technique involves the reinforcement of the exactly opposite behavior to the undesirable behavior. For example, a child who is overactive if sits at a place for a specific period, duration, it is reinforced.
**Differential reinforcement of other behavior (DRO)** refers to the process of reinforcing a desirable behavior when an undesirable behavior fails to elicit. For example, a child who beat other for minor reasons does not do that on a particular day or for a specific period time, and is engaged in some other activity which is not problematic, is reinforced.

**Differential reinforcement of alternative behavior (DRA)** refers to the process involving the diversions of a probable undesirable behavior by presenting a desirable behavior and reinforcing it. For example, two children who fight frequently for trivial reasons are given an opportunity to work together to make something both of them like very much, and are replaced by desirable behavior of joint completion of a task.

**Differential reinforcement of low rate of response (DRL).** This technique is used to control when a behavior in its low frequency is desirable but when occurs more frequently is undesirable. The technique involves reinforcing the behavior in its low frequency level and ignoring it in its high frequency level. For example, a child who repeatedly asking the teacher whether it is holiday the next day, despite telling him every time that it is not a holiday. DRL can be applied hereby responding to his questions only once and not paying attention to his questions when it is repeated. This over a period of time will make the child to maintain the desirable behavior in its required frequency.

**REINFORCERS**

Reinforcers are any object or events that a person or student likes and for which they will work. The source of reinforcement is called reinforcers. It can be different for different children and a child’s current reinforcers may not remain so always. It will change from time to time. Reinforcers are important means of changing behaviors in children. It is not always something which a teacher thinks but the teacher select child’s favorite thing. A close observation of an individual’s needs, desires and physiological state can help to determine the reinforcers. Many things or events can act as rewards for children with mental retardation. It is a stimulus that follows and increases the likelihood of a behavior to reoccur in the similar situations. Bandura (1969) asserts that human behavior is reinforced by a wide variety of sensory
stimuli; particularly those affecting the visual or auditory systems. More specifically it suggests that stimuli that are novel or complex may be especially good reinforcers.

Reinforcers can be different for different children and child’s current reinforcer may not remain the same always. It may change from time to time. There are some rules for presenting the reinforcers.

**Making reinforcement contingent:** When the reinforcement is to be effective, the student must get the reinforcer only after performing the target behavior.

**Making reinforcement Immediate:** To be effective, reinforcer should be delivered immediately after the target behavior is performed. This will establish a connection between a particular behavior and its consequence.

There are different types of reinforcers:

**Primary Reinforcers:**

A primary reinforcer is a natural or unlearned source of reinforcement. Primary reinforcers are stimuli that have biological importance to an individual. It is a powerful tool for use with CWMR if not abused or overused. We assume that they are innately motivating, because they are necessary to the perpetuation of life. Primary reinforcers are described as natural, unlearned, or unconditioned reinforcers. Example: candy, nuts, fruits, juice etc. Edible reinforcers are used mainly with younger children of low functioning ability. Such reinforcers are usually used when teaching a new behavior. Because of their high motivational value, they quickly affect behavior. Stolz and Wolf (1969) studied those edibles to reinforce a number of behaviors by a child with moderate mental retardation. Peterson and McIntosch (1973) taught retarded youngsters to ride tricycle through a system in which approach, mounting and pedaling were shaped and reinforced by food, initially given for every correct response by gradually decreased. Samaras and Ball (1975) proved that cooperative behaviors developed through food reinforcement.

**Secondary Reinforcers:**

A secondary reinforce is learnt or an acquired source of reinforcement. Secondary Reinforcers are neutral stimuli that initially may not have any value by
themselves but through pairing with the primary reinforcers they become reinforcing. These can further be classified as:

**Material or tangible reinforcers:**

Material rewards are things or articles liked by children. It includes materials like toys, ribbons, comic books, colored pencils, flowers and bangles etc. Teachers may look negatively upon material reinforcers because of excess cost or problems associated with presenting such reinforcers in conjunction with behavior. Material rewards help to improve the learning of CWMR and it is most effective.

**Social reinforcers:**

Social rewards are verbal praises or signs, gestures or appreciations. It includes smiles, a pat on the back, or shakes hands, hug etc. The utility of social reinforcers lends strong support for their use, because of their ease of application and the extent to which they are available in the natural setting. Teachers can use this reward very easily without any cost. If the primary goal is to assist CWMR to be as independent as possible, the use of social reinforcers in combination with other types of reinforcers can be rewarding with each presentation of primary, material, token, privilege, activity rewards. The goal is to gradually fade the primary reinforcers and allow behaviors to come under the control of social reinforcers.

**Activity Reinforcers:**

Activity rewards are actions or behaviors. Permit to engage desired activities on receiving a desired response from the child. These could be like sitting on a swing, listening to music, blowing bubbles, coloring, etc. When these activities are made contingent upon other behaviors, they may increase the other behaviors.

**Privileges:**

Privileges are special status/positions, which every child likes to occupy. The procedure of giving these rewards involve placing a child in any status/position which makes him feel important like making him/her monitor of the class, team captain, group leader, etc.
Token Systems:

Token rewards are items though valueless in their own right, gain value through association with other things. They are given to children following the performance of a desired target behavior. Teachers can devise almost any item with token value “star”, giving coins, points, etc. Token economy programmes are found to be very useful while rewarding children in groups. This procedure involves giving token rewards for appropriate or desirable target behaviors performed by the child. The advantages for using token economy are:

- They are simple and easy to use.
- They facilitate giving rewards immediately to the child without loosing much time.
- They do not interfere much in the teaching or learning process/activity in the class room.
- All children can be put under this programme based on the specific behaviors which the teacher wishes to increase /teach the children or decrease/reduce their problem behavior.

Broden et al., (1970) conducted a study on two boys with mental retardation in an elementary school who engaged in disruptive behavior and insufficient study behavior. When the teacher was trained to attend to and praise each student whenever she noticed he was attending in class, the appropriate behaviours of each student rose from about 30% of the time to 80%.

2.2.3 TEACHING STRATEGIES OF STUDENTS WITH MULTIPLE DISABILITIES

Multiple Disabilities are quite multiple and diverse in nature and are found to possess more dissimilarities than similarities or commonness observed among them. Each of them have different story of its causation, symptoms and challenges provided to suffer. Any child suffering from more than one disability at a time in any area or aspect of growth and development like physical, mental, sensory, emotional, social, or learning may be termed as a child with multiple disabilities.
Educational programming for a student with multiple disabilities will be determined by a Trans-disciplinary team, and should focus on developing means to allow and encourage the individual to become as active and vital a participant in daily life as possible.

It is critical that all team members, professionals, family and peers are cognizant of the unique educational and psychosocial needs of the student, to avoid planning and interactions based only on the complex physical and medical difficulties that present. The rights and dignity of each individual must be paramount in all programming decisions.

**Learning**

Programs for students with multiple disabilities often focus on early concept development, such as object permanence and cause and effect. These concepts are integral to the later development of language functions and higher cognitive skills. Switch operated technology allows the student with significant physical limitations to become an active participant in learning activities and thus enhances learning opportunities.

Most programs designed for this level of learning incorporate opportunities for development of more advanced skills as well. Many of them begin with simple cause and effect (a switch press causes activity for a pre-set time period), advance to a sustained press being required for the activity to continue, and then incorporate simple commands (e.g. "press the switch now"), to develop deliberate response to oral commands.

**Positioning/ Mobility**

Good positioning/ handling of students with multiple disabilities is critical, both to reduce pain and prevent further physical complications, as well as to allow the individual to see, hear, reach and become engaged in persons and materials for optimal participation and learning. Many students will also require aids for mobility both in general as well as during Physical Education classes. Assistive devices are instrumental in meeting these needs.
Communication

Most students with multiple disabilities have limited verbal communication skills. Adults or peers often make choices for students with multiple disabilities because they cannot speak. There should always be direct instruction to encourage even very physically involved students to make choices independently. Various low and high-technology Alternative and Augmentative Communication systems can be used to supplement or replace verbal communication. The range of options can be from non-tech (e.g. eye-pointing to the actual object) to high-tech (e.g. switch selection of choices displayed on a computer screen as they are scanned by a screen pointer). Speech Language Pathology as well as Occupational Therapy consultation is advised when making decision in this area.

Environmental Control

Students with multiple disabilities can use Environmental Control Units (ECU) to exercise control over the environment. ECU’s allow the individual to turn on/off lights, electrical appliances (radio, TV, etc) and battery operated devices (tape recorders, games, and so on). Another similar piece of technology is an Automated Learning Device (ALD).

Play/Leisure/Socialization

Technological tools for these areas may include adapted puzzles/games, toys, adapted for switch use; computer assisted drawing programs, as well as computer games.

Sports/Recreation

There is a range of adapted sports equipment that can assist in involving students with multiple disabilities in physical education and outdoor programming. Adapted bowling equipment, balls with sound, various supportive swings, hammocks, adapted tricycles, scooter boards and powered vehicles offer the student the opportunity to experience different positions, orientation and movement experiences that otherwise would not be available.
Daily Living/Personal Care

Technology to assist the individual with multiple disabilities to complete daily living tasks may include adapted eating utensils, bathroom aids, adapted clothing and dressing aids and so on. Many times, an individual with a multiple disability will always remain dependent, to some degree for personal care and daily living functions.

General strategies for teaching children with multiple disabilities are

- Monitor the student's response to stimuli. Some children will learn better with minimal verbal input, others may be hyper-sensitive to visual input or be tactile defensive and recoil from touch or certain textures.
- Use hand-over-hand as an instructional tool cautiously. There is some thought that this tool prevents kinesthetic feedback and thus reduces learning opportunities.
- Always ensure appropriate and comfortable positioning for the student. Provide frequent changes of position and orientation.
- Respect the dignity of choice; do not always decide for the student, even if waiting for choice takes more time.
- Always have a way of calling students back to you, and for letting them know you need their attention NOW. Depending on your students, this could be the same as your usual attention getting method or it could be a specific emergency signal.
- Allow for the needs of students who do not move quickly, cannot travel over certain surfaces, may not hear or see a signal from you, or may behave in unpredictable or erratic ways. They may not think about how to communicate with their non-hearing students when they were out of visual range.
- Think through what can go wrong and what can do about it. Prevent any dangers which you can foresee by doing a risk management assessment. Have a plan for dealing with the unpredictable problems.
- Change environment regularly so that the students get out in the fresh air to complete learning tasks.
- Make some signs and symbols for different needs of the class
2.3 STUDIES RELATED TO TEACHING PROBLEMS

This section mainly presents studies related to problems and challenges of special teachers.

Olivier and Williams (2005) conducted a study on challenges of teachers in teaching the mentally retarded child. This research study focused on the special nature (that is, different from mainstream education) of special education and the experiences of teachers with regard to the challenges they face in teaching the mentally challenged child. Special school teachers have the responsibility to offer not only good, but also highly individualized and goal-directed instruction. The aim with the research was to investigate the following research questions: What are the experiences of teachers regarding the major challenges they face in the education of the mentally challenged child? What guidelines can be provided to these teachers? A qualitative study, with a descriptive, explorative, subjective and contextual research design was chosen, using a phenomenological approach to data collection. This inductive approach was considered to be appropriate for the investigation, because it would enable an in-depth investigation into the matter. The research was open and not directed by a conceptual framework or hypothesis. The research was undertaken in two phases: Phase one entailed an exploration and description of the experiences of teachers with regard to the challenges they face in teaching the mentally handicapped child. This was accomplished by conducting in-depth, personal phenomenological interviews at a specific special education school in Port Elizabeth. The research population was selected purposively in order to obtain rich information and participants were met in their own context. In Phase two, guidelines were derived from the results of Phase one, to assist teachers in teaching the children with mental retardation, and to approach the challenges they experience more confidently and competently. The transcripts were analyzed by using the descriptive analysis method of Tesch (Creswell, 1994), as well as a re-coding procedure by an independent coder. Significant results were obtained and these serve as the basis for the guidelines that can be suggested.
Reddy and Poornima (2008) studied problems of special teachers working in schools of children with mental retardation. Survey method was employed in the study. The sample consists of 293 teachers of children with mental retardation drawing from 40 special schools located in four districts of Andhra Pradesh and Tamil Nadu States. The study revealed that the problems like lack of clarity in the concepts of disabilities, non-availability of academic records, inadequate infrastructure facilities, lack of collaboration with other professionals, inadequate salary and job security, problems in involving parents, competency in organizing special sports and cultural activities to children with mental retardation are highlighted under the dimension Planning and Organization. Likewise, under the dimension ‘Teaching and Training,’ inadequate knowledge about the fundamental aspects of human body, lack of skill in modifying the curriculum to the needs of children with disabilities, lack of knowledge in the use of novel methods such as peer-tutoring, co-operative learning, problems in auditory and speech training in classroom set up and lack of proficiency in multi-sensory approach are highlighted. The teachers face the problems similarly, under the dimension ‘Guidance and Counseling,’ lack of conceptual clarity about the disabilities and developmental delays, lack of expertise in group counseling and lack of positive attitude towards persons with different disabilities.

Asthana and Sigh (2004) attempted to find out the challenges in educating disadvantaged children. Over the last five decades efforts have been made to provide quality education to the children of disadvantaged group by governmental organizations. In this regard various educational methods have been launched from time to time to attract the disadvantaged children towards school environment. The success rate has been marginal. Children, belonging to disadvantaged group, grow in an environment which hardly reinforces competitive attitudes towards academic achievements. Subsequently the academic problems of disadvantaged children do not receive protective support by the negligent and non-supportive school environment. Moreover such children in spite of having basic intellectual capacity do not make academic progress in comparison to their counterparts. This finally forces them to live in a disadvantaged position throughout life.
Recchia and Puig (2011) explored a study on challenges and inspirations that student teachers’ experiences in early childhood special education classrooms. Preparing teachers to meet the needs of children with disabilities remains a complex challenge. General education teachers feel unprepared, and attrition and teacher shortages in special education remain high. Despite a trend towards inclusive education, many children continue to be educated in segregated settings. This study explores the potential challenges and learning opportunities that self-contained settings offer early childhood special education teachers in training. Five early childhood pre service students seeking dual certification reflected on their placements in self-contained early childhood special education classrooms. Through an analysis of their weekly student teaching journals, the researchers explored students’ experiences in segregated early childhood special education classrooms and implications for teacher education. Their findings revealed that including a self-contained setting as one of several field experiences encouraged future teachers to think flexibly about teaching children with special needs while enhancing their understanding of the principles behind the continuum of services.

Stephens (2005) investigated a study on overcoming challenges and identifying a census about autism intervention programming. Effective intervention programme helps the children with autism to reach their potential. This finding has been a source of disagreement among professionals and parents. The complexities of challenges of children with autism and uncertainty about best practices, have delayed progress. This article identifies seven critical programme components which address some of the challenges associated with providing effective and efficient autism intervention programmes. The results or performance of the children who participated in these programs help us believe in the ability of children with autism and to respond with positive change to appropriately designed and implemented interventions.

Solis et al., (2003) examined a study on the effects of precision teaching techniques and functional communication training on problem behaviour for a 12-year old male with Autism. This study considers the effectiveness of Precision Teaching techniques and Functional Communication Training on problem behavior.
The participant was a nonverbal 12-year-old male with developmental delays and a diagnosis of autism. The student’s problem behaviors involved pounding tables and mouthing. Pounding was defined as hitting a clenched fist on a desk or table top, a counter, his thigh, his head, or any other object nearby such as a toy as well as using his feet to kick into the air, on the ground, or at an object or person. Mouthing involved placing the collar of his shirt, his fingers, whole hand, or toes, and other objects such as pens and toys in his mouth. This experiment was conducted with the hypothesis that some child behavior problems may actually be a nonverbal means of communication. The effectiveness of functional communication training with a picture exchange system was examined using an AB single design. Functional communication training reduced the child's rate of aberrant behaviors.

Sykes et al., (2010) conducted a study on the problems and prospects of teacher education. Based on an analysis of occupational competence in teaching and teacher education, this article draws together a set of dilemmas that face the field, arguing that an occupational analysis is needed to complement the more common institutional analysis of teacher education. Then, this analysis is used to evaluate the prospects of the reforms that currently are dominant in the policy discourse of teacher education. The article concludes with thoughts on some promising directions for the improvement of the field of teacher education.

Ingersoll (1999) analyzed the effects of school and organizational characteristics of teacher turnover and school staffing problems and found that inadequate administrative support, low salaries, students discipline problems, and limited faculty input into school decision-making all contributed to higher rates of teacher turnover. Also, he suggested that school staffing issues are not the main result of shortfalls driven by increasing retirement levels, but result from low retention due to organizational conditions.

Alquraini (2010) studied on challenges, perspectives, and future possibilities of special education in Saudi Arabia. This paper provides a brief background of the education system in Saudi Arabia and current special education services and programmes for students with disabilities. Additionally, this paper
presents the findings of some studies that examined teachers' perspectives regarding the inclusion of students with disabilities. As Saudi Arabia continues its dramatic period of improvement, changes in special education services occur rapidly. The article concludes that to improve special education services, educators, parents, policymakers, and other professionals should consider many suggestions regarding critical components of successful inclusive education.

Thompson et al., (2006) designed a study on competencies of teachers for adequate yearly progress of students with disabilities. The No Child Left Behind Act of 2001 (NCLB) and the 2004 reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA, 2004) raise the achievement expectations of all students, including students with disabilities. These requirements place new responsibilities on institutions of higher education and state educational agencies to ensure that teachers are knowledgeable about state academic content and achievement standards and expectations. This paper puts forth competencies for teachers in this new era of standards-based education that were developed by the Educational Policy Reform Research Institute (EPRRI), in collaboration with the National Center on Educational Outcomes (NCEO), and validated by participants at a national symposium on teacher quality. The paper also compares these competencies with Interstate New Teacher Assessment and Support Consortium (INTASC) model standards and the state standards for beginning teachers of one state to see whether current standards contain the proposed competencies. In conclusion, these competencies are proposed as a supplement to existing standards and are envisioned as an aid in matching.

Morrier, Hess, and Heflin (2011) investigated teacher training for implementation of teaching strategies for students with autism spectrum disorders. Training received by teachers of students with autism spectrum disorders (ASD) was investigated. Teachers (n = 90) reported training received via an online version of the Autism Treatment Survey. The most common type of training reported was attendance at a full- or half-day workshop; fewer than 15% reported receiving training from teacher preparation programs at colleges or universities. The types of training received
did not predict the use of evidence-based practices. Individual factors related to training were not significant for education level, years of teaching students with ASD, and type of class (that is, general or special education). The need for an increased role for personnel preparation programs for teachers of students with ASD is discussed.

Shippen et al., (2011) designed a study to investigate the differential classroom structure and efficacy reported by general and special educators at the elementary and secondary level. General and special educators (n = 774, return rate of 37%) from a large school district in the southeast US participated in the study. The participants completed a modified version of the Bender Classroom Structure Questionnaire in order to determine their use of cognitive strategies, management strategies, and individualized instructional strategies. In addition, the teachers completed a modified version of the Teacher Efficacy Scale to probe their efficacy in serving students with disabilities. A Multivariate Analysis of Variance (MANOVA) was conducted to determine level of variance within and between participants. Findings indicate differences in classroom structure between elementary and secondary settings and that special and general educators differed in their instructional practices.

Ruble, Usher, and McGrew (2011) conducted preliminary investigation of the sources of self-efficacy among teachers of students with autism. Teacher self-efficacy refers to the beliefs teachers hold regarding their capability to bring about desired instructional outcomes and may be helpful for understanding and addressing critical issues such as teacher attrition and teacher use of research-supported practices. Educating students with autism likely to present teachers with some of the most significant instructional challenges. The self-efficacy of 35 special education teachers of students with autism between the ages of 3 to 9 years was evaluated. Teachers completed rating scales that represented self-efficacy and aspects of the following 3 of Bandura’s 4 sources of self-efficacy: (1) sense of mastery, (2) social persuasions, and (3) physiological/affective states. Significant associations were observed between physiological/affective states and self-efficacy, but no associations were observed for the other sources.
Delgado (2009) conducted a study on teacher efficacy, tolerance, gender and years of experience and special education referrals. Teacher efficacy and teacher tolerance, along with teacher gender, were examined for their relationship with the number of students teachers referred to special education. In a sample of 167 elementary school teachers from an urban school district in the State of Texas, no statistically significant relationships were yielded between teacher tolerance and referrals made to special education; between teacher efficacy and referrals made to special education; and, between teacher experience and referrals made to special education. In addition, no differences were found in teacher tolerance and teacher efficacy as a function of gender. Results were not supportive of previous research studies.

Sartawi et al., (2006) examined the variables associated with the effective instructional practices of teachers of students with learning disabilities. Subjects were 146 female special education teachers, working in the special education classroom. Demographic information was gathered from all participants (e.g., years of experience, collaboration in school and job satisfaction). Participants responded to a 63-item questionnaire about effective instructional practices. The questionnaire consisted of four sub-scales (that is, planning instruction, managing instruction, delivering instruction and evaluating instruction). In general, the effectiveness of instructional practices of teachers was moderate. No significant correlation was found between years of experience and effective instructional practice or between collaboration and effective instructional practices. A significant correlation was, however, found between job satisfaction and effective instructional practices.

Semmelroth and Johnson (2013) investigated assessment for effective intervention. Measuring Rater Reliability is a Special Education Observation Tool. This study used generalizability theory to measure reliability on the Recognizing Effective Special Education Teachers (RESET) observation tool designed to evaluate special education teacher effectiveness. At the time of this study, the RESET tool included three evidence-based instructional practices (direct, explicit instruction; whole-group instruction; and discrete trial teaching) as the basis for special education
Chapter II

Review of Related Literature

teacher evaluation. Five raters participated in two sessions to evaluate special education classroom instruction collected from two school years, via the Teachscape 360-degree video system. Data collected from raters were analyzed in a two-facet “partially” nested design where occasions \( o \) were nested within teachers \( t \), \( o:t \), and crossed with raters \( r \), \( o:t \times r \). Results from this study are in alignment with similar studies that found multiple observations and multiple raters are critical for ensuring acceptable levels of measurement score reliability. Considerations for the feasibility of practice should be observed in future reliability and validity studies on the RESET tool, and further work is needed to address the lack of research on rater reliability issues within special education teacher evaluation.

Horrocks and Morgan (2011) investigated the effects of in-service teacher training on correct implementation of assessment and instructional procedures for teachers of students with profound multiple disabilities. Multi-component training package (live training, video modeling, role playing, and feedback) was used to train teachers to conduct assessment and to instruct students with profound multiple disabilities. Phase 1 of the study involved training seven teachers to conduct assessment in three areas: (a) preference assessment (that is identification of potential reinforcing items), (b) controlled body movement assessment (that is, gross and fine motor skills), and (c) access skill assessment (that is, assessment of basic skills or prerequisite skills necessary for further instruction). Four teacher–student pairs from Phase 1 participated in Phase 2, where teachers were trained to use one of the following instructional strategies: least-to-most prompting, most-to-least prompting, time delay, or graduated guidance. A multiple baseline design across four teacher participants was used to determine if training was effective in increasing the percentage of correctly implemented instructional steps. Data indicated that the training package was effective in increasing teachers’ skills in assessing and instructing students with profound multiple disabilities. In addition, data from student participants showed they were responsive to teachers’ instruction, as the percentage of independently performed student responses increased from baseline to training and post training sessions.
The organization for Economic Co-operation and Development conducted the Teaching and Learning International Survey in 2007-2008, which surveyed more than 70,000 lower secondary teachers and their school principals in 23 countries, representing a workforce of more than 2 million teachers. The aim was to provide comparative insights into the conditions of teaching and learning at their schools, the leadership in their schools, their preparation and professional development, and the feedback and appraisal that they do or do not receive. Naturally, reports from teachers provide only one perspective on what goes on in schools, and that perspective needs to be put in the context of other information sources. However, the perspective of teachers is crucially important because the best policies and practices will only yield results if they are effectively implemented, and the bottom line is that the quality of an education system cannot exceed the quality of its teachers and their work (Schleicher, 2011).

Suhrheinrich (2011) analyzed the effect of training teachers to use pivotal response training of children with autism coaching as a critical component. Although evidence-based practices for educating children with autism, such as pivotal response training (PRT), exist, teachers often lack adequate training to use these practices. The study examined the efficacy of a 6-hour group workshop plus individual coaching for training 20 teachers to use PRT. Results indicate that the workshop alone was only effective in training 15% of the teachers to meet mastery criteria for PRT. The majority of teachers, however, showed additional improvement following individual coaching. The findings suggest that attending a group workshop is insufficient training for most teachers to demonstrate mastery of PRT, but a modest amount of time spent in individual coaching with observation and feedback helps the majority of teacher’s master PRT techniques.

Alghazo (2005) conducted a study on special education teacher perceptions towards effective instructional practices in the United Arab Emirates (UAE). Participants included 107 prospective teachers who teach in special education classrooms, and 107 prospective teachers who teach in centers. They responded to 63 items of the modified version of the Model of Effective Instruction (Ysseldyke and
Algozzine, 1995). Finding revealed that teachers in general were ineffective in teaching students with disabilities. However, female teachers were more effective than male teachers; special education classroom teachers were more effective than their counterparts who teach in centers; teachers who had 1–5 years of experience were more effective than those with more than six years of experience, and teachers who had in-service training once were more effective than those who had in-service training more than once.

McCabe (2008) conducted a study on effective teacher training at the autism institute in the people's republic of china. The result highlights aspects of the teacher training model at the Autism Institute that have led to the preparation of highly qualified, enthusiastic, and knowledgeable teachers of children with autism. Results of the research indicated that teacher education was highly valued at this organization, and teachers were seen as the most important part of the organization. Teachers received ongoing, systematic and specific on-the-job instruction. One of the most important features of this organization regarding teacher training was found to be the relationships between upper level staff, including instructional leaders, and newer classroom teachers. These relationships were positive and based on mutual understanding and respect, and this has impacted the nature and success of teacher training.

Snape et al., (2005) studied the perceptions of parents and professionals regarding effective éducation of children with autism spectrum disorder. There are various views among academics and researchers about the best type of educational provision for children with Autism Spectrum Disorder. In the present study parents and professionals were interviewed to get a better insight into their perceptions regarding the various educational provisions on the specialist to mainstream continuum. Parents seem to be of the view that whatever the educational provision, teachers should have adequate autism-specific training. If all teachers were trained in this way, parents see advantage in the child being in mainstream settings. More importantly, whatever the provision, the quality of delivery, staff attitude and curriculum modification play an important part in creating an inclusive environment.
Nickson et al., (2006) analyzed factors that influence special educators to remain in the field of education. School administrators are perplexed by the large number of teachers who decide to leave the field of education after three years. The retention rates of special educators’ require school administrators to focus on developing a qualified workforce. Careful attention to the working conditions and the induction of early career special educators is needed for building a committed and qualified teaching force.

Norwich et al., (2011) examined the significance of a National Postgraduate Certificate Programmes Development and Evaluation Project for Inclusive Teacher Education (PGCE). The report of this study discusses issues arising from a national development and evaluation project, which (1) surveyed national primary and secondary postgraduate certificate programmes about how they prepare trainees to teach pupils with special educational needs; and (2) conducted a trial of a practical teaching task for preparing primary and secondary teacher trainees to teach pupils with special educational needs. The survey involved 42% of all top-rated PGCE providers, whereas the trial involved six primary and five secondary PGCE programmes involving 550 trainees overall. Selected findings are reported from the survey, which are relevant to the need for a supervised school-based teaching task. The evaluation highlighted problems about task preparation, communications, timing, task design, trainee support, use of resources and reporting. Despite these issues, the trial was judged to be successful as almost most participants were positive about the task and its impact. Recommendations for adapting and implementing the task made to the funding agency are outlined; recommendations have been adopted in the national dissemination of the task to all initial 1-year training providers. The evaluation of the trial is discussed in terms of three key aspects: (1) the challenge for initial teacher training to prepare all teachers to teach pupils with special educational needs; (2) the critical role of partnership between universities and practice schools in initial training; and (3) the potential of ideas and practices about personalization for including concepts about special educational needs pedagogy into wider pedagogic models.
Billingsley (2004) performed a critical analysis of the research literature on special education teacher retention and attrition. The lack of qualified special education teachers threatens the quality of education that students with disabilities receive. Attrition plays a part in the teacher shortage problem, and efforts to improve retention must be informed by an understanding of the factors that contribute to attrition. Specifically, the author provides a thematic analysis of studies investigating factors that contribute to special education teacher attrition and retention. She addresses four major themes: teacher characteristics and personal factors, teacher qualifications, work environments, and teachers' affective reactions to work. Following this thematic review, a critique of definitional, conceptual, and methodological approaches used to study special education attrition is provided, as are priorities for future research.

Walker (2010) examined if certified special education teachers who instruct emotionally disabled students experience the same barriers to retention when compared to other special educators. Also, this study answered the hypothesis whether significant relationships exist between the variables of staff development, stress and burnout, compensation, student discipline, role conflict, workload, and administrative support and teacher retention.

Principal component analysis interpreted the loadings of survey items on identified constructs. Results of the analysis revealed a strong correlation between the factors of administrative support, compensation, staff development and the retention of special education teachers who work with emotionally disabled students. Fourteen percent of respondents chose to leave their positions compared to eighty-six percent who planned to stay. Findings indicated that administrative support, compensation, and staff development were the three most significant factors that influenced certified special educators’ decisions to stay or leave their assigned positions. In addition, results of this study revealed that additional factors of student discipline, role conflict, stress and burnout, and workload were less significant, but were considered to have relevance with minor roles towards a teacher’s retention.
Walker concluded that the three major constructs serve as a foundation that supports the four remaining individual constructs (stress and burnout, student discipline, role conflict and workload). These constructs were considered to be secondary underlying issues of teacher retention that surface and negatively impact teacher performance and job satisfaction, if not supported by the three major constructs over an extended period of time. Further, results confirmed that Administrative Support exhibited the strongest correlation among survey items and was found to have the most influence on the retention of special education teachers.

2.4 STUDIES RELATED TO SATISFACTION OF TEACHERS

Many research studies have been reviewed on teacher job satisfaction and analyzed from different angles with different independent variables.

The term job satisfaction is generally used in organizational endeavor in business management. In fact job satisfaction is a general pleasurable or positive emotional state of an individual, which results from his appraisal of the various dimensions of his/her job (Beggam, 2004). Job satisfaction is the favorableness or unfavourableness with which employees view their work (Bruneberg, 1976). It signifies the amount of agreement between one’s expectations of the job and the rewards to the job provides. Job satisfaction is concerned with a person or a group in the organization. Job satisfaction can be applicable more to parts of an individual’s job. If each person is highly satisfied with his job then only it will be considered as group job satisfaction.

Generally job satisfaction is related with number of employees’ variables such as turnover, absence, age, occupation and size of the organization in which he works. The degree of satisfaction of job largely depends on satisfaction of employee variables. According to Garton (1976), employee’s satisfaction and morale are attitudinal variables that reflect positive or negative feelings about particular persons or situations, satisfaction when applied to work context of teaching seems to refer to the extent to which a teacher can meet individual, personal and professional needs.
The relationship between man and work has attracted the attention of philosophers, scientists and novelists. A major part of man’s life is spent in work and work is a social reality and social expectation to which people seem to conform. With the growing complexities of the society, it may appear that work is simply a means of earning a living. Work serves many other functions for an individual that people will continue to work even if they are not pressed by economic need gratification (Pestonjee, 1991).

Job satisfaction is an attitude, an internal cognitive state. In the content models, job satisfaction was deemed to be sum of various content factors such as responsibility and growth potential. The simple definition of job satisfaction is an individual’s general attitude towards his/her job. Job essentially requires interaction with co-workers and superiors, following organizational rules and policies meeting performance norms, living with working conditions that are often less than ideal and the like. This implies that an employee’s assessment of how satisfied he/she is with his/her job is a complex summation of a number of discrete job elements.

Job satisfaction emerge from so many interrelated factors can never isolated completely from one another, they can by use of statistical technique be separated enough to give an indication of their relative importance to job satisfaction. The factors which relates to job satisfaction are wages, job security, advancement opportunities, prompt settlement of grievances, fair treatment from management, recognition of social relation on the job, and other similar items. Other factors that influence job satisfaction are employee’s health, age, temperament desires and level of aspirations. Family relationship, social status, recreational outlets, activity in organization in the fields of labour, political or purely social are also affect the job satisfaction.

Job satisfaction measuring procedures appear to be complicated at a first glance. It seems simple to go to the employees and get data from them and then interpret. But experiences are shown that careless procedural class can limit seriously the validity and usefulness of the survey. Keen attention should be given to question construction, maintenance of anonymity for employees and sampling procedures.
(Donald & Charlies, 1975). Even in Education field it is very difficult to measure the teacher job satisfaction.

Even as complicated as job satisfaction is, gratification for educators is critical in many areas of teaching, learning, and school administration (e.g., motivation, retention, commitment, school effectiveness, school quality, student outcomes) (Bishay, 1996; Shann, 1998; Yee, 1990). It is necessary, therefore, that these areas be examined again to ascertain what is satisfying or dissatisfying to teachers who are challenged to assist students with learning differences, as well as how to manage their own behaviors.

Teachers are arguably the most important group of professionals for the nation’s future. Therefore, it is important to find out today’s teachers’ satisfaction of their job.

Stempein and Leob (2002) have revealed that special education teachers have significant stress while dealing with students having mental retardation resulting in addition a wave of dissatisfaction among them than general education counterparts. Studies have also indicated that special educators experience widespread stress and lack of motivation resulting in burnout, job change (Bhaumik, 2009).

Chapman and Lowther (1982) found that women were more satisfied with their teaching career than men. Teachers’ skill and ability were significantly related to satisfaction but accounted for only small amounts of the additional variance. Career satisfaction is related to assigning little importance to activities and accomplishments that, given the structure of the school, may be difficult to achieve. Yet actual accomplishments in these areas have strong positive relationship to satisfaction. Last, the importance of recognition by administration to teachers’ career satisfaction was discussed.

Bhandari and Patil (2009) examined job satisfaction of women teachers. The findings were based on the outcome of a questionnaire survey on job satisfaction of the 342 women teachers working in primary schools of Gulbarga city. 295 teachers were responded. The questionnaire contains different questions on job satisfaction such as salary, promotional opportunity, work encouragement, incentives, working
conditions and other factors such as sanction of leave, work convenience, etc. The study found that a few of the women teachers are facing certain problems such as lack of coordination and cooperation in the workplace. Majority of these teachers are satisfied with their work, job and salary. Majority of women teachers said they have not received recognition for the job and work done.

Giacometti (2005) in his national studies on factors affecting job satisfaction and retention of beginning teachers, examined combination of factors that affect teacher satisfaction and retention. Domains that discriminate between teachers who choose to stay or leave the teaching profession were investigated. A researcher developed questionnaire was administered to 450 randomly selected first, second, and third year teachers. Survey items were related to domains affecting teacher satisfaction and retention. A demographic section was included to collect background information. A principal component analysis resulted in the emergence of domains that were used in the final analysis. They are: emotional factors; school and community support; instructional support; preparation in teaching curriculum, managing students, and assessing students; collaboration; compensation and benefits; motivation to teach; and culture shock. 11% of the respondents chose to leave the profession. Results of the analysis indicated that the best predictor in choosing to leave or stay in the teaching profession was emotional factors followed by compensation and benefits and culture shock. The analysis was used to determine if the individuals in the two groups were correctly classified based on their scores on the eight predictor variables. The number of cases correctly classified was 91.4 percent.

Chamundeswari and Vasanthi (2009) studied job satisfaction and occupational commitment among teachers. They concluded that if the teachers attain adequate job satisfaction they will be in a position to fulfill the educational objectives and national goals. The target population is 588 teachers working in different categories of schools. Research reveals that the commitment of a teacher depends on various factors like instructional strategies, classroom management, personal disposition, temperament and tendencies, evaluation and feedback, interpersonal
relations, job satisfaction, initiative and enthusiasm, professional values and innovativeness respectively in their everyday teaching learning situations.

Mau et al., (2008) analyzed a study on job satisfaction and career persistence of beginning teachers. Four hundred and fifty one tenth grade students from a nationally representative sample, who aspired to be teachers, were examined over a ten year period regarding their career choices. Students who persisted in teaching were compared to students who did not persist with regard to job satisfaction. A job satisfaction model was tested using clusters of variables as guided by social cognitive career theory. Students who persisted in teaching were significantly more satisfied than both those who did not persist and those with non-teaching careers. Beginning teachers were more satisfied with their jobs than those in other occupations. Teachers who had teaching licenses also reported being more satisfied than those who did not have licenses. The social-contextual factors, that is, race, socioeconomic status, teaching license, parents’ education, and occupation were among the best predictors of job satisfaction.

Bouck (2005) explored a study on special education teachers’ perspectives of secondary special education for students with mild mental impairment and learning disabilities. Secondary special education teachers responded to a survey regarding teacher preparation and teacher satisfaction. Results from the study suggested that changes need to be made to pre service preparation, as a low percentage of teachers had experience working with secondary special education students prior to their first position. Changes in pre service preparation are also necessary to resolve the lower levels of satisfaction teachers reported for programs serving students with mild mental impairment than those serving students with learning disabilities. Overall issues of secondary special education preparation need to continue to be examined.

Houchins et al., (2006) examined the effect of five years of system-wide reform on factors associated with the job satisfaction of juvenile justice teachers. Prior to this research, no data were available on the effect of reform on the job satisfaction of this population. A comprehensive survey was administered to teachers who had
been in the juvenile justice system since 1998 when reform measures were implemented. Completed surveys were received from 151 of 158 teachers for a response rate of 96%. Overall, juvenile justice teachers reported being satisfied with the results of the system-wide reforms. The greatest areas of dissatisfaction were in the areas of behavior management and increased stress.

Caprara (2006) conducted a study on teachers’ self-efficacy beliefs as determinants of job satisfaction and students' academic achievement. Over 2000 teachers in 75 Italian junior high schools were administered self report questionnaires to assess self-efficacy beliefs and their job satisfaction. Students' average final grades at the end of junior high school were collected in two subsequent scholastic years. Structural equation modeling analyses corroborated a conceptual model in which teachers' personal efficacy beliefs affected their job satisfaction and students' academic achievement, controlling for previous levels of achievement.

Hatton (1999) conducted a study on factors associated with staff stress and work satisfaction in service for people with disability. Staff stress and morale have been identified as major issues affecting the quality of service for people with intellectual disability.

Robert et al., (2010) conducted a study on teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context. This study examines how teachers' collective efficacy (TCE), job stress, and the cultural dimension of collectivism are associated with job satisfaction for 500 teachers from Canada, Korea (South Korea or Republic of Korea), and the United States. Multi-group path analysis revealed that TCE predicted job satisfaction across settings. Job stress was negatively related to job satisfaction for North American teachers (that is, teachers from Canada and the United States), whereas the cultural dimension of collectivism was significantly related to job satisfaction for the Korean, but not for North American teachers. For motivation theorists, the results from this study provide evidence that cultural context influences how motivation beliefs are understood and expressed in diverse settings. For educators, this study underlines the importance of collective motivation as a source of individual job satisfaction.
Einar and Sidsel (2011) examined the relation between school context variables and teachers' feeling of belonging, emotional exhaustion, job satisfaction, and motivation to leave the teaching profession. Six aspects of the school context were measured: value consonance, supervisory support, relations with colleagues, time pressure, relations with parents and discipline problems. The participants were 2569 Norwegian teachers in elementary school and middle school. All six school context variables were related to job satisfaction and motivation to leave the teaching profession. These relations were primarily indirect, mediated through feelings of belonging and emotional exhaustion.

Robert and Ming (2010) studied the relationships among teachers' years of experience, teacher characteristics (gender and teaching level), three domains of self-efficacy (instructional strategies, classroom management, and student engagement), two types of job stress (workload and classroom stress), and job satisfaction with a sample of 1,430 practicing teachers using factor analysis, item response modeling, systems of equations, and a structural equation model. Teachers' years of experience showed nonlinear relationships with all three self-efficacy factors, increasing from early career to mid-career and then falling afterwards. Female teachers had greater workload stress, greater classroom stress from student behaviors, and lower classroom management self-efficacy. Teachers with greater workload stress had greater classroom management self-efficacy, whereas teachers with greater classroom stress had lower self-efficacy and lower job satisfaction. Those teaching young children (in elementary grades and kindergarten) had higher levels of self-efficacy for classroom management and student engagement. Lastly, teachers with greater classroom management self-efficacy or greater instructional strategies self-efficacy had greater job satisfaction.

Jeong et al., (2012) conducted a study on the effect of social and classroom ecological factors on promoting self-determination in elementary school. The authors surveyed 233 elementary special educators in 23 states to determine (a) how the teaching of self-regulation strategies and classroom setting affected their perceptions of the importance of teaching self-determination, (b) the frequency with
which they did so, and (c) the barriers to promoting self-determination. Results indicated that the frequency of teaching self-determination, more than the ratings of the importance of teaching it, was affected by the teaching of self-regulation strategies. Classroom setting affected only the perception of importance of teaching self-determination, and then only for teachers who taught some of the self-regulation strategy.

Danie et al. (2011) states that teacher attrition is a significant international concern facing administrators. Although a considerable amount of literature exists related to the causes of job dissatisfaction and teachers leaving the profession, relatively few theoretical models test the complex interrelationships between these variables. Using a sample of 479 certified teachers who taught either at elementary (55.3 percent), middle (33.0 percent), or high (10.6 percent) school levels, three competing theoretical models with variables related to teacher stress or support were tested using structural equation modeling to predict job dissatisfaction and eventual intention to quit (Danie, Andrea and Nancy, 2011). The most parsimonious model revealed that student stressors completely mediated the relationship between teacher efficacy related to student engagement and job dissatisfaction, with social support superiors and student stressors being best predictors of job dissatisfaction. Although important within the school system, teacher workload stressors and social support from colleagues did not contribute significantly to the models. Theoretical models are needed to assist school administrators and researchers in developing programs to improve teacher retention and to predict those teachers who will struggle within the profession. Moreover, developing and testing comprehensive models associated with variables related to teacher and student success is critical for a well functioning school system.

Teacher efficacy and teacher tolerance, along with teacher gender, were examined for their relationship with the number of students teachers referred to special education (Delgado, 2009). In a sample of 167 elementary school teachers from an urban school district in the State of Texas, no statistically significant relationships were yielded between teacher tolerance and referrals made to special
education; between teacher efficacy and referrals made to special education; and, between teacher years of experience and referrals made to special education. In addition, no differences were found in teacher tolerance and teacher efficacy as a function of gender. Results were not supportive of previous research studies.

Mondal et al., (2011) analyzed a study on job stress and job satisfaction of school teachers. In teaching profession, distress has been linked to dissatisfaction with job and to negative affective and professional consequences. In the study, the attempt was made to identify the level of job stress and job satisfaction among teachers in consideration with their gender differences along with age and experiences. Study comprised of randomly selected 69 school teachers from Pokhara, Nepal. Socio economic data of the subjects were collected by questionnaire. Modified TJSQ were applied to identify the Job satisfaction and Job stress of the subjects. Data from acceptable returned questionnaires were analyzed by SPSS 17. It can be concluded from the analysis that, the school teachers were partly satisfied and experiencing mild to moderate stress from their job overall. These can be the resultant of unfavorable job condition and job types for the school teachers.

George et al., (2008) conducted an exploratory study on the role of extrinsic and intrinsic factor in determining job satisfaction among urban secondary – school teachers in Zambia. Biographical variables pertaining to the teachers’ gender, age, marital status, school resources, teaching experience, academic qualifications, and rank were investigated to determine whether these had any significant relevance, or made any notable contribution, to the level of job satisfaction experienced. Also, the correlation between burn out and job satisfaction was investigated to determine the extent to which these two factors are related. A sample of 337 secondary school teachers randomly selected from 17 government schools, in the Windhoek region of Zambia, voluntarily participated in the study. Results showed significant levels of dissatisfaction pertaining to intrinsic factors of work and, more especially those factors relating to school area and rank. A significant correlation between levels of burn out and job satisfaction was found, particularly in respect of emotional
exhaustion and depersonalization, which were shown to correlate with low levels of job satisfaction.

Billingsley (2004) examined the special education retention and attrition. The lack of special education teachers threatens the quality of education that students with disabilities receive. Attrition plays a part in the teacher shortage problem, and efforts to improve retention must be informed by an understanding of the factors that contribute to attrition. Specifically, the author provides a thematic analysis of studies investigating factors that contribute to the special educational factors, teacher qualifications, work environments, and teachers’ affective reactions to work. Problems with role overload and design have been strongly linked to special education attrition. Regardless of whether quantitative or qualitative method used, research results provide convincing evidence that role, problems significantly interfere with special educators’ job satisfaction and their ability to be effective with their students. The specific role related problems are not simple or isolated.

Cross and Billingsley (1994) conducted a study on testing a model of special educators’ intent to stay in teaching. This study used path analysis to examine the effects of work related factors – including principal support, stress, role problems, job satisfaction, and commitment on 542 Virginia special educators’ expressions of intent to stay in teaching demographic variables – including teachers of students with emotional disabilities and race and gender of teachers were treated as exogenous variables. Job satisfaction had a positive direct effect on intention to stay in teaching. Factors with small effects included professional commitment and perceived employability outside teaching. Principal support, stress, role problems had direct effects on job satisfaction and commitment, work related variables should be included in strategies for retaining special educators.

Gersten et al., (2001) analyzed the factors that enhance special educators’ intent to stay. This article presents findings from a study of factors that lead to special education teacher attrition and retention involving 887 special educators in three large urban school districts. They focus on a path analysis of the relationship between intent to stay in the field and factors such as job satisfaction, commitment of
special education teaching, and various aspects of job design. Findings suggest that several critical factors to consider in order to increase retention and commitment. A leading negative factor was stress due to job design, perceived support by principals or other teachers in the school helped alleviate this stress. Another key factor was the learning on the job, either formally or informally, through collegial networks. Survey method was used. The survey was conducted in three large urban school districts in the western part of the United States in the spring of 1992.

Vannest and Parker (2010) made an attempt to study the measuring time, the stability of special education, teacher time use. The measure of such has clear and important implications for special education practice and research. Although exhortations to maximize instruction and thereby student engagement exist throughout the literature, few studies discuss how special education teachers use their time, and none address the sampling or measurement issues related to differences of time across the academic calendar, by day to day or by teacher. This empirical investigation reports the requirements for adequate sampling, discussing variance by teacher and across the calendar year with attention to the standard error of measurement and denoting when stability is achieved. High quality measurement provides opportunity for a more scientific approach to maximizing time use and thus student achievement. Results suggest that approximately 10 days appear to be sufficient to obtain a reasonably stable measure to teacher time use with a multiple code instrument designed to capture a variety of teacher behaviour.

Siddiqui (2006) conducted a study on frustration among teachers. There is saying that the welfare and prosperity of a nation depends on its natural and human resources; human resource is perhaps more important than natural resource because the later can only be profitably utilized if the former is efficient. This human resource is of paramount importance for the progress of a country. The teacher, being a catalytic agent in the process of education, dispenses knowledge, forms the time schedule, selects materials, plays the role of subject specialists and helps pupils to overcome their difficulties and personal problems. If the teacher is frustrated he/she can retard the progress of the new generation or the future citizens.
Joseph and Konrad (2009) reviewed literature to identify effective methods for teaching writing to students with intellectual disabilities. Database searches and hand searches of selected peer-reviewed journals were conducted. Participants, settings, research designs, independent variables, dependent variables and results are synthesized across studies. Writing instruction effects on various written expression outcomes were aggregated by averaging data across studies. Findings revealed that strategy instruction was investigated more frequently than other types of approaches. Strategy instruction was consistently found to be very effective for teaching writing skills to students with intellectual disabilities.

Ozmen (2006) investigated the effectiveness of modified cognitive strategy instruction in writing with mildly mentally retarded students’ skills in writing problem/solution texts. Participants were room self-contained and multiage classrooms in Turkey. Instruction had a positive impact on the amount of time students spent planning and writing problem/solution texts. There was also an increase in text length, elements, coherence, and quality of students’ compositions. These effects were maintained over time.

Reynold (1992) reports that competent teachers reflect on their teaching to find out what teaching behaviors are successful and unsuccessful with students. This process helps them refine their teaching practice. She notes that reflection occurs during interaction with students as well as after interactions. During interactions, teachers gather information from student comments, actions, and written work to determine levels of student understanding. These multiple forms of assessment provide information that enables teachers to reflect on what practice are effective or ineffective and to improve their teaching. He notes that as teachers gain experience and become more competent, this reflection changes from concerns about classroom management, the quality of their explanations, how they respond to questions, and student participation to concern and student understanding and instructional event that seem especially noteworthy. It is believed that with experience, teachers develop a system for organizing, understanding and using the enormous amount of information gained from experience. Because of the learning differences of students with learning
disabilities, the focus on student understanding is important in guiding teachers to make adjustments that enable them to succeed.

Prater (1993) discusses the importance of teaching concepts effectively to students with learning disabilities. She reports that students with learning disabilities have difficulties in learning concepts through observation and experience and, thus need explicit concept instruction to succeed in school and life. Prater presents the following sequence of steps that are well grounded in theory and empirical evidence for teaching students to understand concepts.

- Define the instructional objectives
- Analyze the task used for demonstrating knowledge of the concept.
- Define the concept and label it
- Select the number and sequence of examples and non-examples
- Elaborate the defining attributes
- Provide immediate feedback

Materials that feature these steps are noteworthy. Moreover, metaphors, multiple examples, demonstrations, think aloud and tying content to something relevant also facilitates understanding.

Schumm and Vaughn (1992) surveyed general educators at the elementary, middle and secondary school levels to determine their attitudes about planning as well as their planning practices for students with disabilities. Some of the findings from their study include the following: 1. Planning practices differ across grade levels. Middle and secondary school teachers frequently responded that mainstreamed students with disabilities should be prepared to cope with the demands of the general curriculum. To illustrate this finding, Schumm and Vaughn include a representative comment from a teacher expressing this belief: There is absolutely no time for mainstreamed students. They adapt to the programme, the programme does not adapt to them. 2. Many teachers feel under prepared by their teacher education programmes to work effectively with mainstreamed students. 3. Overall, teachers are willing to have mainstreamed students in their classrooms as long as they do not
Chapter II

Review of Related Literature

exhibit emotional and behavioural problems. Effective teaching leads to academic progress and this success is critical if a student with learning disabilities is to develop a positive self-concept.

In the words of the International Commission on Education for the Twenty-first Century, ‘the time to learn is now the whole lifetime’, not just during the period of childhood and youth. In the Commission’s vision of the coming century, ‘much will be expected, and much demanded, of teachers’. ‘Teachers’, the Commission has insisted, ‘have crucial roles to play in preparing young people not only to face the future with confidence but to build it with purpose and responsibility’ (Delors et al., 1996).

Lobosco and Newman (1992) found that teachers’ perceptions of their jobs are strongly related to their perceptions of their students. Their report confirms what one might expect: Working with students who are gifted and talented positively predicts job satisfaction, whereas working with students who have learning difficulties has a negative effect. Yet teachers ‘self-report of general job satisfaction reverse when asked about how the reality of their teaching experience compares to ideal conditions. This has clear implications for urban school districts involved in massive mainstreaming efforts. Teacher preparation and the impending merger of general and special education are discussed.

Garett (1999) studied teacher job satisfaction in developing countries. The study disclosed that the results from a literature review that examined teacher job satisfaction in developing versus developed nations. The review involved computer searches using keywords, manual searches of databases, follow-up of references from papers, requests to research institutions worldwide, and searches of dissertations. Overall, most work has been focused on secondary school teachers. Issues related to elementary teachers and principals have not received much attention. There was no generally agreed upon definition of job satisfaction or standardization of instruments used in the available literature. What little research had been done in developing nations was based on a set of theoretical assumptions that had been developed from findings in developed nations. The evidence available from mature
educational systems identified a complex picture in which job satisfaction, itself a multi-faceted concept, was closely related to the other key factors of work life complexity and work centrality. Stress was produced, manifested, and coped with differently in different societies. The role played by stress in the normal working life of teachers in developing countries was a little-understood area.

Sonnie et al., (1992) attempted to identify variables that influence teachers’ commitment and job satisfaction among both general and special educators. A secondary purpose was to determine the extent to which these commitment and satisfaction variables influence teachers’ intent to stay in teaching. A questionnaire using primarily extant measures was sent to a random sample of 558 special educators and 589 general educators in Virginia. Completed questionnaires were received from 83% of both samples. Cross validated regression results suggest that work related variables, such as leadership support, role conflict, role ambiguity, and stress, are better predictors of commitment and job satisfaction than are demographic variables. Generally, the findings were similar for general and special educators. Implications for educational agencies are addressed.

Billingsley and Cross (1992) attempted to identify variables that influence teachers’ commitment and job satisfaction among both general and special educators. A secondary purpose was to determine the extent to which these commitment and satisfaction variables influence teachers’ intent to stay in teaching. A questionnaire using primarily extant measures was sent to a random sample of 558 special educators and 589 general educators in Virginia. Completed questionnaires were received from 83% of both samples. Cross validated regression results suggest that work related variables, such as leadership support, role conflict, role ambiguity, and stress, are better predictors of commitment and job satisfaction than are demographic variables. Generally, the findings were similar for general and special educators. Implications for educational agencies are addressed.

Lavinga (1974) took a sample of 1600 teachers and found that female teachers were more satisfied than male teachers.
In the studies of Virachari (1987), Bhandarkar (1980), Gupta (1980), Rebay (1988), primary, secondary school teachers and college teachers were investigated. Bhandarkar, as well as Rebay found a positive relation between age, and experience of Job satisfaction. There is no significant difference to sex or level of education and job satisfaction. Regarding pay and supervision the teachers are dissatisfied. Gupta states that marital status; age and experience were not associated with job satisfaction. Rebay states that not only the gender, marital status, age, qualifications but also the locations of the school have no relationship with job satisfaction and at the same time the experience and salaries of the teachers have a significant relationship with job satisfaction.

Sekar and Ranganathan (1988) while studying job satisfaction of graduate teachers in Coimbatore, found that most of the teachers were satisfied with their nature of work, personnel policies, salary, personal achievement and their relationship with superiors and colleagues, working conditions in schools, concluded that caste, place of work and mother tongue were significantly related to job satisfaction. Male graduate trained teachers, single-family teachers, more experienced and government school-teachers were more satisfied than others; age and marital status, however, had no relationship with job satisfaction. Economic and political values were found to be correlates of job satisfaction.

Clemence (1989) found that role conflict affected job satisfaction of women teachers but social dimension of value influenced their job satisfaction rather favorably.

Reddy (1989) in his study found that over-qualified primary school teachers had low job satisfaction while teachers younger in age had higher level of job satisfaction, which had positive correlation with attitude towards teaching and job involvement.

Rao (1989) says that ‘the quality or effectiveness of teachers is considered to be associated with his satisfaction towards his profession, and his satisfaction with his values.'
Billingsley and Cross (1992) discussed that professional commitment and job satisfaction are important factors for the study of retaining teachers in the workplace and building a strong teaching force. However, Bullock et al., (1998) stated that “…it’s not how to keep teachers in our special education classrooms for students with emotional disturbances when they want to leave, but how do we provide an environment that helps special education teachers deal with the stressors of their work.” In addition, exploring the correlates of commitment and job satisfaction should ultimately help us understand what might be done to enhance commitment and job satisfaction among teachers (Billingsley and Cross, 1992). Also, by acting on relevant and effective solutions, the outcomes will help raise the quality of teaching personnel while maintaining a sufficient pool of qualified educators.

Fontana (1986) regarded that ‘if the teacher is too rigid or has a doctrinaire belief of that his methods are right and those of any one who disagrees with him are wrong, then he will be depriving his children of a range of possible learning experiences, to their disadvantage and to his own’. Thus, it is clear that an effective and competent teacher will achieve the desired learning outcomes, provided if he satisfied in his profession. But no significant efforts are found to study the competency in relation to job satisfaction among teachers.

Abushaira (2012) analyzed job satisfaction among special education teachers in Jordan with respect to some variables. A survey enquiry was conducted through (nine-dimension) questionnaire on total number of 139 special education teachers (16 males and 123 females). Results revealed that the level of job satisfaction among the participants was moderate. No significant statistical differences were found in the respondents’ level of job satisfaction due to gender. However, significant differences were found in the respondents’ level of job satisfaction due to age favoring younger teachers. The study presented a clear view of the job satisfaction level among special education teachers in Jordan, which helps to improve their work efficacy. Further, the study recommends the necessity of providing an appropriate work atmosphere to encourage the teachers who work with the multi-disabled students.
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Review of Related Literature

De Beer et al., (2007) observed that due to problems currently experienced by teachers at main stream schools, such as work pressure and minimal support and restructuring of the education system, their job satisfaction has reached an all-time low.

International trends suggest that first-year special education teachers are more likely to leave the service than main stream teachers (Gehrke & McCoy, 2007). Studies indicate that low job satisfaction in teacher can be attributed to an excessive workload because of curriculum changes, unreasonable demands and lack of support systems (Castro et al., 2010; Howard & Johnson, 2004; Kirk & Wall, 2010). Because there is a lack of sufficient and specific data or literature regarding special schools, one can argue that the relatively low satisfaction of teachers in mainstream education could be generalized to teachers in special education (Castro et al., 2010). However, one needs to bear in mind that there are different variables which could contribute either positively or negatively on the teachers’ job satisfaction.

Although low salaries are often cited as a factor contributing to job dissatisfaction, the contrary could also be true; in other words that the act of helping those less fortunate might be a source of profound job satisfaction (Kirk & Wall, 2009) and opportunities for personal and professional growth (Gehrke & McCoy, 2007). Special education requires an educational programme, class or school that accommodates the needs of special learners that is, learners with emotional, social, neurological or physical problems (Plug et al., 1997).

Job satisfaction can be evaluated according to a worker’s expectations, value and reward (Evans, 1998); and can be established by differentiating between the person’s expectations and the personal fulfillment that he or she gets out of a job (De Beer et al., 2007; Evans, 1997). However, Kalleberg (1977) identifies the reward of a job and its concomitant value as the most important predictors of job satisfaction, when job satisfaction is seen as the employee’s general orientation towards the different job roles he or she represents. This contradiction of ideas surrounding job satisfaction might come to play an important role when one ascertains the level of job satisfaction amongst special needs teachers.
Maslow (1970), Hay and Miskel (1978) proposed the theories on job satisfaction. According to Maslow ‘a person’s satisfaction is determined by the fulfillment of his five levels of need’. Lartie (1975) believed that teaching continues to be rather limited in its available extrinsic rewards and that if teacher job satisfaction is to be increased efforts are to be made to improve the teaching situations. According to Edward and others (1976) a high performance leads to high job satisfaction, which in turn becomes feedback to influence future performance. Better performance leads to high rewards. This improvement in satisfaction is because of employee’s feeling that they are receiving rewards in proportion to their performance.

The Indian Education Commission (1964-66) also states that ‘nothing is more important than providing teachers’ best professional preparation and creating satisfactory conditions of work in which they carefully be effective.’

Frankiewiz (1979) found a positive relationship between job satisfaction and effective teacher behaviour. In the light of the above the theoretical framework of teacher job satisfaction may be considered as one of the important factors, which can enhance teaching competency.

Abelson (1986) mailed a Likert-style job satisfaction scale of his own design to teachers who categorized their students as mentally retarded, learning disabled, emotionally disturbed, or as severely handicapped. He reported that the teachers of the children described as emotionally disturbed were the least satisfied with their working conditions. Abelson interpreted this result as reflecting that greater stress was placed on teachers of the emotionally disturbed.

In another study, Stempien and Loeb (2002) compared the satisfactions and dissatisfactions of teachers of emotionally-disturbed students, teachers of students in general education, and teachers who were responsible for both groups of students. Of these three different professions, teachers of emotionally disturbed students were found to be the most dissatisfied. Specific stressors and frustrations, both from within and outside the classroom, were found to be associated with the dissatisfaction of the teachers of emotionally disturbed students. Additionally, the authors found that
dissatisfaction was particularly common in younger, less-experienced teachers of the emotionally disturbed.

Bishay (1996) examined many factors in an attempt to find which ones promote teacher motivation. Pay incentives have been found to be unsuccessful in increasing motivation. In their study of 167 teachers, Sylvia and Hutchinson (1985) concluded: “Teacher motivation is based in the freedom to try new ideas, achievement of appropriate responsibility levels, and intrinsic work elements. Based upon the findings, schemes such as merit pay were predicted to be counterproductive.”

Giacometti (2005) conducted a study on motivation to teach refers to one’s feelings about the teaching profession. Some factors are: desire to work with young people, feel stimulated to teach others, and feel efficacious and motivated in the classroom (Darling-Hammond & Sclan, 1996; Huberman, 1989; National Education Association, 1997a, 1997b); feel challenged in the profession and see opportunities for professional growth (Chapman & Lowther, 1982; Darling-Hammond & Sclan, 1996); strong commitment to the field of education (Chapman, 1984). In addition, how others perceive the role of the teacher in the community is in this domain. Motivational factors help people make the decision to enter the field. Some people believe that by providing their service they will be contributing to humanity. Their position as a teacher is a challenge, and helping young people learn and succeed brings them joy. People who feel challenged by their work are more apt to persist in and have a greater satisfaction with their employment (Chapman & Lowther, 1982). They believe they can make a difference, and that keeps them motivated to stay in the profession.

Teachers generally are drawn to the profession for reasons other than extrinsic factors. As far back as 1960 teachers reported satisfaction because they wanted to help children (National Education Association, 1963). More recent studies still indicate a high level of commitment because teachers are satisfied in helping children and making a difference (Harris & Associates, 1992; Kushman, 1992; Luekens et al., 2004; National Education Association, 1997). In 2000, over one-half of teachers who left the profession felt that the challenge, prestige, and advancement opportunities are better outside of the teaching field (Luekens et al., 2004).
According to the American Association for Employment in Education (2003), special educators, including teachers of the emotionally disturbed, are in greatest need in today. These professionals work daily to deliver on the promises and requirements of the Individuals with Disabilities Education Act (IDEA, 1997), yet the complexities of the profession and other factors in the environment often inspire so that teachers leave early.

According to Westat Research Association (2001), special educators have indicated that they were more likely to stay in teaching when their workload was manageable, their school was supportive of staff and students, and paperwork did not interfere significantly with their teaching. In addition, workforce conditions that encourage their capabilities and emphasize the worth of individuals contribute to greater retention (Council for Exceptional Children, 2001).

In recent years, the field of special education, similar to most educational fields, has entered into a vast and complicated realm of accountability and expectations.

In addition to IDEA federal legislation, the No Child Left Behind Act (NCLB, 2001) calls for all school districts to employ highly qualified teaching personnel and holds the district accountable for the quality of student achievement for all students. According to Sabornie and deBettencourt (1997), the role of special educators has changed dramatically highlighted by the shift from direct provider of instruction to a role that can be defined as facilitator and/or consultant. Similarly, the new, more direct role of the general education teacher has demanded an increased understanding of disabled children, the identification of appropriate curricular and instructional configurations, and the understanding of the multitude of interactions among disabled students. Lane et al., (2002) found four key challenges that affect special education teachers who serve students with emotional disturbances. First, school districts would benefit from using cost-effective screening procedures to aid in the early detection of ED students. Also, the authors mentioned that screening intervention is effective when the discrepancy between current and desired levels of performance is narrow and before maladaptive behaviors have been firmly ingrained.
in a child’s behavioral repertoire. The professional teachers have a high level of commitment to their jobs, where as the people who explore teaching as a vocation in the employment crisis lack the required commitment and motivation.

According to various researchers (Billingsley, Fall, & Williams, 2006; Bullock & Wilson, 1994, Cooley-Nichols, 2004), in order to close the gap of teacher shortages in the field of special education, especially for the teachers working with students with emotional disturbances, trickledown effect of accountability is needed. This effect must flow from the state department’s licensure division to colleges, universities’ preparation programs, utilization of school districts’ staff development training, and to special education teachers in order to develop the competencies and best practices for working with emotionally-disabled students within both self-contained and inclusive settings.

Attracting, satisfying, and retaining special education teachers, particularly those teachers of students with emotional and behavioral difficulties, looms as a major challenge for the 21st century (Simpson et al., 1993). Job satisfaction, motivation to remain as classroom teachers, and commitment to their subject area were topics surveyed by Burnetti (2001). He surveyed 426 high school teachers from a large Northern California school district and found that more than 60% of the respondents either “agreed” or “strongly agreed” that they were satisfied with their current job assignments. Of this percentage, Burnetti personally interviewed 28 teachers who indicated that they were highly satisfied with their teaching positions and perceived that they had a positive impact on their students. The respondents indicated that the act of working with students and seeing them learn and grow were two main motivators for remaining in the field of education. In addition, Shann (1998) found that the job satisfaction of most urban middle school teachers was related directly to how well they perceived their students were succeeding.

It has been well established that a significant number of special education teachers have perceived the educational workplace as highly stressful, and ultimately some teachers will experience failure. In addition, many teachers feel that
the lack of school-based administrative and central division supports add to the consistency of individual on-the-job stress (Byrne, 1991).

Wisniewsky and Gargiulo (1997) mentioned that occupational stress is the effect of task demands that teachers face in the performance of their professional roles and responsibilities. Acheson and Gall (1992) as well as Farber and Ascher (1991) suggested that burnout or career failure is due to complex and varied reasons, but that teacher training, or lack thereof, is thought to be a primary contributor to their success or failure.

Smith and Milstein (1984) conducted a historical review of the stress in teaching from the 1930s to the 1980s and identified the following concerns: (1) rewards by years in the profession rather than by achievement; (2) little opportunity for collegial feedback; (3) role conflicts; (4) little control by teachers over decisions that affect their work; (5) lack of career ladders; (6) pre-service training that appears to be inadequate or irrelevant; (7) perception that many administrators are poorly prepared or at least do not seem to care; and (8) the failure of school districts to protect teachers in basic survival areas.

Following the Smith and Milstein (1984) study, Marlow et al., (1996) examined the reasons for teachers leaving the field. The researchers analyzed results of 212 randomly selected K-12 teachers from Alaska, Hawaii, Idaho, Montana, Oregon, Washington, and Wyoming who completed an attitude survey on job satisfaction and perceptions of the workplace. Smith and Milstein found that 44 % of teachers surveyed considered leaving the teaching profession for the following reasons:

- lack of fulfillment;
- boredom with the daily routine;
- stress;
- frustration;
- difficult working conditions;
- low salaries;
Review of Related Literature

- student discipline;
- student’s lack of motivation;
- poor attitudes; and
- Lack of respect from community, parents, administration, and/or students.

Friedman (1991) conducted a study of school culture factors leading to the burnout of special education teachers. The researcher profiled the comparisons of schools with high and low 26 burnout characteristics as reported by special education personnel within those schools. A random sample of 1,597 teachers (1,485 females and 112 males) in 78 elementary schools was used to complete the study. All participants were given the Maslach Burnout Inventory, followed by interviews from principals, and teachers.

According to Friedman (1991), the total score was a representation of the burnout expressed by all employed teachers. The schools were then separated into two groups based on their standardized scores. The two groups were labeled as high burnout and low burnout schools. High burnout schools were determined to have a burnout score of one or more standard deviation above the average and low burnout schools were categorized by being one standard deviation below the average. Eight schools were determined as high burnout with the total of 115 teachers and a burnout score of 3.5. In addition, ten schools with a total of 171 teachers were considered low burnout schools and revealed a burnout score of 1.4. Several weeks later, the second stage of this study was implemented with the primary intent to extract and compare differences in the climate and culture between the two types of schools. It was discussed that 12 schools were selected (6 from each group) from the total of 18 schools. The schools were selected based on the criteria of administrative stability and social and geographical position. Random sampling was used to select school personnel for interviews. Blind interviews were conducted with administrators, teachers, counselors, and grade-level coordinators by experienced researchers to rule out bias of the findings.
According to the American Association for Employment in Education (2003), special educators, including teachers of the emotionally disturbed, are in greatest need in public schools today. These professionals work daily to deliver on the promises and requirements of the Individuals with Disabilities Education Act (IDEA, 1997), yet the complexities of the profession and other factors in the environment often inspire so that teachers leave early.

Principal support is critical to all aspects of job satisfaction (Gersten, 1995). It is the focus of school districts to support and guide beginning and experienced special education teachers as they implement instructional programming for emotionally disturbed students. Administrative personnel are viewed as the top instructional leaders of their schools and help guide the academic path for all students and instructional personnel.

Overall, across all academic educators, job satisfaction is associated with greater leadership support, work involvement, lower levels of role conflict and stress (Billingsley & Cross, 1992). In addition, increased administrative support is a vital aspect of developing a supportive and satisfied teaching staff. Also, experienced levels of administrative support will increase teacher commitment towards employment in their school district and experience more satisfaction with their jobs (Billingsley & Cross, 1992).

To provide the best possible education, students with disabilities must be taught by experienced, highly qualified teachers. The acquisition of knowledge and skills by students is directly related to achievement, independence, and quality of life (CEC, 2000).

Teaching students with special needs is challenging with the best of conditions. Paperwork, lack of resources, and behavioral issues contribute to feelings of being overwhelmed and underprepared.

2.5 SUMMARY

Strategies are the basic tools for educators of delivering instruction. The classroom teacher learns to take the basic instructional strategies and to blend them to
create a leaning environment. Success in educating children with special needs requires extensive knowledge, a broad range of professional skills and a positive attitude. Primary among the skills needed to teach them is the understanding and use of a variety of effective and proven teaching strategies. Above all strategies are very useful for teaching children with mental retardation, autism and multiple disabilities. Special education teachers enter the teaching profession with the distinct goal of making a difference in the lives of students with special needs, as well as fulfilling their own goals and self-worth.

The investigator conducted an exhaustive review of the work done in the areas related to satisfaction of special teachers in teaching and problems of special teachers in teaching. An attempt was made to include some relevant theoretical as well as abstracts of available studies on relevant variables. It has been seen that a good number of studies were found out in the satisfaction and problems of teachers. But no such studies were there in satisfaction and problems of special teachers in the classroom teaching. The investigators found that large amount of studies were about job satisfaction and problems of teachers. So it is very important and necessary to find out the satisfaction and problems of special teachers in classroom teaching for the development of special education.