

**IMPACT OF INCLUSION ON STUDENTS' LEARNING
AT PRIMARY LEVEL**

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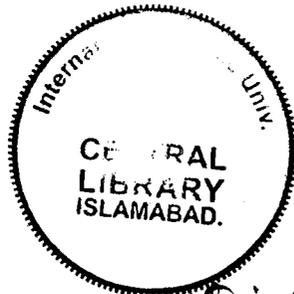
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A thesis submitted in partial fulfillment of the
requirement for the degree of the
M.S.EDUCATION

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2009

CERTIFICATE

This thesis entitled "Impact of Inclusion on Students' Learning at Primary Level". Submitted by Asma Naureen, in partial fulfillment of MS degree in Education, has been completed under my guidance and supervision. I am satisfied with the quality of student's research work and allow her to submit this thesis for further process as per IIUI rules and regulations.

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IMPACT OF INCLUSION ON STUDENTS' LEARNING AT PRIMARY LEVEL

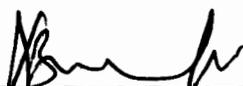
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TO

**HAZRAT MUHAMMAD (S.A.W.), WHO HAS ALWAYS
BEEN THE MAIN SOURCE OF INSPIRATION BEHIND
ALL MY EFFORTS AND ACHIEVEMENTS,
MY GRANDMOTHER,
MY TEACHERS,
MY PARENTS,
AND
ALL THOSE WHO TAUGHT ME EVEN A SINGLE WORD
IN MY LIFE**

ABBREVIATIONS

AD	Attention Deficit
EFA	Education For All
HD	Hyperactivity Disorder
IDEA	Individuals with Disabilities Education Act
IDP	International Development Partners
IE	Individual Educational
IEP	Individual Educational Program
NICHCY	National Information Center for Children and Youth with Disabilities
UNESCO	United Nations Educational, Scientific and Cultural Organization
TBI	Traumatic Brain Injury

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ABSTRACT

This study was focused to find the impact of inclusive teaching techniques on the learning of students with and without special needs of class II. It was an experimental study in which traditional method of teaching was compared with inclusive instructional strategies in an inclusive setting. Students were divided into two equal groups on the basis of teacher-made pre-test scores. Sample size consists of 56 students, there were twenty eight students in experimental group and same number of students was in the control group. Both the groups were representative of inclusion, in which there were students from religious/linguistic minorities, slow learners, having low vision and articulation, hyper-actives, etc. Pre-test was used before the treatment started to judge the difference. Treatment of planned inclusive instruction technique was given to experimental group while control group was taught by ordinary traditional method. The duration of the experiment was fifteen days. First four lessons were taken from the text book of English for class II. At the end of the treatment, a teacher made post-test was conducted to measure the achievement of the students in the subject of English. To determine the impact of inclusive instructional strategies on students' learning in inclusive setting and traditional teaching in inclusive setting, the significance of difference between the scores of groups at 0.05 level was tested by applying t-test and analysis was made. Data analysis showed that both the groups (experimental and control) in the beginning of the experiment were equal. The experimental group outscored significantly the control group on post-test shows that inclusive instructional strategies are more effective than that of traditional method of teaching students at primary level. So, the result of the study indicates that inclusive instructional strategies were more

effective and they have positive effect on the learning of both types of students with and without special needs in inclusive setting than traditional method of teaching. Furthermore it creates the feeling tolerance, cooperation and mutual help among the students.

CHAPTER I

INTRODUCTION

Education refers to a balanced growth of personality through the training of spirit, intellect and logic, process of reasoning, feelings and bodily senses of human beings. Education is the instrument for the spiritual development as well as the material fulfillment of human needs. Education is the full right of everyone and to provide educational facilities to each and every child is the responsibility of the government. “The first few years of one’s life are very important for an individual because they put life long effects on his/her personality as somebody has rightly observed ‘the first few years of a child’s life last a lifetime!’ and now the recent international research coming in from the field of neuro-science, particularly on the development of brain, is also confirming that these early childhood years are the most vital for lifelong development, since the pace of brain development in these years is extremely fast and rapid. There is evidence that experience based brain development in the early years sets neurological and biological pathways that affect health, learning and behaviour throughout life.” (Kaul, 2008).

The process of inclusion allows or gives permission to all the children of the society to participate in regular classroom activities regardless of any disability, race, or other characteristics and it means to bring all the excluded children to their nearby school or educational institution and encourage them to participate in the curricular and co-curricular activities in the regular schools with others pupils who are without special needs. It is a process of providing the opportunities to all the pupils to actively participate in the activities of the school and experience the success and share their experiences with

each other in the regular classroom of their nearby schools and educational institutions. It refers to place the children having diverse characteristics into a shared educational setting by keeping in mind that diversity gives beauty to life and do not create problems. “Inclusion is about welcoming diversity of characteristics of different types, benefiting all the students not only targeting the out of school excluded children but also those who are although in the school even then may feel excluded”. (Ainscow et al, 2006)

It aims to grant equal right of entering to all the children to education. Inclusion is a never ending process of searching better and improved ways to respond to diversity and variety of characteristics and learn to live with differences because all the human beings do not possess same qualities and characteristics. Inclusion is concerned with the identification and removal of all types of barriers. IE is concerned with the presence, participation and achievement in educational sphere by all the students with and without special needs. Here ‘presence’ means how regularly children attend the school and where they are educated, ‘participation’ refers to the quality of their experiences that which type of experiences from which they go through while they are there in the school and ‘achievement’ refers to the learning outcomes. In 1990s the term inclusion became popular and starting being used in place of mainstreaming or integration of students but inclusion is a broader and comprehensive term than those two and accentuates in the addition of specifically planned activities for the children that engage and make busy all learners with and without special needs collectively. “Inclusion is a philosophy that says the schools and societies are not complete unless children with all needs and gifts are welcome to it”. (Shahzadi,2000)

The term inclusion in education took its origin from U.S.A. It came to know through the history of U.S. education that some children have been separated and not allowed to attend the regular classrooms for different of reasons. "In *Brown v. Board of Education of Topeka* (1954), the Supreme Court of the United States decided that segregation/exclusion of children based on race was unconstitutional and unethical in public schools. When Congress of the Education of All Handicapped Children Act of 1975 was passed it extended the right of equal educational opportunity to all the children with disabilities and without disabilities." (Osgood, 2000).

"The federal legislation of USA was reenacted in 1990 as the Individuals with Disabilities Education Act (IDEA), and has undergone numerous changes. IDEA gives guarantee that all children, even those with severe disabilities, have the opportunity to receive a free and appropriate public education in the least restrictive environment of educational institutions. IDEA, together with the Americans with Disabilities Act of 1990, reflected a growing awareness among legislators and educators that separating children with special needs from children without special needs constitutes unequal educational opportunities". (Schnaiberg, 1996).

The term inclusive education is relatively new as compared to special education and not well known in Pakistan. IE has developed as a movement to challenge exclusionary policies and practices by the government as well as non-government educational institutions and got popularity in last ten years. IE is now considered as the most effective approach to fulfil the learning requirements of all children in regular schools. IE is bringing change in educational system by improving it so it may accommodate all

children of the community or society. It means to bring changes in the curriculum, in teachers' way of teaching and students learning. IE is concerned about learners with and without special needs work together in the class and share their experiences to one another. Inclusive education practices in Pakistan are bringing the change in schools, places of learning and educational institutions and the culture of present time with stress on active learning, valid evaluation practices, functional curriculum, on giving more attention to varied students' needs. IE approach emphasizes on changing the places of learning and schools and also educational systems to that extend that they care, nurture and support all the needs of the pupils as well as teachers according to the required goals of the society. Inclusive schools are not considered to provide and arrange "regular education" and "special education" in a same school rather they provide IE and teach all the students together. These schools welcome all the students with or without special needs and give assurance to learn all the students together and take active part in curricular and co-curricular activities. To achieve this, there is a need to bring overall change in education system, change in the behaviour and attitude of teachers as well as administrators. In this process first of all there is a need to identifying the hurdles and hindrances in the way of learning of children whether they are within and around the school, then remove those hurdles and barriers.

Perhaps the best, most concise definition of inclusion is this:

“Inclusion involves keeping special education students in regular education classrooms and bringing the support services to the child, rather than bringing the child to the support services” (Smelter, Rasch, & Yudewitz, 1994,p.35).

Inclusion represents a belief that students with disabilities belong in regular program of the school where special services are available to support the effort (Biklen, 1992)

Advocates of inclusion tend to give these meanings of inclusion:

- To educate all children with disorders/disabilities in regular classrooms in the neighborhood or nearby school and made them accessible and in the reach of all the children.
- To provide age-appropriate curricular and co-curricular activities to all the children with or without special needs.
- To provide essential/necessary services in the regular classroom without excluding any student.

Inclusion is acceptable for following reasons:

- Education is a right of all students without any discrimination.
- Students with disabilities or disorders learn social skills and get benefit from their friends and peers.
- Non-disabled/ students without special needs get benefit by establishing social relationships.
- All children can learn to understand and accept human differences and diversity.

In Pakistan there are 106,275 primary schools (Bureau of Statistic, 1998) and 278,051 teachers are teaching there. Some of the teachers, administrators and parents have awareness about the concept of inclusion but they do not know how to implement it in regular ordinary school setting in an effective way. There is a need

of effective planning for inclusive education in Pakistan. First of all there is a need to prepare the general public to accept inclusion. Change is required in the curriculum to make suitable for inclusive education and trained teachers are also required to build their capacity for undertaking the challenge of inclusive education. To achieve this purpose new infrastructure, a new vision of education and adequate financial resources are required. Only by including the excluded or out of school children the purpose of inclusive education can not be achieved.

Government of Pakistan with the collaboration of IDP Norway has started a number of projects to introduce inclusive education in the regular schools of Pakistan. In initial stage they introduced IE in regular schools of Balochistan Province then at other places and they have also been developing resource centers. In the capital of the country, Islamabad 16 regular schools have been introduced with IE. Many students with special needs have been admitted in regular schools under these projects for IE. This study was focused to find the impact of inclusion on the learning of students with and without special needs.

1.1 STATEMENT OF THE PROBLEM

This experimental study aimed to find out the impact of inclusion on the learning of students at primary level (Class II).

1.2 OBJECTIVES OF THE STUDY

The main objectives of the study were:

1. To find the impact of inclusion on the learning of students with special needs.
2. To find the impact of inclusion on the learning of students without special needs.
3. To give recommendations for the establishment of inclusive classes in schools.

1.3 SIGNIFICANCE OF THE STUDY

This experimental study is very significant in different ways; on one hand it will give awareness to the people about inclusive education as even many of the teachers do not know about inclusion. On the other hand it would enable the community members to adopt the positive attitude towards those children who are suffering from some disorders or disabilities or different from other students. This study would provide guidance to the teachers and parents for helping students with and without special needs. It would also help the teachers and administrators to look and analyze their teaching and make necessary changes in their educational strategies. In the National Report on the Development of Education, 2008 the emphasis was given on inclusive education with the objective to support Education For All (EFA), with special emphasis on eradicating the obstacles to all excluded: girls and women, the disabled, ethnic/linguistic minorities, nomads, and many others to participate and learn in regular schools so this study would

enhance the efforts of government in creating the positive attitude among the educators in specific and public in general.

1.4 HYPOTHESES OF THE STUDY

The following hypotheses were tested in the study:

Ho1: There is no significant difference between the mean scores of experimental group on pre-test and post-test.

Ho2: There is no significant difference between the mean scores of control group on pre-test and post-test.

Ho3: There is no significant difference between the mean scores of control group and experimental group on post-test.

1.5 DELIMITATIONS OF THE STUDY

The present research study was delimited to F.G. Junior Model School, G-7/3-1, Islamabad.

In the study students belonged to religious minorities/linguistic minorities, having learning disabilities, having low vision, suffering from Thalassemia and students with Hyperactivity disorder were included.

1.6 METHODS AND PROCEDURE OF THE RESEARCH

The nature of the study was experimental. The procedure of the study was that two groups of student had been taken and tested before and after teaching. Pre-test, post-test equivalent design was used in this research study. In this design, pre-test was

administered before the application of the experimental and control treatments and post-test was administered at the end of the treatment period.

1.6.1 Population

Students studying in three sections of class II constitute the population of the study. They are 83 students who are studying in three different sections. Their ages ranged from 7 to 9 years.

1.6.2 Sample

Random sampling technique was used to take the sample. The sample of the study consisted of two classes (groups) of the same level of the school, representative of inclusion and in which there was inclusion of students with and without special needs. These two classes were randomly selected among the three sections of class II. Participants of the study were 56 students of F. G. Junior Model School, G-7/3-1, Islamabad. There was inclusion of students belonging to religious minorities/linguistic minorities, having learning disabilities, having low vision, suffering from Thalassemia and Hyperactivity disorder. The scores of pre-test were used to equate the groups i.e. each student of experimental group was equated with corresponding student in the control group. Students were allotted randomly to control and experimental groups. Twenty-eight students were placed in experimental group and twenty-eight students were in the control group.

1.6.3 Data Collection

Two groups of students were taken in which there was inclusion of students with special needs one was taught by traditional method and other was taught by using inclusive teaching strategies. To collect data the teacher made test was used.

1.6.4 Analysis of Data

In order to test the hypotheses collected data was tabulated and analyzed; scores of pre-test and post-test were compared. Researcher used t-test. On the basis of the analysis, conclusions were drawn and recommendations were given.

CHAPTER II

REVIEW OF RELATED LITRATURE

2.1 CONCEPT OF EDUCATION

Socrates of earliest Greece, had the view that education was about to drawing out what was already within the student. (It is well known by the educationist that the word education is derived from the Latin word “educere” which means “to lead out.”) “At the same time, the Sophists, a group of itinerant teachers, promised to give students the necessary knowledge and skills to gain positions with the city-state” (Dewey, 1938).

2.2 Objectives of Education in Pakistan

In Pakistan education aims at producing trained manpower, educated citizens and competent leaders for the better future of the country. It should fulfil the collective as well as individual need and aspirations of the people of Pakistan. The educational system should provide for the development of all the vocational abilities needed for the creation of a progressive, peaceful and democratic society. This system should also attempt to preserve to ideals and culture, which led to the creation of Pakistan and strengthen the concept with the feeling of integrity, unity and oneness. This Islamic State Pakistan should be based upon the Islamic Ideology of justice, equality and brotherhood in a true sense for that it needs right type of education system which fulfil these needs. It should be based on the welfare of state, struggle to raise the standard of living of its people.(Anwar 1998)

2.3 Primary Education

Primary education consists of the first few years of formal, structured and planned education given to the children. In general, primary education is a system of giving fundamental education of five, six or seven years of schooling (in some schools it starts from class one at the age of five years and in some others there is prep or nursery system starting at the age of three or four depending on the system which they have adopted). This period and age group is not similar among the countries, sometimes not even within a single country. "Globally, around 70% of primary-age children are enrolled in primary education, and this proportion is rising as more and more children are being enrolled at primary level. Under the programme, Education for All introduced by UNESCO, most countries have committed to achieving universal enrollment in primary education by 2015, and in many countries, it is compulsory for all the children to get primary education. Schools that provide primary education, are mostly called primary schools". (UNESCO, 2008)

Children are usually placed in classes with only one teacher who will be primarily responsible for their education and welfare for that year but in some schools there is one class teacher who is assisted by other specialist teachers in certain subject areas, like science, mathematics or physical education. The learning with a single teacher gives the opportunity to build up a close relationship with the class and it is a notable and positive healthy feature of the primary system education". (UNESCO, 2008)

Traditionally, different forms of corporal punishment have been an integral part of early education in Pakistan but now this type of punishment has been criticised by the

educationists in specific and by the public in general. Education Ministry has given instructions to all the educational institutional authorities to check that no corporal punishment be given to students as it has very negative effects on the personality of the children especially when it is given to small children because early childhood experiences has long lasting effects on their life.

2.4 Teaching

The goal of teaching is to provide a sound foundation of knowledge on which students will be able to build their knowledge as they are exposed to different experiences of life. Teaching is to transfer knowledge from one generation to another and allows students to grow into useful members of society and become the future leaders. Those teachers are considered good who are able to translate information to the students according to their level, make valid judgment, have experience and knowledge into relevant subject and give it to their students in an interesting and effective way so that they can understand it afterwards able to retain and transfer this knowledge to others. In inclusive schools good quality of teachers is the most important factor affecting students' performance in curricular and co-curricular activities as suggested by the Studies from the US. The researches have shown that those countries which score highly on international tests have ensured that the teachers they have employed are very effective as it is directly related to the students performance at present and their achievements in the future. So the role of teacher and their teaching methods and strategies in inclusive setting directly related to the achievement of the students.

2.5 What is inclusive education?

The concept of inclusive education is different from the concept of 'integration' and, 'mainstreaming' which concerned with the students having any disability and 'special educational needs' and to change the students or make them ready for placing them in the mainstreaming. On contrary inclusion is about the right of every child to participate in all the activities of regular school and its the duty and responsibility of the school to accept it and facilitate the students without any discrimination and welcome them.

- Segregation or exclusion of learners is rejected in any case on the bases of ability, gender, language, care status, family income, disability, colour, religion or ethnic origin.
- All learners in the community schools of their choice confirm their maximum participation in the activities of the school.
- Inclusive education makes learning more relevant and meaningful for learners, who are most vulnerable to exclusionary pressures.
- Formating diverse learning needs, there is a need of restructuring, rethinking and replanning the policies, curricula, cultures and practices in schools and learning environments regardless of the origin and nature of these needs.

(Ainscow and Booth,2003)

2.5.1 Inclusion in Education

In the field of education, inclusion means the process in which all the children are given the opportunity and chance to fully take part or participate in regular classroom activities regardless of any disability, race, or other characteristics they have. Inclusion is

usually applied most to the field of special education. It also provides a wide range of activities and experiences for all students so they can fully take part in the regular classroom setting of their own community schools or nearby schools. It is the liability of the society for the placement of students with special needs or disabilities into a shared educational setting. Since 1990s this term inclusion is used in place of mainstreaming or integration or these terms were replaced inclusion. Inclusion is widely used term that emphasizes collective activities which are designed for all students. Inclusion is about benefiting all learners by providing equal opportunity without excluding or categorizing according to their learning needs so no learner can feel excluded. In this way barriers of learning will be identified and then will be removed by this way it involves the presence, participation and achievement of all the learners. In term of inclusion “presence” explains education of children with regular and punctual attendance and “participation” is defined in terms of “quality” of their experiences and “achievement” is the learning outcomes of the curriculum, not merely test and examination results. (Ainscow et al, 2006)

2.5.2 Background

In education the term inclusion drives from the history of U.S.A.’s education when few students were separated or excluded and left out from regular classrooms due to different many reasons. The discrimination on the basis of race was not lawful, as the Supreme Court of the USA declared this was unconstitutional for the community schools (Brown v. Board of Education of Topeka, 1954). “According to the Education of All Handicapped Children Act of 1975, the right of equal opportunities in the education for children with disabilities was enacted in 1990 with IDEA (Individuals Disabilities Education Act) with numbers of changes and amendments. IDEA passed the law for all

children even with severe disabilities have the right to receive a free and appropriate public education with equal opportunities environment. IDEA, and Americans with Disabilities Act of 1990, has created awareness among legislators and educators that separating the children from the regular classroom is taking away the right of equal education from children with disabilities”. (Osgood, 2000)

2.5.3 Inclusive Education

“Inclusion is about bringing the change by improving the educational system, schools and other educational institutions to accommodate all learners with or without special needs and fulfill their educational needs. It means to bring changes in the curriculum or modify it, to change the way of teaching and students (with and without special needs) way of learning and their way of interacting with each other. Inclusive education practices reflect the changing culture of schools of today highlighting active learning, valid and reliable evaluation method, applied and functional curriculum and extra attention to various and different needs of students. The main focus is to bring positive change in the culture of schools to make them caring, nurturing, and supportive educational communities which fulfill the needs and requirements of all the students (with or without special needs) and teachers. Inclusive schools are open to all children, and they give surety that all students take part in the activities of the class. For bringing such changes, teachers, schools and systems of education need to be changed so that they can welcome diversified needs of pupils and that they are encouraged to participate in all aspects of school-life. “Inclusive education is a process of enabling all students, including previously excluded groups, to learn and participate effectively within regular school systems”. (http://en.wikipedia.org/wiki/Inclusive_classroom, 2008)

2.5.4 Definition

“Inclusion involves keeping special education students in regular education classrooms and bringing the support services to the child, rather than bringing the child to the support services”(Smelter, Rasch, & Yudewitz, 1994,p.35).

According to Chris Darlington, the president of National Association for Special Education Needs (NASEN), a national organization for professionals working in the area of inclusion (USA), inclusion is “a process, not a state, inclusion is not a simple concept restricted to issues of placement. Key principles are valuing diversity, entitlement, dignity, individual needs, planning, collective responsibility, professional development, and equal opportunities.” (Darlington, 2003)

2.5.5 International Trend about Inclusion

Throughout the world knowledge and understanding of the need for inclusion has increased. Several international reports, like the Canadian Commission on Emotional and Learning Disorders report of 1970, the 1978 Warnock Report in England, and the 1984 Report by the Ministry of Education in Australia, disprove educational exclusion. In these documents like other efforts among the educators and teachers around the world, emphasized to provide children the opportunity to learn with and from their peers, regardless of any individual differences.

The implementation process of inclusive education developed through different stages. Education of All Handicapped Children Act of 1975 was passed and most educators and teacher called this process mainstreaming, which was defined by them as placing children with mild disabilities into the regular classroom either for a part or all for

a whole day in the school. In the 1980s the term integration was described as the process by which children with more severe disabilities or disorders were included in mainstream schools. This term integration was used by the civil rights movement in the United States which was against the forced segregation of individuals based on race. The Educators borrowed this term of integration from them; teachers of Special education used this term inclusion or inclusive schooling during the late 1980s. The use of this term emphasizes on the creation of activities to ensure that every child, including children, with disabilities, or disorders can participate in all regular school settings be successful.

Here inclusion particularly means including disabled (physically or mentally) or students having special needs in regular classrooms to give them chance to study with the students without special needs and get benefit.

2.5.6 Definition of Disabled

Children who have some disabilities were previously called and defined as "handicapped". In the category of handicapped came all those who had mental retardation, difficulty in hearing, speech impairment, visual impairment, serious emotional disturbance, orthopedic impairment, other health impairments, deaf-blindness, deafness, multiple disabilities, or having specific learning disabilities, etc. All those who had these impairments, difficulties and disorders were considered that they need special educational institutions where they could get education and related helpful services. Afterwards instead of "handicapped" the term "disabled" starting been used. In this definition those who were mildly or moderately emotionally disturbed were not included then and changes were made to expand the definition by including autism and TBI, and ADD. The term developmental delay is used for category of children, between the age

group of 3 to 9, it refers to the delay in physical development, cognitive development, communication development, social or emotional development, or adaptive development; which need for special education as it was considered by most of the educationists.

2.5.7 Some Recommendations for Different Disabilities

The National Information Center for Children and Youth with Disabilities (NICHCY) has specified changes for different types of disabilities and disorders. The following suggestions have been made by NICHCY:

2.5.7.1 Attention-Deficit Hyperactivity Disorder (ADHD)

Attention-Deficit Hyperactivity Disorder is a neurological condition related, in part, to the brain's chemistry and anatomy. ADHD manifests itself as a persistent pattern of inattention and/or hyperactivity/impulsivity that occurs more frequently and more severely than is typically observed in people at comparable levels of development. (Watterdal, Hauschild, Tahir, 2008)

In the classroom, attentional difficulties and impulsivity are evidenced by the child's not staying with tasks and having difficulty organizing and completing work (child who is suffering from ADHD). The children often give the impression that they are not listening or that they have not heard what they have been told. Their work is sloppy and is performed in an impulsive fashion. (Lerner, 1985)

The learners suffering with Attention Deficit/Hyperactivity Disorder may respond best in a planned, predictable environment, with constancy and known effects. Structure and routines develops a situation that encourages the student to control his/her behavior

and successfully learn. Following recommendations can be helpful for the children having ADHD):

- To post daily schedules and assignments to students
- setting specific times for specific tasks for the pupils
- designing a quiet work space for use upon request of the students
- provision of regularly scheduled and frequent breaks
- use of computer based learning activities
- teaching organization and study skills which will help them in future
- Supplementing verbal instructions with visual instructions for their better understanding.
- Modifying test delivery according to their needs.

2.5.7.2 Autism

Autism is a term used to describe bizarre behaviour and serious developmental delays in social and communication areas and it appears during the first three years of life. Autistic children can be identified from other children by following characteristics:

- Delayed and deviant language development, characterized by inappropriate use of language when it does occur and including peculiar patterns of speech (echoing words and phrases)
- Stereotype behaviour ranging from repetitive body movements (finger flecking, twirling) to ritualistic behaviours (lining up toys or furniture in a particular order). (Kirk and Gallagher, 1986)

NICHCY stressed upon structured program for better classroom environment with consistent and predictable situations. Visual and verbal presentation of information is more effective for learning. For extension of more learning same methodology can be established and used for home and school.

2.5.7.3 Cerebral Palsy

Cerebral Palsy is a disorder of motor functioning due to brain dysfunction that, in most cases, is present at or near the time of birth. Because speech is a motor function, children with a cerebral palsy often require sustained attention from a speech-language pathologist. (Kirk and Gallagher, 1986)

For the areas of speech and communication, self-care, and adapting living arrangements and work sites technological innovations are developed and it improved their work quality. NICHCY has recommended following activities for the children having Cerebral Palsy:

1. speech and language therapy;
2. occupational therapy;
3. physical therapy;
4. medical intervention;
5. family support services;
6. early education; and
7. Assistive technology.

2.5.7.4 Hearing loss or deafness

Hearing is usually measured and reported in decibels (dB), a relative measure of the intensity of sound. Zero dB represents normal hearing. A loss of up to 26 dB is within the normal range; a loss between 27 and 70 dB is within the hard of hearing range; and a loss of 71 or more dB is within the deaf range.

A deaf person is one whose hearing is disabled to an extent...that precludes the understanding of speech through the ear alone, with or without the use of hearing aid.

A hard-of-hearing person is one whose hearing is disabled to an extent...that makes difficult, but does not preclude, the understanding of speech through the ear alone, with or without the use of hearing aid. (Kirk and Gallagher, 1986)

NICHCY has recommended following programmes for students with hearing loss or deafness:

1. "Speech and language therapy with auditory training on regular basis from experts
2. Use of amplification programmes;
3. Those students who use manual communication will be allowed to have services of an interpreter ;
4. Sitting arrangement should be favorable in the class to facilitate speech reading;
5. Video captioned should be allowed so lectures can be reviewed ;
6. For full attention to follow instruction assistance of a note taker is needed for children with hearing loss.

7. Special instruction for the teacher and peers to use alternate communication methods like sign language and counseling is required”.

For children with profound hearing loss need of use of visible communication modes (for example sign language, finger spelling, etc.) and/or magnification and verbal/oral training can help these children with language delay. Different professionals have different approaches, so it is vital that parents be involved in deciding the kinds of interventions used for their kids.

2.5.7.5 Down syndrome

“Down syndrome can be caused by a chromosomal abnormality. People with this condition have 47 chromosomes instead of the normal 46”. (Kirk and Gallagher, 1986)

This specific chromosome disorder gives rise to specific physical features, as well as a wide range of cognitive disabilities as well as other attributes. In majority of cases persons are in the mild-range of cognitive abilities. Down syndrome may also lead to visual and hearing impairments, an increased propensity for infection, as well as heart defects. (Watterdal, Hauschild, Tahir, 2008)

NICHCY recommended that schools should offer programme for parents with special instruction in teaching their child language, cognitive, self-help, and social skills, and specific exercises for gross motor and fine motor skills development. It is also recommended that there can be variation in the mental abilities, behavior, attitude, abilities and developmental progress in of students with Down syndrome. Their level of

mental retardation may range from mild to severe, with the majority functioning in the mild to moderate range of mental retardation.

It is impossible to predict future achievements of children with Down syndrome due to above mentioned individual differences.

2.5.7.6 Serious Emotional Disturbance

NICHCY explained that serious emotional disturbances need behavior modification program to help those students who have serious emotional disturbance, there also are other techniques which are also useful in behavior modification, like as Life Space Intervention and Conflict Resolution. Physicians may employ a few medication therapies in some cases depending upon the condition of the patient. The IEP also include psychological or counseling services. NICHCY narrated that there is growing recognition that families, as well as their children, need support, respite care, intensive case management services, and with this multi-agency treatment plan.

2.5.7.7 Epilepsy

Epilepsy is a medical condition that produces seizures (fits) affecting a variety of mental and physical functions. Seizures can last from few seconds to a few minutes. They can have many symptoms, from convulsions and loss of consciousness, to some that are not always recognized as seizures by the person experiencing them or by health care professionals: blank staring, lip smacking, or jerking movements of arms and legs. (Watterdal, Hauschild, Tahir, 2008)

“Children with epilepsy may need additional assistance to keep up with classmates depending upon the type seizure. Assistance can include adaptations in classroom instruction. First-aid instruction on seizure management for the student's teachers, and counseling rules should be written in the IEP (Individual Education Program)”.

The effectiveness of medication and its any side effects should be worked out by family and school personals to make the program more affective. Children and youth with epilepsy must also deal with the psychological and social aspects of the condition with in the school.

2.5.7.8 Learning Disabilities/Disorders

Learning Disabilities/Disorders involve problems in the understanding and use of the symbols of communication (including listening, speaking, reading, writing, mathematics). Learning Disabilities cover a wide range of intellectual impairments. Generally, someone is considered to have a learning difficulty when they function at a level of intellectual ability, which is significantly lower than the chronological age. Increased difficulties in acquiring basic life skills and increased dependence on others are common. (Watterdal, Hauschild, Tahir, 2008)

According to NICHCY, the following strategies are effective for students who suffered from learning disabilities:

1. Student's strengths must be capitalized.
2. High structure and clear expectations must be provided.
3. Use short sentences and a simple vocabulary.

4. Provide opportunities in a favourable atmosphere to help for building self-esteem;
5. Provision of flexible classroom procedures (e.g., allowing the use of tape recorders for note-taking and test-taking when students have trouble with written language);
6. Make use of self-correcting materials and provide immediate feedback without embarrassment;
7. Use computers for drill , practice and teaching word processing;
8. Use positive reinforcement of appropriate social skills at home as well as at school
9. Students with learning disabilities can greatly benefit from time to grow and mature.

2.5.7.9 Mental Retardation (MR)

This term should no longer be used as it is discriminating and stigmatizing. The term has therefore been replaced with the term; “Intellectual Impairment” or “Developmental Impairment”. Intellectual Impairment is often used to describe a set of conditions involving deficits in abilities of cognitive functioning and adaptive skills. Intellectual Impairment to a lesser or greater extend, affect a person’s ability to reason and understand, to acquire skills and master developmental milestones within the “typical” age ranges, to solve problems and adapt to new situations, and to learn and remember as easily as others. (Watterdal, Hauschild, Tahir, 2008)

According to NICHCY in teaching persons with mental retardation needs:

1. Make use of concrete materials that are interesting, age-appropriate, and relevant to the students;
2. Information should be presented in the form of instructions in small, sequential steps and review each step frequently;
3. Provision prompt and consistent feedback is needed;
4. Teach these children in the same school they would attend if they did not have mental retardation;
5. Teach tasks or skills that students will use frequently, in such a way that students can apply the tasks or skills in settings outside of school; and
6. Tasks learned without instruction may need to be structured and need to be broken down into small steps with each step being carefully taught.

2.5.7.10 Severe and/or multiple disabilities

The students who have severe/multiple learning disabilities are likely to lag significantly in many areas of learning and to have concomitant social, emotional, or behavioural problems as well. (Lerner, 1985)

According to NICHCY, classroom arrangements must be made by considering students' needs for medications, special diets, or special equipment to facilitate the students with severe and/or multiple disabilities. Supportive aids and equipment may include: wheelchairs, typewriters, head sticks (head gear), and clamps, magnified glasses, bold font size, modified handles on cups and silverware, computer and communication aids. Computerized communication equipment and specially built vocational equipment

also play important roles in changing working environments for people with serious movement problems. Integration of students with non-disabled peers and friends is another important component of the inclusive educational setting. Attending the same school and participating in the same activities of the classroom as their non-disabled peers is vital to the development of social skills and friendships for people with severe disabilities. Integration also benefits non-disabled peers and professionals through positive attitude change like helping their peers with special needs.

2.5.7.11 Traumatic Brain Injury

Traumatic Brain Injury is an assault on the brain that causes mild to severe injury. The nature of the speech and language disorder depends on the type and extent of the injury. (Watterdal, Hauschild, Tahir, 2008)

NICHCY gives following suggestions to deal with children having TBI, “teachers may need:

1. Repetition and consistency
2. To demonstrate new tasks, state instructions, and provide examples to illustrate ideas and concepts
3. To avoid figurative language
4. To reinforce lengthening periods of attention by assigning appropriate tasks
5. To use compensatory strategies for increasing memory of the students
6. To be prepared for students' reduced stamina, and provide rest breaks as needed
7. To keep the environment as distraction-free as possible so that they may concentrate.

2.5.7.12 Visual Impairments

Visual Impairment is a broad term used to describe the complete (blind) or partial loss of vision (low vision). (Watterdal, Hauschild, Tahir, 2008)

Pupils with visual impairments can participate in regular classroom effectively with the help of different aids for example use of technology like computers and low-vision optical and video aids enable many partially sighted, low vision, and blind students to take part in regular classroom activities without difficulty. Large print materials or having big font size, books on tape, and Braille books are also helpful for them and they are available. Students who have visual impairments combined with other types of disabilities have a greater need for an interdisciplinary approach.

2.6 EFFECTIVENESS OF SPECIAL EDUCATION

The effectiveness of special education programs has been an issue and criticized by many educators. Different educationists like Baller (1936); Charles (1953) and Kennedy (1962) have pointed out that special education did not guarantee for children secure job or employment when they become adult. The demand by the professional for mainstreaming was increased in 1960's as the students who were segregated/separated to teach in special classes did not perform better than counterparts studying in regular educational institutions which compelled the educators to think about the effectiveness of special education. Some of the educators were in favour of special education for children having any or multiple disorders. But educationist like Johnson (1962) who found that students in special classes were unable to achieve the objectives of education at the same rate and levels as similar students who had been in regular classrooms. Although they

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were provided specially trained teachers, more funds were allocated for them, and smaller classes were arranged for them. Goldstein, Jordan and Moss (1965) carried out a study in which students were randomly assigned to special education classes or general regular education classes, and their performance was compared. Their academic achievement was compared and their tests of social knowledge showed no differences (Baller, 1936; Charles, 1953; Kennedy, 1962).

Reynolds, Birch, Wang, and Walberg were of the opinion that in special education programs more than half of the students have learning disabilities of different kinds and for them there is no special training of techniques or strategies for teaching them., they mean to say if these students were separated then there should be special teaching programmes for them according to their individual needs. If these children are taught with other students having different disabilities or labels are in the same classroom, then there is no value of label for the teacher. By establishing of "resource rooms" in regular schools to fulfill the needs of the children with disabilities, the concept of separation of these students started to shatter and they would be accepted first by the teachers, administrators and fellow students then by the society. (Reynolds and Birch, 1977; Wang, Reynolds, and Walberg, 1994; Wang, Reynolds, and Walberg, 1995)

Many training institutions for teachers in USA offered generic degree programmes and different states started generic certification or multiple-certification programmes for teachers and staff. Teachers are given such certificates after training to teach both categories (students with learning disabilities and mental retardation). Some universities

offer degrees like "Mild Learning and Behavioral Disorders" to prepare teachers to handle children with disabilities by using specially design strategies and techniques.

According to educationist like Wang, Reynolds, and Walberg "special and regular education" programmes required to be reformed as special education is creating more troubles for the students as well as for the system than it solves, especially for the children having mild disabilities. These educationists pointed out that more than 80% of students of special education have learning disabilities of one type or the other. It is proposed by them that the teachers of general regular education should be given training to prepare them to teach children having disabilities also with other students who are without special needs. In this way many of the problems, and expense would be reduced. On contrary Liberman (1990), the opponent of the view above mentioned, inferred that one should think many times even a hundred times before integration of a child with severe learning disabilities. (Wang, Reynolds, and Walberg, 1986; Liberman, 1990)

The large number of students with special needs in a class was considered as the greatest issue. In 1989, in USA, there were 45% students in special education that had learning disabilities which was increased to 48.5% in 1991-92, and then it became 50.1%. In some local schools of USA (some districts schools) this number is very high as it increased to 65% as reported by Lewis. Slavin said that special education is a considerable burden because researches have shown that the children with mild disabilities in special education institutions and those in regular education classrooms are found almost equal. (Cartwright, Cartwright, & Ward, 1989; Lewis 1991; Slavin, 1989).

There is noteworthy overlapping between what teachers teaching in regular schools and teachers of special schools do or have ideas to do with children who have disorder or disabilities. The teachers in special education and regular education used almost similar or identical management techniques, teaching methods and materials for the students having mild mental retardation, learning disabilities, and those who are emotionally disturb. In 1992, Cannon and his colleagues found after conducting a research that teachers of special education and general regular education used 82% similar techniques and practices for effective and useful teaching for children with learning disabilities. He said if both type of teachers do the same then it is unreasonable to maintain separate education programme for the students with learning disabilities particularly if there are no considerable distinctions in accomplishment. (Cannon, 1992)

Three studies were conducted to analyze inclusion and to see the performance of students with special needs educated in regular schools. They observed that these students did to some extent better academically and socially in regular school setting as compared with the students in segregated settings. (Baker, Wang, and Walberg, 1995)

There are many researches which have also shown the usefulness of inclusion but also pointed out some of the troubles for example:

- Change induces fear among some classroom teachers which generally become less with experience.
- A behavior problem creates most of the difficulties.
- Students showed gains in learning in inclusive setting.
- Included students had positive influences on their classmates.

- The mainstream curriculum needs alteration.
- Collaboration and support are integral part of inclusion.
- Social interactions different among students, some are positive and some are negative. (Stainback and Stainback ,1991)

Cole, Mills, Dale, and Jenkins studied the effects of integration and separation in a special education for children of preschool. The duration of the study was four years. Total 124 students were included in the study; each year number of student was different. Their ages were between 3 to 6 years, among them 100 were with special needs. Students were randomly taken from integrated and segregated classrooms. The result was that the low achievers made greater gains in segregated classrooms; high achievers made greater gains in integrated classroom setting. (Cole, Mills, Dale& Jenkins, 1991)

IE has following meanings as retrieved from the reports of Osborne and Dimattia and Martin:

- a) It is not necessary to place all children with disabilities in the general education environment.
- b) Children with disabilities should not be excluded on the basis that school finds it less difficult to educate the child in a segregated classroom.
- c) A child cannot keep pace with peers in general education is not justification for exclusion of students.
- d) Curriculum alteration and modification for inclusion puts a burden on the classroom teacher is not justification for exclusion.

- e) Social benefits from participating in general education may be of equal importance to academic training for all the students.
- f) Children whose behavior impair and damage the learning of other students may be excluded, but attempts, such as training of the teacher or different management of the child, may to be established to be unsuccessful.
- g) Extremely high costs of "supplementary aids and services" to accommodate a child in the mainstream may be the only reason to justify exclusion (Osborne and Dimattia ,1994; Martin, 1994).

2.7 Disruptive Behavior

In inclusive classroom the child's disruptive behavior and its effects are very important. If he/she is not giving any harm to others then he/she will be allowed to attend regular classroom instruction. A student can be expelled from regular classroom only if he or she becomes dangerous to himself or herself, to other students, the school staff, or his/her behavior becomes the source of continuous trouble in the classroom so that routine activities of the class cannot be conducted properly. (Guzman & Shofield, 1995)

Expulsion or exclusion requires the following steps:

- a) To inform the child's parents written notice to the parents or guardians.
- b) A formal hearing before the board of education at which the superintendent presents the proof of the student's bad behaviour or wrongdoing and the student, or the student's lawyer or lay counsel, can present proof of the student's innocence.

- c) To give a chance for the student to see and challenge all of the evidence presented against the student.
- d) Issue a formal written decision by the board to expel the student, to reinstate the student, or to administer less severe punishment (Guzman & Shofield, 1995).

Disruptive behavior can be explained by different schools according to their own terms as there are no "norms" for assessment except the school keeps accurate data on all incidences of misbehavior for all students.

2.8 Modification in the Curricula for Inclusion

The curriculum used in regular school should be changed according to the needs of all the students in inclusive classrooms. Supplementary aids and services should be provided to the students with special needs. Learning environment should be created in which all the students can learn and it is made accessible to the students with special needs. Accessibility means that the door is open for all the students.

Different ways can be adopted to accommodate or modify the materials, methods of instruction and the curriculum for students with disabilities are many and varied, and some of them are based on common sense approaches. For example, students who are blind cannot read but they are always permitted to have Braille books, readers, and tape-recorded lessons, these modification help students to learn effectively. Nobody questions that this is a suitable accommodation but the same considerations are not permitted for students who do not read efficiently but who have good vision. The method of modification should be stated in the IEP so the classroom teacher will recognize that it is

a consideration of the committee that must not be overlooked. Methods of accommodation include:

a. Course substitution.

This approach is used when the disability prevent the student from taking a course or would make such a course meaningless then there should be some alternative course. Examples are substituting adaptive physical education for physical education and, in the case of a student with hearing loss, substituting music history for music appreciation, according to the aptitude of the students.

b. Time alterations.

This method allows students to take longer time to complete individual courses or courses of study.

c. Modifications in the curriculum, instructional methods, or materials.

There are many instructional aids available for students with special needs for example; taped lectures or books and Braille books--that can help the student achieve class objectives. Alterations in the reading levels of tests can also be used to help the student achieve certain objectives set by the authority.

d. Development of a special education curriculum corresponding to the general education curriculum.

In this method the curriculum objectives for general and special education are the same, but the instructional methods are different, suited to the student's needs.

e. Alternative approaches.

Other methods which a school may use to help students achieve graduation are work study programs, work experience, vocational training, independent study, and night classes or high school equivalency tests (Podemski, Marsh, Smith & Price, 1995, p. 118-119).

2.9 Role of Special and General Education Teachers

One can not clearly differentiate between what the teachers of special education and regular education teachers do in the classroom with the students with special needs. The strategies they both use are nearly similar. In special education institutions teachers give extra coaching or perform their duty but do not attempt to remediate reading in language teaching or give some type of therapy. Same is done by regular school teachers with the students with special needs. It is also reported that the curriculum of special education institutions and regular education institutions are the same.

2.10 Appropriate Class Size

Different educators have different opinion about the appropriate class size. For some small class size is appropriate for teaching all the students and it has positive effect on the

achievement of the students. On the other hand there are some educationists who say that small class size has little effect on the achievement of the students. Teachers and some reformers have strong view that smaller class size is the requirement for inclusive classroom. Administrators are worried that by reducing class size or making the class size small will increase the expenses. To emphasize their point of view they give the example of Japan where legal and average class size consists of forty students. The size of the class is related to expense (in USA salary of the teachers is dependant on the number of students in the class, larger the class size greater the salary). In USA district public schools 80% to 85% of the school fund is spent on teachers' salaries and other benefits for them. Greater number of students in the class means that teachers would have received higher salaries and less number of students in the class means lower will be salaries of the teachers. If small class size will be made or established then more teachers, more classrooms and more funds are required, e.g. if there are twenty students in one class and only one more student will be added to each class then at least one teacher's salary would be saved by adding them in twenty classes and that would be used to increase the salary of already working teachers. But most of the teachers demand small class or class having less number of students which they consider is suitable for inclusion.

2.11 Ability Grouping

Ability grouping in education means: (1) a process of making groups or divisions for some specific task in a subject or separating students for certain programs due to common or similar feature or characteristic, (2) specific kind of teaching/instruction to make grouping of students on the basis of their abilities. Ability grouping is frequently used strategy in schools in USA while in some schools all the students of all the

classrooms of school are tracked or grouped. Students have been tracked by many schools for different programmes like academic or vocational programmes. Ability grouping means to make groups of students within a class for particular subjects, e.g. English or Mathematics. There are proofs that "gifted" children can drop in higher level tracks can in the level of achievement to some extent if they are placed in a class of diverse abilities, representative of inclusion. The educationist like Brewer, Rees, and Argys pointed out that overall very small or little efficiency has been observed due to ability grouping. According to Slavin within class grouping for the subject of mathematics has a positive effect on students' learning depends upon the type of the activities used and not the process of grouping. (Brewer, Rees, & Argys, 1995; Slavin, 1987; 1990)

Tracking is segregation/separation. The negative aspect of tracking is that rules are made for the students to take all low-track courses if they wanted to take only one low-track course, may be a student is weak in mathematics but good in English but due to tracking his ability of language will suffer and his abilities of creativity may not flourish e.g., a student is good in solving the complex mathematical problems but due to his weakness in English that student would be placed in a basic English class compelled to take low-track mathematics class.

Brewer, Rees, and Argys (1995) discussed ability grouping in schools in the following ways:

- a. Some forms of ability grouping appear to be beneficial, for example when students are grouped for only one or two subjects like for languages while for remaining heterogeneous classes most of the time.

- b. Ability grouping for whole day has little or no positive effect on student learning at the elementary level of studies.
- c. Most of the students at the secondary level not at all or very little benefit academically from being in tracked classes.
- d. Current practices of tracking do more harm to the students than good for the overall educational achievement and low performing students are at risk.
- e. Current practices of retention have very few positive and mostly negative effects on student learning.
- f. Preservation and Retention produces negative results on such measures as academic achievement, personal adjustment, self-concept, and attendance.
- g. Different programs of teaching showed modest positive effects on students' reading skill and math skills, but they were even lesser effective for the most disadvantaged children. Students' progress was rarely sustained beyond 2 years after participation in the inclusive teaching program (Brewer, Rees, and Argys, 1995).

2.11.1 General Class Placement and Full Potential

Almost the teachers, educational institutions or unions are agreed that the systems and programmes are operating in the regular school setting for the students not good enough to meet the requirements of the students and skills are not utilized to maximize their potential. A case was brought in the "U.S. Supreme Court, Board of Education v. Rowley (1982)" which dealt with the question of inclusion of the students with special needs. The decision of the court was in the favour of inclusion of children with special needs which was surprising and alarming for those who are in favour of special education.

The case which has been discussed dealt with the question “whether or not a student with hearing impairment would benefit maximally and to a great extent in regular school or class, or if placement in a special class would meet the child's needs”. The judgment of the court was reversed of the previous judgments and concluded that “Congress did not intend that schools should maximize the educational performance of students with disabilities. In other words, the child was not entitled to a better program than other students”. Equal opportunities and facilities would be given to all the children, with or without special needs as other students do not get the "best"(in the form of teaching and other services) in educational institutions, it is not necessary to require the "best" for students under provisions of IDEA. This decision was contradictory to the decisions of the lower court decisions about to change curriculum, training of teachers and other services to place the students with special needs in regular classroom educational setting.

2.11.2 Modification of Buildings According Students' Need

Modification of building means that school buildings and instruction services or teaching facilities should be changed or modified according to the needs and requirements of the with diverse abilities so can reach to their classes without any difficulty and fully participate in the curricular and co-curricular activities of the school. Previously there were different programmes of education one for the students without special needs and other specially design programme for the children with special needs and it was not considered necessary that all the classrooms and building of all the school be in the reach of all the children, but now it is emphasized that appropriate educational programmes to be designed which are accessible for all the students, and under inclusion this means all

classrooms would be changed according the requirements of the students and not only for those who have special educational needs.

IDEA gives surety "that all children with disabilities have available to them . . . a free appropriate public education which emphasizes special education and related services designed to meet their needs." This change guarantees that there may need in expansion of the definition of "special education" by including "instruction conducted in the classroom, in the home, in hospitals and institutions, and in other instructional and educational settings; and instruction in physical education." The implication may be that the classroom instruction that does not meet the needs of included children may be questioned that why they are not fulfilling the needs and requirements of all the children, including the environment and instructional methods of the teacher. For example, if noise in the classroom is a serious problem for some learners as they can't bear noise, schools may be forced to renovate classrooms to reduce noise and otherwise improve the conditions of learning to facilitate the learner. The special needs of students may imply the soundproofing of walls and use of carpet and other floorings and acoustical ceiling tiles that do not allow noise to come in the classroom and to reduce extraneous noises that might prove distracting or interfering and act as a barrier in their learning process.

2.11.3 Supplementary Services for Inclusive Setting

Nearly all the teachers, educational institutions and unions of teachers say that to introduce inclusive education in general, regular schools sufficient supportive services and inclusive teaching facilities are required, for example, especially trained and qualified teachers are required to deal and support students with special needs or disorders,

programmes for staff development, team teaching, proper planning and complete co-ordination between the school teachers and administration are few of the essential elements.

It is said that these things are concerned with the students with disabilities so they should be decided on an individual basis. Schools, teachers, and unions would have a difficult time to cope with these circumstances if they argue about any of these characteristics they would prevent inclusion of the students.

It is not possible practically that every child or student who is included in the regular class or school would have his or her own full time aid or equipment so to demand for that is unreasonable and unrealistic for the teachers and administration. Many classroom teachers are trained to use or to supervise aids but some have problems to handle them. Among all the supplementary services the most important is in the shape of teachers' training to handle the students with special needs and to consult with professionals who can help the teachers to improve their instructions. Devices which assist the teachers should be provided to enable the student with special needs to benefit from classroom instruction. Institutions having students with serious health problems need different types of monitoring devices to teach students effectively.

2.12 Policy Implications of Inclusion

The decisions are made in the policies for education in USA that the first priority for the students with disabilities is the regular general schools in which they can learn with other students who are without any learning or health disability. Severe health disorders

cause many difficulties for the teachers and administrators at all levels for the implication of inclusion in educational system.

2.12.1 Funding

The funding patterns at some places encourage segregated special education; in other locations there are incentives for integrated education for all the students in USA. The decision should be based on the child's needs on this point the law and most educators would be agreed, the education authorities can change rules to provide some justice by providing resources. There seem to be two opposite views points by opponents of inclusive education: (1) the purpose of inclusion is to save money, and (2) inclusion will cost more money.

Albert Shanker was the representative of The American Federation of Teachers, had raised the question on many forums that funds allocated to inclusive education will divert funds from regular education and make the conditions of the schools worse., it is also said by Laurence Liberman that inclusion of students by in regular classrooms is a trick to save money. Both, Shanker and Liberman were against inclusion but on different grounds. The former thinks that IE will require more money and the later thinks it is a way to save money but both of them were not in the favour of inclusion. (Shanker, 1992)

A study “the relationship between costs and benefits of inclusive education practices in ten schools within nine Oregon school districts” was conducted by Vergun and Chambers and they found that transportation costs increased in the beginning to provide transport facilities for the children with disabilities, but with the passage of time this cost declined as students with special needs were allowed to attend the nearby educational

institutions and those institutions served the students with special needs so in this way they have to travel shorter distances. When building modification or change is required according to the needs of the students with special needs even then it costs less than to build altogether a new building for them. To build a new building not only costs more rather it takes more time also. The schools authorities said that the greatest need and requirement was the support in the form of teacher and staff training for their development and changing needs for inclusive education.

There are different charges from the parents of the students with special needs and their supporters and the counter charges from the parents of the students without special needs about special education. The charges include: “costs are out of control; special education is an entitlement; a free suitable education is a license for under-education; and special education has produced a cottage industry of specialists who live off the public funds meant to serve children. While attention-deficit disorders is growing very rapidly and the majority of special education students today are said to have learning disabilities and the sufferers can not improve after certain limits”. These conflicts can be avoided if policy makers would turn their attentions to early reading problems. “ Inexpensive early detection/diagnoses and appropriate instruction may prevent many of young children with dyslexia may be the most important policy issue in special education would be resolved and give peaceful solution of the growing conflicts among different groups of parents and their supporters” (Peyton, 1998).

2.12.2 Role Conflict

Every country may have policy to clarify the roles of the teachers of special education and regular education, if it is not so then the school should clarify them to avoid problems and misunderstandings for both of them. As teachers of regular schools and teachers of special education have certification in their respective fields and they have to perform different roles, in traditional special schools and regular schools and there is less confusion regarding to their roles but in the inclusion model teachers are in same classroom with a variety of students with diverse abilities which may lead to different problems. These problems of role conflict can be eliminated or removed if this overlapping is removed.

2.12.3 Certification and Licensure

The last few years has been directed at improving teacher education by removing certification and licensure. According to Flexer (1930), “some politicians, academics, and organizations have attacked teacher education with the complaint that all a teacher really needs to know is subject matter to be the master of his or her subject. Thus, a variety of alternative certification programs have been developed and launched, some of them eliminates all professional teacher education. Others have greatly reduced the number of professional teacher education courses required for certification, different steps had been taken. Meanwhile, most researches about inclusion reveal that classroom teachers are unprepared to deal effectively with the needs of students with disabilities in the classroom and then they recommend training for them”. (Flexer, 1930)

To handle the role conflict effectively there is one solution that is of "dual certification" for the teachers to train them in a subject area and also in special education. These types of programmes have been suggested for early childhood education (Burton, Haines, Hanline, McLean, & McCormick, 1992; Miller, 1992). This type of programme of dual certification for elementary level is reported by Iran-Nejad, Marsh, Ellis, Rountree, Casareno, Gregg, Schlichter, Larkin, and Covert, (1995), the Multiple Abilities Program at The University of Alabama. A programme was introduced by the Syracuse University i.e. inclusive elementary and special education teacher preparation programme which can be adopted by other countries. (Meyer, Mager, & Sarno, 1991).

2.12.4 Parent Involvement

It is very important to involve parents in the process of learning of students so that parents feel included in the processes of education of their children. Often authorities of the schools do not like to spare time that is essential to make contacts with the parents and other matters related to it. It should be affirmed by the country's policy the parents may involve in the teaching-learning process of their children as it is their right. Clear procedures should be established to involve the parents in learning process. It will create better understanding and will prevent disagreements between the parents of the children having special needs and the children without special needs.

2.12.6 Discipline

Children with behavior disorders are placed increasingly in regular classrooms so it is now necessary on the part of schools to promise to provide that practices dealing with the students with behavior problems. This can be done in two ways; first by providing

training to teachers to deal the students effectively with behavior problems in the classroom secondly by formulating the policies to deal with disciplinary problems.

It is said that the common problems which are faced by the teachers are the behaviors like talking, teasing and kidding which are quite ordinary and acceptable in many setting (McFadden, Marsh, Price & Hwang, 1992). Punishment should not be given to the students only because they have who emotional and behavioral problems related to their disability or disorder rather some alternative treatment should be given. As we all know that punishment has no positive effect on students' behaviour and punishment can not correct and prevent the inappropriate behaviours and if students are removed from the classroom due to their misbehave then they become more stubborn. The emphasis of the teachers should be on changing behavior of students who have behavioral problems. The school should provide suitable amendments and intercessions. To remove the students from the classroom is not the solution of their problem. It is neither beneficial nor educational. If children are removed from the classroom with faithfulness then some alternative programme should be given to them.

Either a child is disabled or non disabled there are probabilities to create problems in the classroom. It depend upon different elements like the policies of the school and behaviors of the teacher. These problems can be reduced by recognizing them. McFadden, Marsh, Price and Hwang (1992) gave the judgment that irresistible common disciplinary referral are accounted for by a relatively small group of repeat offenders. Consistent application of rules can address ordinary disciplinary problems and conflicts. The rules must stem from a policy that is based on fairness.

Students' performance in the classroom should be measure and documented which will be helpful to achieve the short-term objectives and together they would constitute a formidable body of data and information that would show proof of meeting requirements. Rules of the school should deal with ways to improve and facilitate data-collection and other required technological assistance.

2.12.7 Characteristics of successful programmes

ERIC Digest (1993) identifies features of successful programs under five areas:

- a) people's positive attitudes and beliefs,
- b) service and physical accommodations,
- c) school support,
- d) Collaboration and instructional methods.

People's Attitudes and Beliefs

Regular teachers believe learners can succeed, and they accept responsibility for learning different outcomes of learner with disabilities, and are prepared to receive students with disabilities. Parents are informed to achieve to the goals of support program. In all Special education Institutions teachers and staffs are committed for collaborative practice.

Services and Physical Accommodations

Health, physical, occupational, or speech therapy services are available within the school and accommodations to the physical place and equipment for meeting student's needs are available.

School Support

The principal accept the students with disabilities and can also understand their needs. Sufficient numbers of personnel are available and more development in their number with technical assistance is provided. Procedures along with policies for monitoring individual student progress are the need of the sport.

Collaboration

The instructional or planning teams are the part of special educators. Problem-solving and program implementation are used as teaming approaches. All specialists, physical/ occupational/ speech therapist collaborate with regular and special education teachers.

Instructional Methods

Teachers are trained enough to adapt curricula and instructional methods. There is a huge variety of instructional arrangements. Teachers generate a cooperative learning environment to promote socialization.

Following are the barriers to inclusion

- a) special education certification mandates
- b) hierarchical school organization
- c) Curriculum design

Tanner, Linscott and Galis have also identified to perceived barriers of inclusion. The bureaucratic functioning of school organization can be a barrier

as it preventing teachers from easily cooperating by crossing lines and departmental boundaries. If accommodation in a curriculum is difficult that can also cause problems.

Irmsher (1995) reported that inclusion is most successful when it includes multi-age classrooms, which may introduced within a regular school but it needs restructuring of school system. Arceneaux (1994) also reported that if reforms are introduced in the overall school system instead of one or two modifications then inclusion can be more successful. Inclusion is a considered as the issue of special education but total reform in the system of education makes inclusion as an important part of the process. To establish an inclusive school, there is a need to change the whole system like to adopt collaborative teaching, by implementing multicultural curriculum, change in the attitude and behaviour of the management through proper training. (Irmsher 1995; Arceneaux 1994)

2.12.8 Roles of special and regular teachers in inclusion

Schattman (1992) believed that inclusion made blurred and vague sense about the roles of special education teachers and regular school teachers which is very confusing. It becomes very difficult to define the roles of regular school teachers and special education teachers in inclusive schools. In separate programmes of special and regular schools the roles of teachers are very clear. To avoid the conflicts and misunderstandings among professionals it is necessary to define the roles of teachers of special education and the teachers of regular schools. In an inclusive school the special education teacher is a member of the team who may guide and co-teach with the regular classroom teacher. He/she should take duty for training, support, and supervision to paraprofessionals to

improve their teaching and to handle the children effectively. Success will be determined by the ability of professionals to integrate special services to regular school programme. (Schattman, 1992)

In the process of inclusion of students with special needs into regular classrooms involves different people, most classroom teachers have no experience to deal with the students with special needs before in the regular classroom activity. It is likely that team teaching will be implemented; paraprofessionals and parents should be involved as it is necessary. In traditional classroom a teacher used to be alone with her/his students and now these interactions can be irresistible to the teacher. There are chances to arise conflicts due to personality differences, difference of opinion and vague roles which should be clear. Luckily, the experienced teachers, who have more than ten years' service, like the idea of collaboration and cooperation of teachers and cooperative learning.

2.12.9 Central role of the teacher

The classroom teachers always play an important, central and vital role in their classes and in the process of teaching so he/she not only informed but must be involved in every decision related to his class and students. If teacher would be ignored and not involved then grave conflict can be caused. Cooperation, mutual respect, coordination, communication, and equality are essential for any plan to implement. It is essential to recognize the central role of the classroom teacher for effective teams.

2.12.10 Strategies for inclusive teaching

Following are the strategies for inclusive teaching given by Dr. Shagufta Shahzadi, Department of Special Education, University of Karachi at ISEC 2000.

A. General Strategies:

- Teacher serves as a model of how to interact with the student who has a disability or disorder.
- Treat the student with the dignity and all students should be given respect.
- Speak to the student directly to solve their problems and never "around" the student in his or her presence.
- Draw attention to the student's achievements and strengths not towards their weaknesses.
- Teach about differences as part of the regular curriculum.
- Where individualization is necessary attempt to have it occur when other students are receiving individualized instruction.
- Structure social interaction in the classroom through planned activities.
 Ensure frequent communication between the school and the home.
- Always encourage peers and fellow students, rather than an adult, to assist the student.
- Teacher should be committed to integration and inclusive practices.

B. Working as a team:

- The teacher should not be expected to integrate a student with a disability into the regular classroom alone. Working as a team is a key to make inclusion a success.
- With the proper support from the team members, the classroom teacher, the student with the disability as well as the other students in the classroom will get benefit.
- Following members should be on the team:
 - a. Parents or a family representative
 - b. Classroom teacher
 - c. Special Education Teacher resource facilitator, integration facilitator, support facilitator, methods and resource teacher.
 - d. Education Assistant
 - e. additional Staff
 - f. Administration
 - g. Peers/friends
- Role of the team is to support each member, to develop the IEP for the student to implement the program and to solve any problems, which may arise in the class.

C. Instructional Strategies:

It is important to note that just because a student may be labeled as disabled, that does not mean that he or she cannot participate in the planned classroom

activities as the other students are expected to. Recent research has suggested the following instructional strategies essential for inclusion:

1. **Data-Based:** or outcome based instructional models.
2. **Cooperative Group Learning:** This strategy allows teachers to establish individual goals for students of a variety of skills and abilities while the group works to achieve a common goal.
3. **Whole Language:** This approach accepts the diverse communicative skills and abilities of students and allows each student to work at her or his level.
4. **Activity-Based Learning:** Individualized learning objectives are embedded into the general concept of the lessons.
5. **Skill Matrix:** The benefit here is that natural cues, rather than contrived cues, exist and the learning occurs in the context in which the skill is to be practiced.
6. **Differentiated Instruction:** Also known as Multi-Level instruction. This strategy allows the inclusion of all students in the learning activity while using the same lesson, materials and program.
7. **Peer Tutoring:** The teacher utilizes peer power to increase the individualization of the program.

D. Peer Power:

It is important to include peers to assist in every step of the way like preplanning, planning, and implementation.

1. **Preplanning:** Teaching peers how to interact, to respond, to communicate and to behave in the inclusive class.

2. Planning: Include peers on the integration team.
3. Implementation: Include peers on the problem solving team. (Shahzadi,2000)

2.12.11 Communications

Ineffective communication is the major source of rumors, misunderstandings, and conflict. Even the use of psycho educational terminology can cause problems. Teachers who may not ordinarily hear technical terminology may be threatened by it, fearing the appearance of ignorance or lack of knowledge.

2.13 Training of teachers

According to Fullan and Hargreaves inservice training for teachers is absolutely essential. "Traditional expectations are based on one teacher working with a group of students but working as part of a team requires new roles and understandings. Conflict can arise, like it does with parents, when two adults disagree about how to deal with students. There is likely to be disagreement on the appropriate methods to be used, ranging from discipline to instructional materials. In fact, there is not general agreement in the literature about the most effective ways of teaching. In true team work there is interdependence" (Fullan & Hargreaves, 1991).

2.14 Time

Time is an important factor to bring any change. To introduce any novelty, change or new concept in routine task for class demands time. For that more meetings with the concerned persons, more contacts outside the class, more preparations are required so the school inclusion plan must provide time to be implemented properly.

“It is not unusual for specialists, who have no teaching responsibility, to meet when the classroom teacher is working with students. Decisions may be made that will cause conflict, especially if non-teaching personnel appear to assume the role of experts mean to say that teachers know better their students as compared to higher officials. In a comprehensive discourse on inclusion, supported with research and personal views, Stephanie Ritter describes her experiences as a special teacher and complains that time is a critical shortage”. ([http://www.lhup.edu/library/Internation Review/ritter.htm](http://www.lhup.edu/library/Internation%20Review/ritter.htm))

2.15 Teaming

In Team-teaching, or co-teaching two or more teachers teach to the same students in the class and this is arranged by the educational institution or organization. Teaming is very essential in the new universal economy and it is found beneficial in the process of teaching. It is required in team teaching that teachers share, work together, and agree on methods of instruction for the betterment of the students as everything is done in the process of teaching is for the better future of the children. The teachers are supposed to take the liability and duty to perform all the teaching roles which have been mentioned above but it is also the responsibility of the teachers to know about materials which would be used in the class, maintain discipline, assessment, supervise classroom and individual aids, etc. Unfortunately most teachers are not prepared to facilitate such extensive collaboration and most schools are not structured to participate to the extent necessary. As Skrtic (1991) noted, schools tend to produce standard products and standard services, so deviations from the norm to engage in team teaching can be problematic at first. (Skrtic, 1991)

According to West and Idol (1990) collaborative consultation is a professional problem-solving process. They classify several types of team teaching:

1. A team of classroom teachers who serve in an advisory capacity to other teachers in their building.
2. Involvement of team of teachers means formed ad hoc of persons with particular teaching or management skills.
3. Student Support Team--specifically to serve an individual student.
4. Child Study Team--a team to study a student and problems for placement determination then may give its recommendations. (West and Idol, 1990)

The team is not in any way owns authority. There are many advantages of teamwork that are not apparent until they have been experienced. Teams can share responsibility, solve problems more effectively, and work more industriously because they do not want to "let down" other team members. There is a natural expansion of ideas because team members bring new ideas to the group for consideration, and different members can presume responsibility for different aspects. The team must be responsible for planning, implementing, managing, and evaluating its activities. The promise of team work is that teamwork will be exciting and rewarding if colleagues support each other in learning, risk-taking, innovation, and change (Senge, 1990). Effective teams trust each other. Trust means mutual involvement, access to all information, and sharing in decisions, successes and failures. They do not put blames on others. (Senge, 1990).

There are various approaches to inclusion; there are many kinds of teams and examples of teamwork and the team may be organized for specific purposes. For

example, there may be an assessment or evaluation team, a referral team, an IEP team, transition teams, and so forth. For the most part, however, teams refer to the persons immediately responsible for daily supervision and instruction of students. This would include, at a minimum, classroom teachers and special educators, and may include paraprofessionals, volunteers, peer coaches, and any number of specialists, such as vision and hearing specialists, occupational and physical therapists, psychologists, counselors, employment specialists, and curriculum specialists. They all can help each other.

Organizing Features

Unless there is proper and sustained training, the team will fail in the long run:

- Teams must be small enough to be effective; it should consist of few members.
- Team members should have complementary skills
- Teamwork has to be devoted to a specific purpose in teaching.
- Members must be mutually accountable and responsible (Katzenbach & Smith, 1993).

One thing which is required of all team members is mutual respect and trust, something that is difficult to achieve. A team member is asked to not just share knowledge and skill, but also ignorance and mistakes. It takes trust to be able to observe each other's work, accept criticism, and to admit weaknesses. If such trust is established, however, team members can address problems openly for the purpose of learning and improvement, rather than fear of being discovered. A strong collegial relationship creates

a learning environment where improvement is continual which will be in the interest of students.

2.16 Collaboration and Teamwork

Collaboration and teamwork do not just simply happen in any institution. For many years corporations have been trying to train workers to be cooperative rather than competitive with such efforts. It is apparent that teams function successfully if members share the same culture, values, and vision. The following are characteristics of collaborative cultures of schools:

- More complex problem-solving and extensive sharing of craft or skilled knowledge.
- Stronger professional networks to share information.
- Greater risk-taking and experimentation (because colleagues offer support and feedback)
- A richer technical language shared by educators in the school that can transmit professional knowledge quickly.
- Increased job satisfaction.
- More continuous and comprehensive attempts to improve the school, when combined with school-level improvement efforts.

The literature on collaboration especially that related to inclusion is full of idealistic statements and not based upon reality, about people sharing goals, being able to listen and respond in productive ways, openness and honesty, and so forth. There have been many articles about collaboration in special education journals (e.g., West & Cannon,

1988; Friend & Bauwens, 1988; Idol, 1988; Pugach & Johnson, 1989; Tindal, Shinn, & Rodden-Nord, 1990; Patriarca & Lamb, 1990; West & Idol, 1990; Meyers, Gelzheiser, & Yelich, 1991; Wiedmeyer & Lehman, 1991). Teamwork, cooperation, and a shared vision are repeatedly identified as important factors in inclusion (Thousand & Villa, 1990). The fact is that most schools do not function this way with regard to inclusion, teamwork, cooperation, or collaboration, and there is resistance to teamwork (Katzenbach & Smith, 1993). In fact, the culture of education is built on individual work and isolation not on cooperation or team work; everyone has his or her own fears.

As collaboration can be difficult to achieve, it can be expected that there will appear ways to recognize and solve problems over differences of professional opinion. The full attention should be on the student and the curriculum. Translating the IEP into inclusive objectives is a good way to establish agreement, if not rapport. Teachers can assess the facilities, curriculum materials, and other factors that will be involved in effective inclusive teaching. In planning specific educational programming, the team should focus on outcomes.

2.16.1 To Support Collaboration

To support inclusion, collaboration and team teaching can be important to consider, especially when starting a new IE programme. Team teaching can be unpredictable and it may be difficult to tell who can work together comfortably over a long period of time and who cannot. Training will be critical but this does not essentially provide assurances that people will be able to cooperate with each other.

For resolving conflict clear policies, guidelines, and supervision may help to reduce differences among team teachers. The problem is getting a balance between enough specificity in prescribing or defining the roles so that a bureaucratic rule book is not created. Conflict is sure to happen, and the school administration must be ready to deal with it and find ways to decide on long-range curriculum plans. The administration should clearly define grading process, expectations for conduct of the classroom, and handling of students with problems and students' misbehavior. It should also provide assistance in planning the first unit plans, how to work with visitors, parents, aids, conferences, and so forth. Teachers should have an opportunity to plan together as it is of greatest importance. Administrators need to follow through by providing guidance and support for classroom modifications that support inclusion, consultation, in-service programs, paraprofessionals, additional planning time, and support services all these things are important for successful IE teaching program.

Administrators' innovative techniques can support a school-within-a-school model, such as grouping classrooms into "families," "houses," or "wings." Students are grouped and re-grouped in different ways for instruction. For example, a fifth grade "family" would include a number of students with disabilities. Part of the time, some students would receive individualized instruction and remediation, at others times they would be fully integrated with peers and at other times would be in large groups for specific kinds of tasks. In such instructional arrangements, the special educator or teacher is working in the same classroom with the regular educator; the so-called "pull-in" model. Pull-in approaches promote collaboration focused on instructional planning. Pull-in approaches

focus on specific instructional needs, but pullout approaches be liable to be unfocused and related to general issues (Meyers, Gelzheiser, & Yelich, 1991).

According to McLeod (1996) a school might be organized into six families--two at each grade level in grades 6, 7, and 8. There might be one or two additional families for new students spanning all three grades. Each family could have 130 students. The newcomer family could consist of 50 to 60 students. Each family might have three or four "core" teachers assigned to it. Within the family, students would be assigned in groups of 20 to 25; the groups with whom they take basic subjects, Students are organized in such a way that certain teachers will have daily and frequent contact with them. They will have most of their experiences with the core group of students in the family, but they will also some meetings with other students within the larger group for certain kinds of activities. In some cases, the same group of students would remain in tact as a family for 2 or more years, and would have the same core teachers. This arrangement enables team teaching, fosters companionship, communicates and a sense of family among students, and enriches the classroom as a caring community which cares for all its members.

The characteristics or features of this type of arrangement are quite different than a traditional class in numerous ways. First, there is a wider range of skills and abilities in the larger group, so differences are expected. As in the one-room schoolhouse, older and younger children together is the norm, so variations in size, shape, age, and abilities are commonplace. In a traditional class there is a much more constrained range of skills, causing those who deviate at either extreme to stand out in bleak comparison. In a large group that is shuffled frequently for different learning activities, there are many kinds of

skills and abilities, and differences are expected and accepted. This has the advantage of permitting advanced and lower achieving students to work at appropriate levels according to their own pace.

Another difference is that such classes and arrangements do not operate on a common schedule but multiple schedules of small groups. This arrangement supports many kinds of activities in various arrangements for varying periods of time to meet needs of students, providing flexibility that cannot be found in a standardized "bell" schedule because in this inclusive teaching setting everyone will be given a chance to complete his/her task.

In such IE schools, empowerment is carried to the extent that teachers should have a voice in budgetary allocations, employment decisions, and use of space and facilities. Carried to its fullest extent, teachers in such schools have the luxury of being treated as true professionals, able to have some control in the organization and operation of their school, design of the curriculum, and in their own professional development but if teacher is neglected or not given importance then it may expected that there comes many problems in the way of implementing those plans.

2.16.2 Functioning as a Team

Teams are like groups and may be formed from various personnel with addition to other members like teachers and community members and for different purposes. There can be ad hoc teams of short duration and long- term teams. In most cases the parents, classroom teacher, and special education teacher should be involved in all teams to some extent. There can be assessment teams, IEP teams, in-service training teams, support

teams, and others. Teamwork is involved for the primary purpose of serving students with disabilities and the teachers who provide for them in classrooms. Through team work better results can be achieved.

Parent or Guardian

It is important to secure the participation of parents for students' betterment. The parents or guardian can provide a family history and important information about the child. For long-term planning, family values and priorities are extremely important, especially as students begin to prepare for secondary postsecondary adjustment. Parents can also provide important information about the child's functioning in the family, the neighborhood, and other groups. The information can be useful for evaluations and assessments of the students.

Classroom teacher

The classroom teacher will bear significant responsibility for implementing the IEP and for educational planning, instruction, evaluation, and reporting. The teacher should be provided the necessary assistance and support to develop the appropriate learning environment, prepare the peer group to accept the child, adapt the curriculum, and supervise or coordinate the activities of teacher aides, volunteers, peer tutors, and others. All these activities are dependant on teacher's devotion.

Special education teacher

The special education teacher can serve many role functions, depending on the circumstances and the arrangement of the inclusion program in regular classroom setting. In a full-inclusion model, the special education teacher will co-teach with the regular classroom teacher. As such, the special education teacher should share the responsibilities of IEP implementation, planning, instruction, evaluation, reporting, and daily instructional activities with the teachers of regular classroom. In many states of USA, special education teachers are being prepared with broad skills in all areas of the traditional disability conditions in order to perform such a role. In other models, such as a facilitator, the special educator may provide significant direct instruction to the students with disabilities, as well as support for the classroom teacher. It is critical that the special education teacher not be perceived as a consultant with no obligations to the teacher and the students. The special teacher must be involved in as many aspects as possible, including accountability, involvement in planning and support. If the role is restricted to that of an expert who gives advice, makes criticisms, provide information, and so forth, the relationship is likely to be strained. Authorities should work for IEP selflessly and by putting their petty selfish considerations aside.

Special education teacher should be invited only to enter the classroom for brief periods to work with students, it is important that the special education teacher take direction from the classroom teacher about when to enter and there must be a solid understanding about the details of classroom organization, discipline, peer support programs, and the adaptation of the curriculum for specific students to give full guidance.

In a co-teaching environment, the special education teacher may assume major responsibility for aspects of curriculum adaptation, supplementary services, and selection and use of materials and equipment which help the students as well as teachers.

2.17 RESEARCH ABOUT INCLUSION

Baker, Wang, and Walberg (1995) pointed out that research showed the separate and segregated classroom for children with special needs has negative effects on students' academic performance and social adjustment, and students with disabilities/disorders perform better on average in regular classroom setting.

Galis and Tanner(1995) said on a study of inclusion in elementary schools of Georgia during the 1990's that individualizing instructional methods, changing the instructional environment, and making smaller class size are important issues. They found that (1) regular education teachers have difficulty with the idea of inclusion in regular classroom; (2) younger, less experienced teachers have difficulty in managing with the complex demands of change, and (3) legal aspects dealing inclusion of the students with special needs required clarification, especially for regular education teachers. Tanner, Linscott, and Galis (1996) said in their research about inclusion that a "perceived lack of information" about inclusion has been observed among middle school principals and teachers.

Opponents of inclusion of the students with special needs in regular classroom setting, especially advocates in the fields of learning disabilities, gifted and talented, deafness, visually impaired, and autism, argue for a full range of services and believe that "full" inclusion poses problems for such children. It is also argued that inclusion can have

negative after effects for nondisabled students. The effect of inclusion on nondisabled (able & normal) students in inclusive classes has been found to be not statistically significant as compared to other classes reported by Staub and Peck (1995).

2.18 Inclusion and National Education Policy 2008 of Pakistan

The concept of inclusive education is given in the draft of National Education Policy 2008 for the first time. The objective (as mention in the report) of inclusive education is to support Education for All, with special emphasis on removing barriers to participation and learning for those excluded: girls and women, the disabled, ethnic/linguistic minorities, migrants, nomads, and many others. The education of children from diverse backgrounds and different abilities has been a major task for countries like Pakistan. Children with special needs are to be included with normal children so as to provide an opportunity for their addition, integration and inclusion in the society.

2.19 Efforts for Inclusive Education in Pakistan

Different projects have been started for inclusive education in Pakistan e.g. Education For All in an Inclusive setting, Action Research on Introduction and Implementation of Innovation within the Education Sector in Balochistan, etc. These projects are funded by the government of Norway. The partners in these projects are Ministry of Education, Ministry of Women Development, Social Welfare and Special Education in co-operation with IDP International Development Partners (Braillo,

Norway). The potential goals of IDP Norway for 2-3 years pilot project in Pakistan are the following:

1. Development of an educational support system selected to children with special needs.
2. Development of a National Resource centre for Special Needs Education with (under the Ministry of Education)
 - Itinerant teacher services
 - Braille production
 - Development and production of other learning devices adjusted to children with various special needs.
 - Development of a National Co-operation Unit for Special Needs Education.
 - Develop re-orientation and up-grading programmes for teachers in special schools as well as ordinary schools (pilot schools for IE).
3. Pilot Implementation of Inclusive Education in a selected number of schools.
4. Developing plans for a master programme in special needs education.
(Government of Pakistan, 2003)

2.19.1 Main Objectives of the Project (Action Research on Introduction and Implementation of Innovation within the Education Sector in Balochistan)

IDP Norway with the collaboration of Provincial Education Department of Balochistan started its work on inclusive education in Balochistan in 2006 with the project mentioned above. Following are the main objectives of the project:

- To create awareness about the inclusive and child-friendly education among key government stakeholders, as well as 4 pilot schools. 2 schools for girls and 2 schools for boys.
- To involve the parents and communities to strengthen the ownership of the community towards the local school and thereby increase enrollment and completion rates in primary school.
- To develop awareness of teaching learning material related to inclusive education. (Government of Pakistan, 2009).

2.19.2 Major Achievements of the Project so far

Following are the main achievements of the projects:

- Creation of awareness among senior education officials in the province (Balochistan) as well as among the headmasters and teachers in the 4 pilot schools.
- Measuring of the body mass of more than 250 children in one of the pilot schools. The conclusion was that more than 75% of the children suffered from undernourishment and/or malnourishment as well as suffering for a host of other disabling and disfiguring health conditions. (Government of Pakistan, 2009).

2.19.3 Main Objectives of the Project (Introduction of Education for All in an Inclusive Setting in Pakistan)

IDP Norway with the collaboration of Federal Directorate of Education (FDE) started its work on inclusive education in Islamabad in 2006 with the project mentioned above. Following are the main objectives of the project:

- To develop and implement the policies, regulations and practices related to education for all in inclusive setting.
- To ensure enrolment of children who are out-of-school or who are segregated in special education institutions into regular primary schools.
- Development of awareness as well as teaching and learning material related to inclusive education. (Government of Pakistan, 2009).

2.19.4 Major Achievements of the Project

Following are the major achievements of the project mentioned above:

- Education Policy under deliberation by the Government includes a paragraph on (FDE) prevent the schools from denying children access to education based on disabilities, backgrounds and circumstances.
- More than 100 children with disabilities (developmental impairment, hearing impairment, physical impairment and visual impairment) are now enrolled in regular schools. (Government of Pakistan, 2009).

CHAPTER III

RESEARCH METHODOLOGY

The purpose of study was to evaluate the impact of inclusion on students' learning at primary level. As the study was experimental and it was aimed to find out the impact of inclusion on students' learning with or without special needs and to see the effect of use of inclusive instructional strategies in teaching (independent variable) in inclusive classroom on students' achievement (dependent variable).

3.1 Design of the Study

In this study pre-test, post-test equivalent design was used. In this design, pre-test was administered before the application of the experimental and control treatments then post-test was conducted at the end of the treatment period.

3.2 Population

Students studying at primary level constitute the population of the study. They are 83 students who are studying in three different sections. Their ages ranged from 7 to 9 years. The participants were selected from that school which is representative of inclusive education. There was inclusion of students with special needs. Both boys and girls attended this school. Students belonged to families with low or medium socioeconomic and educational background attended this school in other words they belonged to lower-lower class, lower-middle class, lower-upper class and middle-lower class. Their parents have very limited resources and they prefer to send their children in nearby schools to get education.

3.3 Sample

Random sampling technique was used to take the sample. The sample of the study consisted of two classes (groups) of the same level of the school, representative of inclusion and in which there was inclusion of students with and without special needs. These two classes were randomly selected among the three sections of class II. Participants of the study were 56 students of F. G. Junior Model School, G-7/3-1, Islamabad. There was inclusion of students belonging to religious minorities/linguistic minorities, having learning disabilities, having low vision, suffering from Thalassemia and Hyperactivity disorder. The scores of pre-test were used to equate the groups i.e. each student of experimental group was equated with corresponding student in the control group. Students were allotted randomly to control and experimental groups. Twenty-eight students were placed in experimental group and twenty-eight students were in the control group.

3.4 Teaching Conditions

Equal conditions for both the groups were established. All factors of time of day and treatment length in time were equated. Both groups were taught the same material of the subject of English prescribed for class II by Federal Directorate of Education. First four units were chosen to teach. The study lasted for 15 days with a daily period of 40 minutes. Two different teachers taught them who have equal qualification. Experimental group was taught with special inclusive teaching techniques and control group was taught with ordinary traditional method.

Variables

Independent variable:	Inclusive teaching strategies.
Dependent variables:	Scores in the achievement test (Post-Test) in the subject of English
Variables controlled:	Teacher, Time, Average Age and Classroom conditions.
Variables uncontrolled:	I.Q. of the students, their previous achievements, socioeconomic status, anxieties, self-concept, interests and attitude.

3.6 Data Collection

During the experiment two different treatment patterns were applied. Lesson plans of both the groups addressed the same instructional objectives based on the same study material. Two groups of students were taken in which there was inclusion of students with special needs. Pre-test was administered to equate the groups. Experimental group was taught with special inclusive teaching techniques and control group was taught with ordinary method. Both the groups studied the same material. The experiment continued for fifteen days. Soon after the treatment was over, post-test was administered to measure the achievement of the students. Pre-test scores of the sample served as data to

equate the control and experimental groups, while post-test scores served as data to measure achievement of students as a result of treatment. Teacher made test was used to collect data.

3.7 Data Analysis

In order to test the hypotheses the collected data was tabulated and analyzed; scores of pre-test and post-test were compared. Researcher used t-test to measure the significance of the difference between the means of the two groups. Significance of the difference between the mean scores of experimental and control groups on the variable of pre-test and post-test scores was tested at 0.05 level. On the basis of the analysis, conclusions were drawn and recommendations were given. Raw scores obtained from pre-test and post-test were presented in tabulator form for the purpose of interpretation.

3.8 Statistical Procedure of Data Analysis

The data were analysed by using the following statistical procedures:

Paired Sample T-Test

Paired sample t-test is a statistical technique that is used to compare two population means in the case of two samples that are correlated. Paired sample t-test is used in 'before after' studies, or when the samples are the matched pairs, or the case is a control study.

Mean values of pre-test and post-test scores for both the experimental and control groups were computed to measure the gains in both the groups and for the comparison of two groups.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter is confined to the analysis and interpretation of data obtained through pre-test and post-test scores. Pre-test score in the subject of English were used to equate the groups. Significance of difference between the mean scores and standard deviation of control and experimental groups on pre-test were found. After applying the treatment, the significance of the difference between the mean scores of control and experimental on post-test were found out by applying t-test. The summary of results is presented in the form of tables and then their interpretation was given. The results of pre-tests and post-tests on control and experimental groups have been presented as under:

Table 1 presents the results of control and experimental groups on pre-test.

Table 2 presents the results of experimental group on pre-test and post-test.

Table 3 presents the results of control group on pre-test and post-test.

Table 4 presents the results of control and experimental groups on post-test.

The coming tables show the comparison between the control and experimental groups. In these tables:

n = number of students

M = means

SD = standard deviation

t-value = difference of means

The level of significance is 0.05

Table I: Showing the number of students (n), the mean scores (M), standard deviation (SD) and their difference on pre-test of control group and experimental groups.

Group	n	M	SD
Experimental	28	14.107	3.60
Control	28	13.321	3.772
Difference	–	0.786	0.172

Table 1 shows that the mean score of experimental group was 14.107 and that of the control group was 13.321 on pre-test. The difference between the two means and their standard deviation was not statistically significant. Hence, both the groups were found to be almost equal on pre-test therefore null hypothesis was accepted that there is no significant difference between the mean scores of control and experimental group on pre-test.

Ho₁: There is no significant difference between the mean scores of experimental group on pre-test and post-test.

Ha₁: There is significant difference between the mean scores of experimental group on pre-test and post-test.

Table 2: Significance of difference between the mean scores on pre-test and post- test of experimental group.

Experimental Group	n	M	SD	t-value	
				Calculated value	Table value
Pre-test	28	14.10	2.39	9.56	2.0518
Post-test	28	18.17	3.629		

Table 2 shows that the calculated value of t (9.56) was greater than table value (2.0518) at 0.05 level of significance. Hence, Ho₂ (null hypothesis) was rejected and Ha (alternative hypothesis) was accepted. It means that there was significant difference between mean scores on pre-test and post-test of experimental group after being treated by inclusive teaching strategies.

Ho2: There is no significant difference between the mean scores of control group on pre-test and post-test.

Ha2: There is significant difference between the mean scores of control group on pre-test and post-test.

Table 3: Significance of difference between the mean scores on pre-test and post-test of control group

Control Group	n	M	SD	t-value	
				Calculated value	Table value
Pre-test	28	13.32	3.772	7.078	2.0518
Post-test	28	15.52	4.44		

Table 3 shows that the mean score of control group was 13.32 on pre-test and 15.052 on post-test. The difference between the means of two tests was statistically significant. It is indicated that the calculated value of t (7.078) was greater than the table value (2.0518) at 0.05 levels. Hence, the mean of control group was not found to be almost equal on pre-test and post-test so alternative hypothesis (Ha) was accepted and null hypothesis (Ho2) was rejected. It means there is a significant difference between the mean scores of control group on pre-test and post-test so hypothesis that there was no significant difference between the mean scores of control group on pre-test and post-test was rejected and alternative hypothesis was accepted.

Ho3: There is no significant difference between the mean scores of control group and experimental group on post-test.

Ha3: There is significant difference between the mean scores of control group and experimental group on pre-test.

Table 4: Significance of difference between the mean scores of control and experimental groups on post-test

Group	n	M	SD	t-value	
				Calculated value	Table value
Experimental	28	18.179	3.629	2.46	2.0518
Control	28	14.107	4.44		

Table 4 shows that the mean score of experimental group was 18.179 and of control group was 14.107 the calculated value of t (2.46) was greater than the table value (2.0518) at 0.05 level of significance. It means there was significant difference between mean scores on post-test of experimental group and control groups so null hypothesis (Ho3) was rejected 0.05 levels of significance and alternative hypothesis was accepted. The result indicates that mean score for experimental group was more than that of control group after being treated by inclusive teaching strategies.

Above mentioned results indicate that the students of experimental group and control group were almost equal before conducting the experiment as shown by the result of pre-test. The result of post-test shows that the students of experimental group who are taught by inclusive teaching strategies show comparatively better results than the students

placed in control group who were taught with traditional methods. So achievement level of students of experimental group is better than that of the students of control group in the subject of English in an inclusive setting.

In traditional method, there is no student interaction. Students take turn in reading each paragraph. Question with their answers are written on the board, students are asked to copy them and memorize them. Such a method encourages rote learning and memorization. The teacher does not allow any communication among the students which creates monopoly and boredom.

On the other hand in inclusive teaching encourage cooperation and mutual interaction and help. Students take part actively in teaching-learning process if the task given to them is purposeful, active and task oriented.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

It is an experimental study in which pre-test and post-test equivalent group design was conducted. The study was designed to see the effectiveness of inclusive instructional strategies as supplementing strategies on the academic achievement of primary school students in the subject of English. The major objectives of the study were; (1) to find the impact of inclusion on students with special needs; (2) to find the impact of inclusion on the learning of students without special needs. (3) To give recommendations for the establishment of inclusive classes in the schools.

In order to investigate the various dimensions of inclusive education following null hypotheses were tested:

Ho1: There is no significant difference between the mean scores of experimental group on pre-test and post-test.

Ho2: There is no significant difference between the mean scores of control group on pre-test and post-test.

Ho3: There is no significant difference between the mean scores of control group and experimental group on post-test.

This study was conducted in F.G. Junior Model School, G-7/3-1, Islamabad. The sample of the study were two classes of the same level of the school, representative of

inclusion and in which there was inclusion of students with special needs. Inclusion is about welcoming diversity, benefiting all learners not only targeting the excluded, children in the school who may feel excluded, providing equal access to education without excluding them. Participants in the study were 56 students. The sample was divided into two groups of 28 each. Students of both the groups had almost equal marks in pre-test (Appendix-I) and group A served as experimental group and group B served as control group. Equal conditions for both the groups were established. All factors of time of day and treatment length in time were equated. Both groups were taught the same material. The study lasted for fifteen days with a daily period of 40 minutes. Experimental group was taught with special inclusive teaching techniques and control group was taught with ordinary traditional method.

Experimental period was of fifteen days. The content included were the first four lessons of textbook of English for class II. The academic achievement of the experimental and control groups was examined through a post-test (Appendix-II).

Pre-test and post-test were used as measuring tools in the experiment. Pre-test and post-test were with different arrangements of test items. The pre-test was used to equal distribution of students in the control and experimental groups. The purpose of post-test was to measure the achievement in oral as well as writing ability of the students after treatment.

5.2 FINDINGS

The following findings emerged as a result of the analysis of data.

- 1) It is found that the mean score of experimental group was 14.107 and that of the control group was 13.321 on pre-test. The difference between the two means and their standard deviation was not statistically significant. Hence, both the groups were found to be equal. (Table 1).
- 2) It is found that the calculated value of t (9.56) was greater than table value (2.0518) at 0.05 level of significance. Hence, H_01 (null hypothesis) was rejected and H_{a1} (alternative hypothesis) was accepted. It means that there was significant difference between mean scores on pre-test and post-test of experimental group after being treated by inclusive teaching strategies. (Table 2)
- 3) It is found that the mean score of control group was 13.32 on pre-test and 15.052 on post-test. The difference between the means of two tests was statistically significant. It is indicated that the calculated value of t (7.078) was greater than the table value (2.0518) at 0.05 levels. Hence, the mean of control group was not found to be almost equal on pre-test and post-test so alternative hypothesis (H_{a2}) was accepted and null hypothesis (H_{o2}) was rejected. It means there is a significant difference between the mean scores of control group on pre-test and post-test so hypothesis that there was no significant difference between the mean scores of control group on pre-test and post-test and alternative hypothesis was accepted. (Table 3).

- 4) It is found that the mean score of experimental group was 18.179 and of control group it was 14.107 the calculated value of t (2.46) was greater than the table value (2.0518) at 0.05 level of significance. It means there was significant difference between mean scores on post-test of experimental group and control groups so null hypothesis (H_0) was rejected 0.05 levels of significance and alternative hypothesis was accepted. The result indicates that mean score for experimental group was more than that of control group after being treated by inclusive teaching strategies. (Table 4)
- 5) It is found that the inclusion has positive effect on students with and without special needs when treated with inclusive teaching strategies.

5.3 CONCLUSIONS

On the basis of statistical analysis and the findings of the study, the following conclusions were drawn:

1. The inclusive instructional strategies in teaching of English at junior level were found to be more effective as they increased the interest and enhanced the motivation level of the students with and without special needs.
2. During the treatment period, the students of the experimental group were found to be more attentive and showed more interest because the concepts were explained with the help of instructional material (A.V.Aids) which played a significant role in clearing the concepts of students.

3. Inclusive instructional strategies were found to be equally effective for both the students with and without special needs and when small children are taught with love and affection and by using instructional aids, the achievement level of low achievers is found to be much higher than teaching without any affection and teaching aids. It means teachers positive attitude definitely solve many problems of the students.
4. When students work in groups or as a team they support and help each other which enhance their learning.
5. Inclusive Instructional strategies were found more effective as compared to traditional teaching regarding retention of learning. Retention of the students of experimental group was found significantly better than that of the students of control group.

5.4 RECOMMENDATIONS

In the light of findings revealed and conclusions drawn from the study, the following recommendations are made:

1. Keeping in view the results of the study, it is very clear that there is a need to clarify and expand the concept of inclusive education in order to develop the awareness and acceptance of the inclusive education among the teachers and professionals concerned with the teaching of children with special needs especially at primary level. Awareness about the concept will bring forward the

roles and responsibilities of teachers and professionals in the process of establishing of inclusive education and this will make its implementation possible.

2. Since the use of inclusive instructional strategies proved to have significant positive effect on the achievement of students with and without special needs. The teachers be provided proper training of teaching in inclusive setting and be motivated to use it in the classrooms regularly in inclusive schools.
3. Special children should work side by side with peers with diverse skills and abilities to help them learn and develop the skills necessary to work in real life.
4. Emphasis should be laid on the use of polite and simple terminology being sensitive to children's feeling so that children may not hurt. Always ask children to put themselves at other children's place, especially those they consider different from them in any aspect. Stigma words such as: handicapped, mental, blind, etc. are insensitive to use and not polite. Use alternative words like partially sighted, visually impaired, mentally challenged, etc.
5. Teachers, administrators and students respect each others religion, languages, cultural backgrounds and abilities and celebrate their respective religious festivals.
6. A curricular adaptation should be made i.e. any adjustment or modification in the learning environment, teaching techniques or learning support materials used that enhances a learner's performance or allows at least partial participation in a learning activity. Teacher's needs to be further trained and continuous professional development mechanism needs to be devised. A co-ordinated professional support service should be provided through training, mentoring, consultation, monitoring.

7. The topics related to inclusion needs to be added in national teachers training curriculum as majority of teachers do not know about inclusion.
8. Inclusive teaching strategies and aids should be used in non-inclusive classes also as they are helpful for all the students in their learning process.

Suggestions for further research

Following researches may be conducted in the area of inclusive education:

1. To evaluate the projects on inclusive education conducted by the collaboration of IDP Norway and FDE.
2. To conduct case studies of individuals suffering from some disorder or disability in an inclusive setting.
3. To evaluate the performance of gifted children in an inclusive setting.

REFERENCES

- Adams, J. (1993). Including Special Education Services in the General School Curriculum. NASSP Curriculum Report, p.1-5.
- Ainscow M., Booth T. (2003) *The Index for Inclusion: Developing Learning & Participation in Schools*. Bristol: Center for Studies in Inclusive Education.
- Ainscow M., Booth T. and Dyson, A. with Farrell, P., Frankham, J., Gallannaugh, F., Howes, A. and Smith, R. (2006) *Improving Schools, Developing Inclusion*. Abingdon, Oxon: Routledge.
- Allan, J. (2008) *Rethinking Inclusive Education: The philosophers of difference in practice*, Dordrecht: Springer Thomas, G., & Loxley, A. (2007) *Deconstructing Special Education and Constructing Inclusion (2nd Edition)*. Maidenhead: Open University Press.
- American federation of teachers. (1993). *Special Education and Inclusion*. Washington, D.C: American federation of Teachers.
- Anwar, M. October(1998). A Study to Compare the Functioning of Government and Private Schools (up to Primary Level) in Tehsil Texila, Arid Agriculture University Rawalpindi.
- Arceneaux, M.C. (1994). A secondary school's experience: Is it inclusion, or is it school reform? A Paper presented at the Annual Conference of the Association for Persons with Severe Handicaps, (Atlanta, GA, December 7-10, 1994). ERIC Document Service No. ED381960.
- Baker, E.T., Wang, M.C., & Walberg, H.J. (1995). The effects of inclusion on learning. *Educational Leadership*, 52(4), 33- 35.
- Bennett, N. (1989) *From Specila to Ordinary Schools U.K*. Camelot press, South ampton
- Biklen, D. (1992). *Schooling without labels: Parents, educators, and inclusive education*. Philadelphia, PA: Temple University Press.
- Brewer, D.J., Rees, D.I., and Argys, L.M. (1995). *Detracking America's schools: The reform without cost?* Phi Delta Kappan, November.
- Cannon, G. (1992) *Educating students with mild handicaps in general classrooms: Essential teaching practices for general and special educators*. *Journal of Learning disabilities*, 25(5) 300-317.

Cole, K.N., Mills, P.E., Dale, P.S., & Jenkins, J.R. (1991). Effects of preschool integration for children with disabilities *Exceptional Children*, 58(1), 36-45.

Dewey, J. (1938). *Experience and education*. New York: Macmillan.

Darlington, C. (2003). *The Challenges of Effective Inclusion*, Times Educational Supplement, USA.

ERIC Digest. (1993). *Including Students with Disabilities in General Education Classrooms (#E521)*. Reston, VA: ERIC Clearinghouse on Disabilities and Gifted Education, ERIC Document Service No. ED358677.

Fullan, M., & Hargreaves, A. (1991). *What's worth fighting for? Working together for your school*. Toronto, Ontario: Ontario Public School Teachers.

Galis, S.A. & Tanner, C.K. (1995). *Inclusion in Elementary Schools: A Survey and Policy Analysis*. *Education Policy Analysis Archives*, 3(15). An electronic journal at olam.ed.asu.edu.

Gallagher, J., & Krik.S.(1986). *Educating Exceptional Children*. Fifth Ed. Houghton Mufflin Company. Boston.

George, F. Kneller. (1971). *Introduction to the Philosophy of Education*. John Wiley and Sons, New York.

Government of Pakistan, (2008). *National Report on Education*.

Government of Pakistan, (2003). *Institutional Cooperation Programme, FDE, Pakistan and IDP, Norway*.

Guzman, N., Schofield, R. (1995). *Systemic Restructuring for Successful Inclusive Schools: Leadership and a Collaborative Evaluation Model*. A Paper presented at the Annual Meeting of the American Association of School Administrators (New Orleans, LA, February 10-13, 1995).

[http://www.lhup.edu/library/Internation Review/ritter.htm](http://www.lhup.edu/library/Internation%20Review/ritter.htm). Retrieved on 13th April, 2009.

http://en.wikipedia.org/wiki/Inclusive_classroom. Retrieved on 18th August, 2008.

Irmsher, K. (1995). *Inclusive Education in Practice: The Lessons of Pioneering School Districts*. ERIC Documents, ED380913.

- Johnson, G.O. (1962). Special educator for the mentally handicapped--A paradox. *Exceptional Children*, 29(2), 62- 69.
- Kauffman, J.M., & Hallahan, D.P. (1994). *The illusion of full inclusion: A comprehensive critique of a current special education bandwagon*. Austin, TX: PRO-ED.
- Kaul, V (2008). EENET ASIA NEWSLETTER, 6TH Issue-2nd and 3rd Quarter2008: IDP Norway.
- Lerner, J., (1985). *Learning Disabilities Theories, Diagnosis and Teaching Strategies*. Fourth Ed. Houghton Mufflin Company. Boston
- Lieberman, A., & Miller, L. (1990). Teacher development in professional practice and school. *Teachers College Record*, 92, 105-122. New York: Teachers College Press.
- Martin, S. (1994). *Take a look observation and portfolio assessment in early childhood*. Reading, MA: Addison-Wesley Publications Limited.
- McEvoy, M. & Reichle, J.(1995). *Developing and evaluating a model of inservice and technical assistance to prevent challenging behavior in preschoolers*. Final Report. ERIC Document Service No.ED379876.
- Osgood, Robert L. (2000). *The History of Inclusion in the United States*. Indiana University Press.
- Peyton, S. (1998). *Special Education-An Alternative Perspective*. Newsletter, Sharon, Massachusetts: Sharon special education.
- Reynolds, M.C. & Birch, J.W. (1977). *Teaching exceptional children in all America's schools*. Reston, VA: Council for Exceptional Children.
- Schattman, R. (1992). *Inclusive practices transform: special*. *The School Administrator*, February, 8-12.
- Schnaiberg, L. (1996). *Oberti and the Law*. Education Week.15(17), January 17, 1996, pp 18-26.
- Schrag, J., & Burnette, J. (1994). *Inclusive schools*. *Teaching Exceptional Children*, 26(3), 64-68.
- Shahzadi, S. (2000) *Inclusive Education: Perspective of Services*, Article presented at ISEC Karachi.
- Shanker, A. (1994). *Inclusion and ideology*. Reported in AFT Online Forum, America Online.

- Staub, D. & Peck, C.A. (1995). What are the outcomes for nondisabled students? *Educational Leadership*, 52(4), 36- 40.
- UNESCO, Education For All Monitoring Report 2008, Net Enrollment Rate in primary education.
- U.S. Department of Education. (1999). Study of personnel needs in special education. [<http://www.spense.org>]
- Vergun, P.B. & Chambers, J.G. (1995). A case study of "supported education" in Oregon: Resource implications of inclusion. State Analysis Series. ERIC Document Service No. ED381972.
- Wang, M.C., Reynolds, M.C., & Walberg, H.J. (1995). Serving students at the margins. *Educational Leadership*, 52(4), 12- 17.
- Wang, M.C., Reynolds, M.C., & Walberg, H.J. (1988). Rethinking special education. *Educational Leadership*, 44(1) 26-31.
- Watterdal, T.M. (2007). Compendium: Agreements, Laws & Regulations Guaranteeing All Children Equal Right to Quality Education in an Inclusive Setting. UNESCO.
- West, J.F. & Idol, L. (1990). Collaborative consultation in the education of mildly handicapped and at-risk students. *Remedial and Special Education*, 11(1), 22-31.

PRETEST

NAME: _____

DATE: _____

CLASS: _____

SECTION: _____

TIME: 1 ½ Hours

MARKS: 25

Part I: (Written)

Q1. Dictation.

(5)

1. _____

2. _____

3. _____

4. _____

5. _____

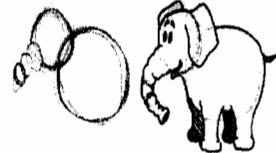
Q2. (a). Match the Columns.

Elephant

Duck

Butterfly

Car



b). Use 'a' or 'an' in the following sentences.

(3)

1. This is _____ ball.



2. This is _____ aeroplane.



3. This is _____ tree.



Q 3. a). Write about yourself. (4)

- i) I am a _____.
- ii) My name is _____.
- iii) I study in class _____.
- iv) I live in _____.

b). Make plurals. (2)

- 1. lemon
- 2. balloon
- 3. star
- 4. flower

Q 4. Use of 'This' and 'These'. (3)

- i) _____ are books.
- ii) _____ is a car.
- iii) _____ is a kite.

Q 5. Part II: (Oral) (6)

- a). Reading from the text book.
- b). General knowledge.
- c). Poem.

POST-TEST

NAME: _____

DATE: _____

CLASS: _____

SECTION: _____

TIME: 1 ½ Hours

MARKS: 25

Part I: (Written)

Q1. Dictation. (5)

1. _____

2. _____

3. _____

4. _____

5. _____

Q2. a). Write about yourself. (4)

v) I am a _____.

vi) My name is _____.

vii) I study in class _____.

viii) I live in _____.

b). Make plurals. (2)

1. car

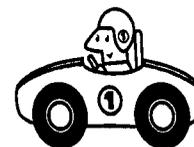
2. bird

3. book

4. pen

Q3 (a). Use 'a' or 'an' in the following sentences. (3)

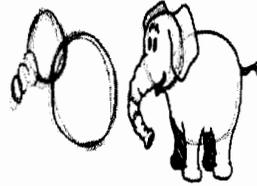
1. This is _____ car.



2. This is _____ lizard.



3. This is _____ elephant.



b). Match the Columns.

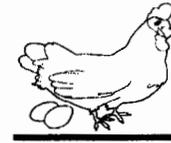
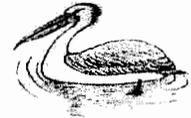
Hen

Bird

Cow

Sawn

(2)



Q 4. Use of 'This' and 'These'.

- iv) _____ are birds.
v) _____ is a balloon.
vi) _____ is a ball.

(3)

Q 5. Part II: (Oral)

- a). Reading from the text book.
b). General knowledge.
c). Poem.

(6)

Appendix – C

Detail of the marks of pre-test and post-test of class II-A (Control Group)

Subject: English

Total Marks: 25

Sr.No.	Names	Marks of Pre-Test	Marks of Post Test
1.	Farhan Haroon	22	24
2.	Muhammad Bilal	15	22
3.	Monika Nadeem	15	21
4.	Kainat Shafique	12	21
5.	Nabeel Ahmed	17	20
6.	Abdul Ghafoor	18	19
7.	Madiha Gul	14	19
8.	Abdur Rehman	13	18.5
9.	Umar Zeb	18	18
10.	Muhammad Faizan	17	18
11.	Khadija Bibi	15	17
12.	Fazeeha Gul	19	17
13.	Komal Shaukat	14	16
14.	Eman Baber	09	16
15.	Amna Naeem	14	15
16.	Adan Irshad	19	14.5
17.	Iqra Ayub	11	14
18.	M. Sayyam	15	14
19.	Ayesha Asad	08	14
20.	Zobia Bibi	09	13.5
21.	Ahmar Gul	12	13.5
22.	Hammad Masih	07	12
23.	Tabita Ghouri	12	12
24.	M. Suleman	11	12
25.	Hamza Mazhar	16	11.5
26.	Saim	13	9.5
27.	Usmman Hassan	06	6.5
28.	Muhammad Israr	07	5.5

Appendix -D

Detail of the marks of pre-test and post-test of class II-B (Experimental Group)

Subject: English

Total Marks: 25

Sr. No.	Names	Marks of Pre-Test	Marks of Post Test
1.	Eesha Nazar	22	24
2.	Nadia Naz	19	22
3.	Sania Khattak	19	22
4.	Talah Rehman	12	21
5.	Moiz Abdullah	16	21
6.	Fareeha Noreen	15	21
7.	Tayyaba Arshad	15	21
8.	Amna Anwar	17	20
9.	M. Hamza Saleem	10	20
10.	Shiza Arfan	16	20
11.	Sumbul Anwer	18	20
12.	Zainab Bashir	18	20
13.	Usama Shaffique	12.5	19.5
14.	Amina Manzoor	13	19
15.	Misbah Shakoor	15	19
16.	Kashif Ali	15	19
17.	Kousar Bibi	12	18
18.	M. Zohaib Tahir	08	18
19.	M. Awais	13	18
20.	Bisma Wajid	12	17.5
21.	Farhan Haroon	13	17
22.	M. Ismail	15	16
23.	Shazil Shahid	15	16
24.	Shahzaib Babar	15.5	16
25.	M. Farhan	11	13
26.	Zunaira Ahmad	10	13
27.	Mariam Khan	08	10
28.	Zohaib Hassan	07	08

Sample Lesson Plan

Teacher _____

Subject _____

Class: II

Average Age of the Students: 7 and 1/2 years

Date: _____

Time: 40 minutes

Lesson : Noun

Steps

Contents

General Objectives

1. To enable students to read English with correct pronunciation.
2. To enable students to write English correctly.
3. To enable students to understand and speak English language.

Specific Objectives

1. To explain the concept of “noun”.
2. To explain the use of noun
3. To enable all the students to use noun in simple sentences.

Materials

1. Textbook
2. Workbook
3. Real objects
4. Magnifying glass
5. Blackboard
6. Pictures
7. Flash cards

Teaching strategies/ Techniques

cooperative group learning, whole language, activity-based learning, differentiated instruction, peer tutoring

Group size

4 students will be placed in each group

Assigning students to groups

Each group will be assigned two average students, one above average and one below average.

Classroom arrangement

Class will be arranged in “U” shape

PREVIOUS KNOWLEDGE

Teacher will make the students ready for the learning by asking following questions:

1. What is your name?
2. What is your friend’s name?
3. Why things have names?

ANNOUNCEMENT OF THE TOPIC

By receiving the reply the teacher will announce the topic and then write on the board. “Noun”.

PRESENTATION STAGE

The teacher will give the introduction of the lesson.

FIRST READING BY THE TEACHER

Teacher will open the book on page No. 3 and will start reading. Students would had already opened the books. Then she will explain the concept of noun by using different A.V.Aids like real objects, pictures of different things, by drawing objects on the board and write their names and side by side pronounce them.

PRACTICE STAGE

1. Students will tell the name of one object tern by tern.
2. Students will be provided the flash cards then teacher will call the students one by one and ask the student tell the name of the object given on the flash

card. The students who have low vision will be provided magnifying glass to see clearly.

3. Students will be given the practice to match the names with the objects.

4. Students will be allowed to exchange the flash cards with their peers and tell the name of those objects also. In this way their vocabulary will increase.

5. Students will be divided in groups and they may be asked to write and draw as many objects as they can to create a type of competition among them.

6. Exercises related to nouns are given in the workbook so students will be asked to complete them individually, teacher will guide them by going to every student's seat.

HOMEWORK

Students will be assigned to draw and colour five animals and five vegetables also write their names.

Listen and Read. Myself

Work Book page 11

I am Hina.
I live in Gujrat.



I am seven
years old.

7



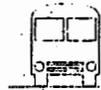
(Hamid is my brother.)



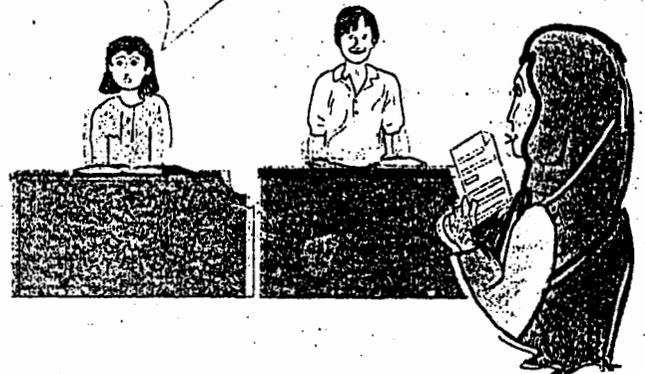
(Bina is my sister.)



I go to school
by bus.



I study in
class two.



Answer these questions orally.

1. Who is Hina?
2. How old is Hina?
3. Does Hina have a brother?
4. Does Hina have a sister?

Writing Sentences

You begin a sentence with a capital letter.

Examples:

This is a dog.



This is a book.



Leave out the a and use -s with the plural noun.

These are dogs.



These are books.

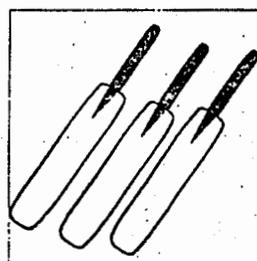


Look, Tell and Read

When something is quite near you, you use the word 'this'.



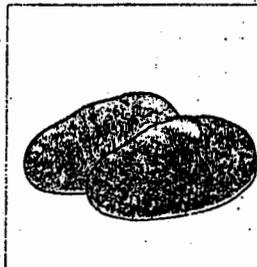
This is a panda.



These are bats.



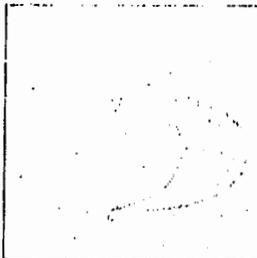
This is a cat.



These are potatoes.



This is a deer.



These are onions.



Explain that when something singular is near you, you use the word this. When something plural is near you, you use the word these. The use of that and those is explained on the next page.

Writing Sentences

When something singular is far from you, you use the word 'that'.

Examples:

That is a jet. 



That is a hen. 



When something plural is far from you, you use the word 'those'.

Leave out the a and use -s with the plural noun.

Those are jets. 



Those are hens. 



Make as many sentences as you can.

This	is	a	boy. table. tree.
These	are		rats. ducks. apples.

That	is	a	bell. tap. box.
Those	are		huts. potatos. crows.

Writing Sentences

Use of a and an

Use an in place of a with something singular that is with a vowel sound.

Examples:

This is an apple.



That is an apple.



This is an onion.

That is an onion.

Leave out the a and use -s with the plural nouns.

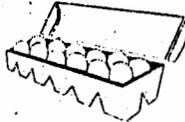
This is an egg.



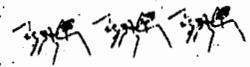
That is an ant.



These are eggs.



Those are ants.



Make as many sentences as you can.

This	is	an	egg. orange. ink pot.
These	are		irons ants. umbrellas.

That	is	an	apple owl. union.
Those	are		umpires. eagles. elephants.