**AWARENESS ON INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AND TEACHERS AT SECONDARY LEVEL**

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**DECLARATION**

I, **SHAMINA.E,** do hereby declare that this dissertation **“AWARENESS ON INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AND TEACHERS AT SECONDARY LEVEL”** has not been submitted by me for the award of a Degree, Diploma, Title or Recognition before.

Farook Training College **SHAMINA.E**

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Education especially school education is one of the important components of national development. Since independence, education has been visualized in government policies as a pre-cursor to national development as well as to better quality of life. Effective supporting and enhancing learning is a major factor through which educators cancontribute to sustain democracy and minimize inequality. Equity and equality are connected as inseparable features of good education provision and should not be considered as separate entities. The ability to foster quality and equality requires awareness of the obstacles that an individual faces in achieving their potential and of the barriers that obstruct harmonious relationshipbetween group andindividuals**.** Resolving such equality issues is a route of quality.

Quality education has become a buzz-word all over the world. Due to the initiatives taken by the states and center, education system in India has expanded exponentially over the past years. One area within the field of education where this is more evident is in the area of educating Children With Special Needs. It is usually reported that ten percent of our school aged children show evidence of specific learning disabilities. We do know that it interferes with their learning process. Until the late 18th and early 19th centuries no attempts were made to treat disadvantaged individuals in a humane fashion. Derogatory terms were used to describe them as they were generally isolated in institutions and asylums. Children With Special Needs have always been segregated for ages in the name of special education schools. Parents of those children always have discriminated and humiliated and have heaped that humiliation on their already suffering children in the form of abuse, beating or labeling. In many developed countries, the children remain hidden as a result of stigmatizing attitudes and neglecting value disposition of the communities.

The constitution of India ensures equality, freedom, justice and dignity of all individuals and mandates an inclusive society including persons with disabilities. Education of children with disabilities is one of the major responsibilities of the government today. It would be important for all – policy makers, planners, implementers and stake holders; to expand the vision of inclusion to encompass equality of opportunity, as well as economic and social mobility for all sections of society including persons with disability along with affirmative action for all disadvantaged groups. There must be equality of opportunity to all with freedom and dignity, and in particular for individuals belonging to disadvantaged groups. These should be provided special opportunities to develop their skills and society in the growth process as education is the only hope to create an inclusive society, which means an inclusive world.

Concern for inclusion of children with disabilities in the main stream has also been widely expressed by various commissions, committees, working groups and seminars. In the World Conference on Special Education held in Spain in 1944, a frame work of action was adopted. The document states;

“The trend in social policy during the past two decades has been to promote integration and participation to combat exclusion. Inclusion and participation are essential to human dignity and to the enjoyment and exercise of human rights. Experience in many countries demonstrates that the integration of children and youth with special needs is best achieved within inclusive schools that serve all children within a community”.

**NEED AND SIGNIFICANCE OF THE STUDY**

The national objective ‘Education for All’ is possible only when students with special needs get equal opportunities for education. Children With Special Needs are those who deviate mentally, socially, educationally, physically or culturally from normal children. Such children need special educational care and their learning problems are to be tackled in a special manner. Educating these disabled children is a challenging task in human resource development. Many national and international initiatives have been made in this regard during the last fifty years.

The Kothari Commission (1964 – 1966) was the first statutory body to suggest that the education of handicapped children has to be organized not merely on humanitarian grounds, but also grounds on utility. The commission emphasized that education of children with disabilities should be ‘an inseparable part of the general education system’. The commission felt that service for children with disabilities were extremely in adequate and recommended the adoption of a dual approach, namely the provision of special as well as integrated education to improve the situation. One way to provide education to Children With Special Needs is the establishment of special schools. But this does not provide a learning situation to the educational problems faced by them; as such schools are few in number and more over fail to integrate these children in the social mainstream. The second approach recommended by the commission was integrated education. There are different approaches for implementing integration. The most among them is the idea of inclusion.

Inclusion offers a different perspective on the education of children with disabilities in ordinary schools. Inclusion means all children are welcome regardless of differences. An inclusive school is a place where everyone belongs; the child is accepted and is supported by his or her educational needs. Inclusive education is a flexible and individualized support system and is provided in regular schools, committed to an appropriate education for all. Inclusive education recognizes and responds to the diversity of children’s needs and abilities-including differences in their ways and pace of learning.

The government of India introduced programmes like Integrated Education for Disabled Children (IEDC 1979), Project Integrated Education for Disabled ( PIED 1987), District Primary Education Programme (DPEP) for disabled children. Being a democratic country we should give equal opportunities to all children to learn to the limits of their capacity. This will be possible only through inclusive education.

Inclusion of students with disabilities into regular schools is now one of the most significant issues facing the education community both nationally and internationally. While talking about inclusive schools it is important to remember that everyone in the school should be involved in inclusion. A team approach is very crucial to inclusion. Regular teachers, parents, community, headmasters, resource teachers, non- disabled children with special needs, education officers etc have to play a vital role for effective inclusion of disabled children in education. All school personnel should share responsibility and provide support for all students. Teachers should have the capacity to work within a collaborative frame work to meet the universe needs of all individual students.

In order to address the issue of inclusive education there is a wide spread acceptance that teacher training institutions must ensure that new teachers are trained to teach effectively in classrooms where there are students with a variety of learning needs. A number of researches have come to the conclusion that successful implementation of inclusion reforms depends largely on the goodwill of educators. In a study involving teachers in USA it was found that only 29 percent of general educators felt that they had enough expertise or training in inclusion (Hobbs and Westling 1988). In the light of this and other research findings, these authors suggest that ‘the degree of success of inclusion can be related to several factors, perhaps the most important being teacher’s perception, attitudes and opportunity for collaboration’.

Teacher development is at the heart of initiatives for inclusive practices in schools. To overcome the history of exclusion and more forward we need more than a rudimentary knowledge of the various disabling conditions. We need a fundamental change in the way we think about our life. Teachers need a change in attitude, a change that re-defines people with disabilities as of equal value to our society. Above all our regular education sector of which we are a part requires the energy, strength and coverage to move forward shattering all irrelevant educational concepts and philosophy.

Teacher requires right type of awareness and attitude on various aspects of disabilities, causes and characteristics, identification and assessment, teaching and training methods and guidance and counseling to the children with disabilities, their parents and community. Such an awareness and attitude lead to better competencies in teachers. A teacher with right type of awareness, attitude and competencies is an asset to any institutions offering programmes for the disabled. Researches that probe in to the awareness, attitude and competencies of teachers will go a long way for policy planning, development and implementation of training programmes to the existing as well as to the prospective teachers. By considering all these factors, the investigator wants to know whether the existing school teachers and also the prospective teachers have adequate awareness on the concept of inclusive education.

**STATEMENT OF THE PROBLEM**

The present study is entitled “AWARENESS ON INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AND TEACHERS AT SECONDARY LEVEL”.

**DEFINITIN OF KEY TERMS**

To have clear idea about the problem stated, the operational definitions of key terms are given below.

**Awareness on Inclusive Education**

Good (1959) defines ‘Awareness’ as “the state of being aware; conscious of a situation or object, without direct attention to it or definite knowledge of its nature”.

‘Inclusive education is a set of values principles and practices that seeks more effective and meaningful education for all students, regardless of whether they have exceptionality labels or not’.

(Michael F. Giangreco 1997)

In the present study Awareness on Inclusive Education means the knowledge or perception regarding concept of inclusive education, understanding exceptationalities, inclusive education strategies and inclusive education policies

**Student Teachers**

Student teachers are the students undergoing training to be a teacher. For the present study it is operationally defined as prospective teachers who are undergoing training at secondary level in the institutions under Calicut University.

**Teachers at Secondary Level**

For the present study it stands for the teachers who teaches in eighth, ninth and tenth standards of government and aided schools of Malappuram and Calicut districts.

**VARIABLE OF THE STUDY**

The only variable that is measured and analysed in the study is Awareness on Inclusive Education.

**OBJECTIVES OF THE STUDY**

The following are the objectives of the study

1. To find out the extent of Awareness on Inclusive Education among student teachers at secondary level
2. To find out the extent of Awareness on Inclusive Education among teachers at secondary level
3. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on
4. Gender
5. Locale of Institution
6. Type of Management of Institution and
7. Subject of Specialization
8. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution
   4. Subject of Specialization and
   5. Teaching Experience
9. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level.

**HYPOTHESES**

The following are the hypotheses formulated for the present study.

1. There is no significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution and
   4. Subject of Specialization
2. There is no significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution
   4. Subject of Specialization and
   5. Teaching Experience
3. There will be significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level.

**METHODOLOGY**

It deals with the description of the sample, tool and statistical techniques used for the study

**a. Sample**

The sample for the study constituted 450 teachers compraising of 300 student teachers and 150 teachers at secondary level which were selected from various training colleges and secondary schools of Malappuram and Calicut districts. **b.Tool**

The Awareness on Inclusive Education among student teachers and teachers at secondary level was measured by using ‘Awareness test on Inclusive Education’ (Mumthas&Shamina, 2010)

**c. Statistical Techniques used**

The following are the statistical techniques used for the study.

1. Preliminary analysis
2. Percentiles
3. Test of significance of difference between means for large independent samples
4. ANOVA(one-way)

**SCOPE AND LIMITATIONS OF THE STUDY**

The present study is intended to find out the extent of Awareness on Inclusive Education among student teachers and teachers at secondary level. Also this study aims to find out whether there exists significant difference in the mean scores of Awareness on Inclusive Education among student teachers and teachers in their relevant subsamples. The study also intends to test whether there exists significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level. The data were collected from a sample of 300 student teachers and 150 regular teachers at secondary level. While selecting the sample due representation was given to different strata viz., gender, locale of institution, type of management of institution and subject of specialization. The variable Awareness on Inclusive Education was measured by using the tool ‘Awareness Test on Inclusive Education’.

Even though considerable efforts have been made to make the study as successful as possible the investigator could identify certain limitations. Some of these are:-

1. For the preparation of the tool, the investigator selected only four dimensions of inclusive education viz., concept of inclusive education, understanding exceptionalities, inclusive education strategies and inclusive education policies.
2. The study was conducted on student teachers and teachers at secondary level only. Primary level and higher secondary level teachers are excluded from the study.
3. Sample selected for the study is not a state wide one. The study is confined to student teachers and teachers at secondary level of Malappuram and Calicut districts.

In spite of the above limitations the investigator hopes that the study will yield valid findings leading to scientific and objective conclusions.

**ORGANIZATION OF THE REPORT**

The report has been presented in five chapters.

**Chapter I** presents a brief introduction to the problem, its needs and significance, definition of key terms, objectives, hypotheses, methodology and scope and limitations of the study.

**Chapter II** presents the conceptual overview of the variable and review of related studies

**Chapter III** gives an account of the methodology in detail used in the present study. It contains objectives, hypotheses, variable, description of tool employed for data collection, sample for the study, data collection procedure, scoring and statistical techniques used.

**Chapter IV** describes statistical analysis of the data, summary of findings and tenability of hypotheses.

**Chapter V** presents a summary of the study, major findings, conclusion, educational implications of the studyand suggestions for further research in this area.

**REVIEW OF RELATED LITERATURE**

Review of related literature of the study is an important aspect of any investigation. It is necessary for a researcher to make a through survey of related studies before planning and carrying out of the study. A proper study of the related literature would enable the investigator to locate and go deep to the problems. Familiar with what is already known and what is still unknown and untested helps the researcher to eliminate the duplication of what has been done and provides useful hypotheses and useful suggestions for significant investigation. (Best and Khan 1999)

In order to get an insight to the theoretical background of the subject of study, related literature was thoroughly reviewed. The result of the review is summarised in this chapter. For convenience this has been attempted under two sections.

A**.** CONCEPTUAL OVERVIEW

B. REVIEW OF RELATED STUDIES

**A.** **CONCEPTUAL OVERVIEW**

The conceptual overview of the variable Awareness on Inclusive Education is presented under the following headings.

1. Concept of Inclusive Education

II Understanding Exceptionalities

III Inclusive Education Strategies

IV Inclusive Education Policies

**I. Concept of Inclusive Education**

Human beings by nature are found to possess strong reservations for those who appear to deviate or differ from them much in one or the other personality attributes no matter whether these differences fall on the negative or positive side. So from the time immemorial, the exceptional children have a long history of being intimidated, harassed, isolated and segregated from the mainstream of the society. The roots of the earlier efforts in special education in the form of placing the exceptional children in residential institutions, special schools and special classes thus may be traced and considered just as repetition and reminder of the earlier practices of isolation, segregation and separation prevalent in most of the societies for the care and education of the exceptional or disabled children.

The concept of integrated or inclusive education represents the latest trend in the provision of placement or alternative programmes suggested in the field of education to the exceptional and disabled children. It runs quite contrarily to the ideas and philosophy related to institutionalization, separation or segregation which catered to the needs of establishing institutions and special schools for the care and education of exceptional children.

A variety of terminology have been in vogue over the last three decades to call a halt for the institutionalization and segregation of exceptional or disabled students and directing the efforts for educating them with their non-disabled peers. The most often used terms are deinstitutionalisation, normalisation, least restrictive environment, integration, main streaming and inclusion.

**De- institutionalisation**

It is antithesis of the term institutionalisation and in fact it was a signal for calling a halt to the practice of institutionalising a disabled child in the name of catering and treating him for his disability. As a term it means removing the disabled person from the institutions and place them in other environments. The philosophy of de-institutionalisation was responsible for the initiation of normalisation movement.

**Normalisation**

This refers to a process or attempts for making the education and living environment of the exceptional or disabled as close to normal as possible. Normalisation, a philosophy gave birth to the concept of least restrictive environment and mainstreaming.

**Least restrictive environment**

Least restrictive environment as a term means reducing or minimizing the restrictions imposed by the environment on the learning and living of an exceptional/disabled child to the maximum extent possible.

**Integration**

Integration is a concept emerged as a philosophy in antithesis of segregation. Instead of subjecting the disabled child to a sort of segregation by putting them in separate special schools for their education, their integration (association) with the non disabled population of their peers was targeted to achieve through this new philosophy of integration.

**Mainstreaming**

Mainstreaming is the education of mildly handicapped children in the regular class room. It is based on the philosophy of equal opportunity that is implemented through individual planning to promote appropriate learning, achievement and social normalisation.

**Inclusive education – A new concept in education**

The concept of inclusive education is a world wide human right phenomenon that argues for including children with disabilities, Including learning disabilities in to regular class rooms. With in the area of education inclusive education means a philosophy of education that promotes the education of all pupils in regular schools. It implies all learners with or without disabilities being able to learn together through access to common pre-school provisions, school and community, educational setting with an appropriate net work support services. This is possible only in a flexible education system that assimilates the needs of a diverse range of learners and adapts itself to meet these needs. It aims at stake holders in the system (learners, parents community, teachers, administrators and policy makers) to be comfortable with diversity and see it as a challenge rather than a problem.

**Defining inclusive education**

Inclusion is the move towards extending the scope of ordinary school so that they can include a greater diversity of children (Clark et al 1995).

‘Inclusive education is a set of values principles and practices that seeks more effective and meaningful education for all students, regardless of whether they have exceptionality labels or not’.

(Michael F. Giangreco 1997)

‘Inclusive education implies synchronization of the educational needs of the normal children and the educational requirements of the children with special needs, so as to evolve a common curriculum with a view to provide education to all in regular schools itself. It is a flexible and individualized support system for children and young people with special educational needs. It provides an integrated component of the overall education system and is provided in regular schools committed in an appropriate education for all’.

(Uppal and Dey 2001)

**Principles of inclusive education**

The underlying principles of inclusive education are as follows.

* All children have right to learn and play together.
* Children should not be devaluated or discriminated against by being excluded or sent away because of their disability.
* There are no legitimate reasons to separate children for the duration of their schooling. They belong together rather than need to be protected from one another.
* No student is excluded from, or discriminated within education on grounds of race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, disability birth poverty or other status.
* All students can learn and benefit from education.
* Schools adapt to the needs of students, rather than students adapting to the need of the school.
* The student’s views are listened to and taken seriously.
* Individual differences between students are a source of richness and diversity, and not a problem.

**Importance of inclusive education**

Inclusive education leads to normal mental and social development. It is less expensive. It maintains the principle of equality. It leads to social acceptance and potential.The disabled become more aware about real life situations. It is also helpful for non-disabled. Non disabled come across the improved institutional technologies and can use them when they are not required by the disabled child. Students can benefit from the measured funds in the classroom. And also from the higher class room staff ratios. The peer tutoring situations can help them to get mastery over the subject matter. They have the opportunity to learn educational skills such as Braille or sign language.

**Aims of inclusive education**

The aims of inclusive education are

* To welcome with open mind everybody to school where pains and sorrows are shared with others as joy and happiness.
* To strengthen the human dignity and to remove many stereotypes from each others mind and accept the fact that nobody is perfect.
* To give an opportunity to non-disabled pupils to share with peers who are different in one way or another and to learn, to accept and respect their differences.
* To give disabled pupils the opportunity to become part of the school community and get a “realistic idea” of what a multiform and competitive society looks like as their own possibilities and limitations.
* To create ample opportunities, develop self-esteem needed for human beings to live a dignified life.

**Characteristics of an inclusive classroom**

In an inclusive classroom teaching is shared active and creative process. Students are placed in groups for the sake of diversity for some activities and because they have similar needs for other activities. Instead of students leaving the class room for special services, support and resources are brought in to the classroom for students who have special needs. Students are placed at grade levels appropriate to their ages and provided with instructions according to their needs. The curriculum is individualised. All students progress is assessed according to individualized goals and standards.

**Benefits of inclusion for children with special needs**

1. Children with disabilities demonstrate high level of social interaction with non-disabled peers in an inclusive settings compared to segregated setting. This is especially true of when there is adult support to encourage socialisation.
2. Social competence and communication skills of children with diverse abilities are improved in inclusive setting. Since the disabled peers have greater opportunities for social interaction with non-disabled peers, who act as models of children still developing age appropriate social and communicative competencies.
3. Children with disabilities in inclusive settings often have more vigorous educational program resulting in improved skill acquisition and academic gains.
4. In inclusive education children get to see beyond the disability when working in small groups and begin to realize that they have much in common for children with disabilities.
5. Children without disabilities and giftedness get benefit from improved institutional technologies in the class room. Some children with diverse abilities will require the use of technology to help them learn, such as specialized computer software or hardware to assist them in their work other children can benefit from the presence of these technologies and can use them when they are not required by the children with diverse abilities.
6. Children without disabilities or giftedness benefits from higher classroom ratios.
7. Children without disabilities or giftedness involved in peer tutoring situations can benefit from improved self-esteem and mastery of academic content.

**II. Understanding Exceptionalities**

In linguistic sense exceptionality is the quality or attribute of being exceptional. In other words one is labelled an exceptional on one or the other field or trait of one’s personality on account of the possession of some exceptionality, ie.uniqueness or being different from others in possession of that trait or quality. In its simple meaning exceptional children may be portrayed as the children in possession of an exceptionality of some positive, negative or multiple natures. On account of such exceptionality, they appear to deviate significantly from other average children of their age and grade.

It is such a deviation whether on the positive or negative side that may create adjustment and developmental problems before them in one way or the other and that is why some sort of special provisions in the shape of special education and rehabilitation measures, etc. are employed for their adequate welfare and progress.

**Defining exceptional children**

“The term ‘atypical’ or ‘exceptional’ is applied to a trait or to a person possessing the trait up to the extent of deviation from normal, possession of the trait is so great that because it the individual warrants or receives special attention from his fellows and his behaviour responses and activities are there by affected” (Crow and Crow1973)

‘The term exceptional children refer to those children who deviates from the normal in physical, mental, emotional or social characteristics to such a degree that they require special social and educational services to develop their maximum capacity’. Telford and Swarey (1977)

**Typical features or characteristics of exceptional children**

Exceptional children are quite deviant, distinct and different from the children of their age and grades including those who are termed as average or normal children. Their difference or deviation from the normal or average children is so marked and deviant that can be recognised, distinguished and separated them easily. This deviation of the exceptional children from the average children may fall on any side, positive or negative of their exceptionality. On account of such significant deviation, falling on both the sides of their exceptionality, either they excel the normal in one or the other aspects of their personality or lag behind in a dismal way. The term exceptional children is thus quite generic term that includes the exceptional who show superiority or inferiority in almost all the aspects of ones growth and development-physical, mental social, emotional, moral and behavioural etc.The extent and degree of differentiation and deviation of these children form the normal or average children is so marked that on account of their exceptionality (positive, negative or multiple) they may experience unusual or peculiar problems regarding their adjustment to their self and the environment and on account of this may require special treatment in terms of their care and education for the proper adjustment and progress in life.

**Classification of exceptional children**

a. Mentally or intellectually exceptional children

1. Mentally retarded

2. Gifted

3. Creative

b. Sensory exceptional children

1. Visually impaired or handicapped

2. Hearing impaired

c. Non-sensory physically exceptional children

1. Orthopedically impaired

d. Communicationally exceptional children

1. Children with communication disorder

e. Learning or academically exceptional children

1. Learning disabled

2. Slow learners

f. Socially and emotionally exceptional children

1. Emotionally disturbed

2. Socially handicapped

3. Socially disadvantaged

g. Multiple disabled and severely affected exceptional children

1. Children with cerebral palsy

2. Children with autism

3. Children with multiple disabilities

**a. Mentally or intellectually exceptional children**

1. Mentally retarded children

Mentally retarded, as the name suggests suffer from the retardation of the normal growth, development and functioning of their mental capacities. The term mental retardation or mental deficiency has been defined in several ways.

According to Page (1976) mental deficiency is a condition of subnormal mental developments, present at birth or early childhood and characterized mainly by limited intelligence and social inadequacy.

Tredgold (1937) defines mental deficiency is a state of incomplete mental development of such a kind and degree that the individual is capable of adapting himself to the normal environment of his fellows in such a way as to maintain an existence independently of supervision, control or external supports.

There are different curriculum approaches for various challenged children. These include

a. Developmental skill acquisition

It aims at gradual development of sequential skills.

b. Cognitive strategy approach

It aims at cognitive development of MR. Attention training is given to students and appropriate rehearsal focused on development of memory.

c. Academic basic skill approach

It emphasizes the three fundamental ie, reading, writing and arithmetic. DISTAR reading and DISTAR writing programmes are fine examples.

d. The functional survival approach

Here the students are given some specific vocational skills along with normal children by taking them in to field. It is done with the help of teachers, parents and community as well. Here purpose is to make them self depend.

e. Task Analysis

Here task is divided in to small parts and the children learnt according to their speed.

f. Multisensory approach

The more senses are used in learning, the more learning becomes stable.

2. Gifted children

“The talented or gifted child is one who shows consistent remarkable performance in any worthwhile line of endeavour”. Havinghurst (1958)

Gifted children learn rapidly and easily. Reason thing out, think clearly, recognize relationship comprehend meanings and posses the ability of making strong judgements and generalizations. They feel difficulty in confirming to the ideas and thinking of others and demonstrate ability to perform difficult mental task.

Education of the gifted, if planned and carried properly may result into the proper nourishment and utilization of giftedness or talent of children. The educational provision for gifted children include establishment of separate schools, provision of grouping or separate classes, acceleration andenrichment programs

The former two are characterised with getting them separated from other non-gifted peers. The later two are worked for providing education to gifted in the existing set-up of our school system. Acceleration advocates to provide opportunities to the children for skipping one or more grades in tune with his developed academic capabilities. Enrichment calls for the enrichment, enlarging or making richer the existing curriculum experiences and its delivery mode for providing the gifted what is required by them for meeting their special or exceptional needs.

3. Creative children

Creativity may be taken as a capacity for an individual to create, discover or produce a new or novel idea or object including the rearrangement or reshaping of what is already known to him creativity is characterised with same distinguishable characteristics like its universality, making use of creative thinking, its purposefulness and appropriateness, flexibility, sensitivity, intrinsic motivation etc.

Creativity may be stimulated through the practices like freedom to respond, opportunity for ego involvement, removal of hesitation and fear, developing healthy habits among children, teaching self responsibility, teaching children to face and learn from their mistakes, making judicious use of blame and praise, providing appropriate opportunities and atmosphere for creative expression, avoidance of block to creative thinking, proper organisation of the curriculum ,reform in the evaluation system,making use of creative resources in the society, use of special techniques like brain storming, use of gaming technique, use of creative promotion activities etc.

**b Sensory exceptional children**

Visually impaired and hearing impaired come under this category

The educationally blind are those persons whose vision is so defective that they can’t be educated by print material and can be taught only with Braille. Partially sighted children require adoption of visual materials and special methods of instruction. Multisensory approach should be used as they learn through touch and hearing. Blind needs Braille script and partially sighted should be provided large printed materials, modifying glasses and adjustable furniture. The changes like use of equipments, special skills, daily living skills and sensory training

Educationally “hearing impairment is such a disability which obstructs child in taking education by verbal expression”. Total communication approach is a curriculum approach for hearing impaired. It includes child devised gestures, speech, formal sign language, finger spelling, speech reading and writing, proper hearing devices are provided to the children. Speech training is given to them captioned videos, and films can also help the children in regular classes. Printed or written presentation should follow oral presentation.

**c. Non – sensory physically exceptional children**

Physically handicapped are those who suffer from a defect that is accompanied by one or another type of deformity that inhibits the normal exercise of his or her muscles, joints or bones. Task Analysis, computer assisted instruction ,communication skills and language, self care, vocational training, career awareness and work adjustment are sources of the curricular approaches for orthopedically impaired.

**d Communicationally exceptional children**

Communication disorders come under two wide categories viz, speech disorder and language disorders. Speech disorders interfere with one’s ability to speak. These are mainly classified as (i) articulation disorder (ii) fluency disorder (iii) voice disorders. Language disorders refer to the impairment in ones ability to under stand and/or use words in content, both verbally and non verbally.

Inclusion of speech impaired provides a good language model through communicating able peers. For language teaching in the mainstream classes the approach SCORE [ S – Situation ,C – Contrast,O – Order R – Regulation

E – Encouragement] can be used.

**e Learning or academically exceptional children**

Learning or academically exceptional children are may be learning disabled or slow learners

National commission on handicapped (U.S.A) defined that learning disabled children are those who exhibit disorder in one or more psychological functions involved in understanding and in using spoken or written language. The disorders are manifested in language, thinking, reading, writing, spelling and arithmetic. They include conditions which are referred to as per conceptual problems. Different approaches for the learning disabled are multisensory approach, self instruction training and process gaining approach.

Slow learners refer to all those children of different abilities, who by one or the other reasons, when compared to the children of their age or grade suffer from the retardation of backwardness. In terms of rate of learning and academic performance. Educational provisions for slow learners include provision of special curriculum , special coaching proper individual attention,

checking truancy and non-attendance, provision of co-curricular activities, maintenance of proper progress record and, rendering guidance service.

**f. Socially and emotionally exceptional children**

Emotionally distributed children are those children who deviate markedly and chronically from most of the children of their age and social groups in terms of their emotional make-up and behaviour seriously affecting their adjustment to their self and social surroundings.

The emotionally disturbed children require specific provisions for the treatment of behavioural problems. Various approaches or models like biogenic model, psycho analytic model, ecological model, behavioural model and environment-cum behavioural management model are suggested for helping these children.

**g. Multiple disabled and seriously affected disabled children.**

Children with multiple disabilities are those children who suffer from two or more obvious and not so obvious disabilities at a time related to one or the other areas of aspects of their growth and development.

Children with multiple disabilities need proper education for their adequate adjustment and progress in life. Attempts for the planning and organisation of education for them essentially requires the decisions about their placement, nature of curriculum and mode and methods of teaching. Necessary adaptations in the teachings learning environment and support system should be organised for meeting the individual needs of the disabled children. Special attention should be paid to the learning of essential functional skills, mobility and communication, behaviour management tasks with an eye to make them capable of functioning in the integrated set-up of the school, home and community settings including the use of sophisticated assistive technology as effectively as possible.

**III. Inclusive Education Strategies**

Inclusive education strategies refer to the different strategies and techniques to meet the diversity of children needs and abilities – including differences in their ways and pace of learning .Inclusive practices Involvescollaborative team work, a shared frame work, family involvement, regular educator ownership, clear role relationship among paraprofessionals, effective use of support staff, meaningful individualised educational plans and procedure for evaluating effectiveness.

**Collaborative instruction**

In order for inclusion to be successful, collaboration should occur at all levels including collaboration with teachers and other professionals, and with families and members of the broader school community. Collaborative organisational structures support a school climate of team work, cohesion, shared responsibility and sense of purpose. A variety of collaborative structures have emerged that support and enhance professional collaboration, including peer collaboration, collaborative consultation and co-operation teaching.

The question about how instruction might be provided effectively and flexibly to the diverse range of students in our classroom has generated a number of alternative instructional strategies. Schools can be structured competitively, individualistically or collaboratively. In competitive and individualistic structure, students typically complete with each other for better grades awarded for submitted work or performance on exams. Under this structure a limited number of students achieve high grades students tend to work independently and collaboration amongst students is not encouraged. Collaborative learning benefits students in many ways, including higher academic achievement, self esteem and peer relationship, and positive relationship between students and teachers. Collaborative instruction enables students to develop important peer relationship that contribute to social development.

Advantages of using collaborative instruction

There are many advantages of collaborative instruction and they can be summarised as

* Interactive and co-operative rather than competitive and individualistic
* Individualised learning goals and individual accountability
* Structured and positive learning in heterogeneous group
* Active participation and higher levels of engaged time compared with teacher mediated instruction.
* Improvement in self esteem and attitude towards academic tasks.
* Increased participation of all students in class room learning
* Higher academic achievement and retention
* Ideal learning content for teaching practising and reinforcing pro-social behaviours
* Increased respect for diversity

A number of collaborative instructional strategies that are simple to implement can increase a teachers effectiveness in teaching the diverse range of students in their class room co-operative learning, peer tutoring and reciprocal teaching are examples of collaborative instructional strategies that structure students interaction in heterogeneous groups, encourage mutual independence and provide for individual accountability.

**Co-operative learning**

Co-operative learning encourages collaboration through structured interaction in small groups. As the name implies it involves students in co-operation for a shared outcome. One of the goals of co-operative learning is to enhance individual student understanding and retention of whatever is being taught through group work. Another is to develop positive attitudes towards subject matter and towards learning in general.

Face to face interaction, positive group interdependence, individual accountability, emphasis on tasks, responsibility, appropriate use of interpersonal and small group skills and group processing are the characteristics of co-operative.

Strategies to enhance effectiveness of Co-operative learning group

Source of strategies to enhance the effectiveness of co-operative learning are

* Assign students to heterogeneous group
* Assign student to small groups of optional size (4-6 students)
* Decide on a group composition that will result in high level of participation and cohesiveness in the group
* Review and modify group composition regularly
* Arrange seating in a wide so that all students can see each other and no one person is seated in a position of authority.
* Select a task that students are willing to do and that is effective in engaging students in the content to be learned.
* Incorporate manipulative materials to encourage involvement and to provide a focus for group activities.
* Specify both the academic and collaborative objectives
* Establish rules for peer involvement in groups
* Determine the role assignment
* Teach students group interaction skills
* Monitor student interactions
* Practice acting in the role of facilitator
* Provide adequate spacing between group to minimize distraction
* Promote independence along with individual responsibility
* Use some form of individual and group accountability
* Provide feedback to students on both the task and the process
* Include students evaluation and reflection of group performance
* Recognize outstanding group performance

**Peer mediated instruction and interventions**

Peer mediated instruction and interventions (PMII) is the collective name to the various teaching alternatives that involve students working together to support each other’s learning. Students peer teaching roles vary from providing direct instruction and modelling (peer tutoring) to encouraging and monitoring performance. The focus of these activities is varied and can have interpersonal, cognitive as well as academic objectives and can also be combined with self management.

PMII can be used with individuals and small groups, cross age or on a class wide basis. PMII includes peer modelling, peer initiation training, peer networking and peer tutoring.

Advantages of PMII

Among the many advantages of PMII are

* Create learner-friendly instructional environment
* Increase student on-task time and response
* Reduce teacher student ratios as students are in effect the tutors for one another.
* Increase opportunities for students to receive feed back and encouragement.
* Students prefer peer-teaching instructional alternatives.

**Peer Tutoring**

Peer tutoring is a general descriptor for the classroom learning strategies involves pairs of students in teaching and learning or a one to one basis. Tutors are the students who receive the instruction or encouragement from the tutors. In cross age tutoring arrangement older students acts as a tutor for younger students.

Peer tutoring has been found to have a significant positive influence on.

1. Students academic performance
2. The social acceptance of students with disabilities and increasing interactions amongst students with disabilities and their non disabled peers.
3. Affective and social skill development for both the tutor and tutee.
4. Self efficacy and attitudes to learning
5. Organisational skills and completion of academic class work.

Advantages of peer tutoring

1. Allow students to have access to one-on-one assistance
2. Provides opportunities to learn and interact socially in mutually supportive ways.
3. Creates learning in a supportive contexts and improve self efficacy.
4. Assists others in tasks
5. Allow modelling of academic and social skills by a peer.
6. Improves attitudes about students with disabilities
7. Encourage positive social interaction
8. Provides an opportunity to experience the value of learning together and helping another.
9. Is effective with all ability levels
10. Is time efficient

**Reciprocal teaching**

Reciprocal teaching (RT) was developed as an instructional strategy to improve reading comprehension in small groups students R.T activities support students participation through the practice of specific comprehension strategies with peers. Successful implementation of R.T like all collaborative arrangements depends on careful ongoing monitoring of the learning group. The teacher should pay close attention to student interactions and individual progress and be ready to intervene when necessary. Altering group membership and providing explicit teaching or modelling may be required. It is also important for teachers to ensure that the specific academic goals are achieved.

Reciprocal Teaching Steps

Step II. Establish a foundation for R.T by reading using Reciprocal teaching in the class room

Step II Teach the whole class the four comprehension strategies, predicting, clarifying, questioning and summarising

Step III Form groups of approximately six members with a range of reading abilities and within the group from pairs of students with similar reading abilities.

Step IV Start RT groups with direct and scaffold instruction. The level of teacher directedness and the amount of scaffolding will depend upon the student’s level of skill with each of the four strategies and in working collaboration in a group.

Step V Increase R.T group independence by reducing level of teacher scaffolding and change teacher role to one of facilitator.

Step VI Introduce writing in to each R.T step.

Step VII Assess students comprehension by asking higher level comprehension questions.

**Modelled reading**

Modelled reading is an example of a pair reading, cross-age peer-tutoring program. MR has typically been used successfully with grade 5 and 6 students working with students in grades 1 through 3 or with year 10 tutors supporting readers in grades 7 or at the secondary school level. MR provides a number of structured steps that tutors are trained to implement each time they meet with their partner. The steps are designed to scaffold learning, then allowing students to read at a higher level than they would be capable of if felt entirely alone. To ensure that the readers attention is focussed on the appropriate word or woods at all times, the reader is engaged by using their finger to track, search or. MR provides a positive learning environment where tutors are trained to systematically respond with a variety of positive verbal statements about their partner efforts. Partners meet a minimum of four times per week for approximately 15 minutes.

**IV Inclusive Education Policies**

The past few decades have seen many new policies being launched by the government of India both in terms of legislation, policies and schemes in order to address the educational needs of children with disabilities. In 1974 Government of India launched the integrated education for disabled children scheme (IEDC) in 1987 the Project Integrated Education (PIED) for the disabled ,the district primary education programme (DPEP) with aims to move towards “universalisation of elementary education” and Surva Shiksha Abhiyan (SSA) in 2001 for meeting the EFA goals.

**Integrated Education for Disabled Children Scheme (IEDC)**

The objective of the integrated education for disabled children scheme (IEDC scheme) was to a)provide educational opportunities for disabled children in common schools to facilitate their retention in the school system (b) to integrate the disabled children with the general community at all levels as equal partners, and (c) to prepare them for normal growth and to face life with courage and confidence. The categories covered under the scheme are (1) orthopedically handicapped (ii) Blind and visually impaired (iii) Hearing impaired (iv) mentally retarded (educable) (v) cerebral paley.

Under the IEDC scheme the benefits extended to the disabled children for books and stationary allowance, uniform allowance, transport, escort allowance, reader allowance and actual cost of equipment subject to maximum of Rs 2000/- per child for a period of five years.

**Project Integrated Education for the Disabled**

This schemes was launched in 1987 by ministry of Human Resource Development along with UNICEF. In this scheme there lies shift in strategy (in comparison to IEDC) from school based approach to a composite area approach. Accordingly in this scheme a cluster (usually a block of population) of schools is taken as the project area. All the school in the area are expected to control children with disabilities. All the essential facilities pooled for a cluster or block, can be made available for all the included schools and disabled children in that cluster.

**District Primary Education program (DPEP)**

District primary education programme was launched, as a centrally sponsored scheme by the ministry of human resource development in 1994 in 42 disabilities of seven states for providing access to primary education to all children irrespective of their disability or non disability. This scheme has been founded jointly by the world Bank, European commission (EC) UK department of international development, government of Netherlands and UNICEF. This scheme has contributed a lot in providing a big boost to inclusive education. Through its support service, DPEP is aiming to contribute in the manner as follows.

* Catering to community mobilisation and early detection of disabilities.
* Providing in-service teacher training
* Making provision for resource support
* Making provisions for educational aids appliances
* Making provisions for the removal of architectural barriers

**Surva Shiksha Abhiyan**

Sarva Shiksha Abhiyan a project launched by the department of elementary educational and literacy of the ministry of human resources development, Government of India has exclusive provisions for inclusive Education to all children with special needs (including disabled) for achieving its target of universalisation of elementary education in the age group of 6-14 years by 2010. In this project as a policy matter it has been assumed that the educational requirements of the children with special needs can be met by providing adequate resource support to them in regular schools, and giving them an opportunity to receive education in the most appropriate environment, i.e., inclusive set up of the regular schools. This project is founded by the Government of India and centrally administered through the Department of Elementary Education and Literacy of the Ministry of Human Resource Development. For its implementation it is going to take the help of the relevant central mysteries, Government of states and union territories, central and state level institutes and organisations, non governmental agencies and organisations working in the field of spreading elementary education, literacy and engaging in the field of providing education and training to the disabled children and special education teachers and professionals.

The constitution of India ensures equality, freedom, justice and dignity of all individuals and mandates in inclusive society including persons with disabilities. India is a signatory to the declaration on the full participation and equality of people with disabilities in the Asia pacific region and Biwako millennium frame work for action towards an inclusive, barrier free and rights based society. A national policy for persons with disabilities has also been framed in 2006 – We have a comprehensive national action plan for the Education of children and youth with disabilities in place since 2006. Inclusive Education of the Disabled at the Secondary Stage (IEDSS) has been launched in January 2009; as also universalization of secondary Education is the mandate of Government of India. Further the eleventh five year plan of India (Go I 2008) has marked “Inclusive Growth” as its focus and has earmarked substantial financial provisions to make this inclusion a reality.

**REVIEW OF RELATED STUDIES**

Skrtic (1991) analysed why regular schools are not able to meet the demands of the disabled and the disadvantaged. Findings reveal that formalised structure and standardised curriculum reduces professional thought and discretion of teachers to personalise the programmes to match the children’s need.

Affleck et al (1998) conducted a study on children with learning disabilities in regular classroom. In this study reading maths language achievement data of elementary students with learning disabilities compared between resource programme and inclusive class room. They compared the performance of students without learning disabilities placed in integrated and main stream education programs. There is no significant difference in the performance of these two groups. The researcher suggested that normally achieving students are not adversely affected by being placed among students with learning disabilities. Even though they didn’t find much of a difference in the academic progress of students with learning disabilities they did find to seen a change come to their social behaviour. They concluded that inclusive class room provide better opportunities for special education students to blind in socially with their peers and gradually improve their skills.

Ainscow (1999) studied different perspectives on inclusive education on the basis of understanding of ‘educational difficulties’ First, educational difficulties within the child. Second it might be construed as due to a ‘mismatch’ between the characteristics of a child and the organisational and curricular arrangements available in a school. Third, the difficulties could also be on account of the limitations of the curriculum referred to in a broader sense to include all the planned and unplanned experiences offered by schools.

Hedge and Mithell (2007) conducted a study on belief and practices of inclusive pre-school teachers in inclusive settings. This study examined the belief of in-service teaches working in inclusive classrooms regarding developmentally appropriate practices and how those beliefs affected their attitude towards knowledge of, and comfort level regarding working with children with disabilities. The study also examined whether education or experience level had an influence on teachers perception regarding inclusive practices. Results of the study indicated that there is no significant relationship between in-service teachers belief regarding developmentally appropriate practices and their attitude towards knowledge of and comfort level regarding inclusion. Teachers level of education or experience do not necessarily indicate that they are prepared to meet the needs of the inclusive classroom environment.

Azad (2008) studied the attitude of head of schools, special teachers, pre-primary general teachers and primary level general teachers regarding inclusion of SEN and inclusive system education. Majority of people have positive attitude yet some have negative opinions. Out of 232 participants who responded to it were 52 of school teachers, 42 special teachers if primary teachers and 122 primary level general teachers – 91 percent showed positive attitude, six percent negative attitude and only three percent would not say anything about good or bad qualities of inclusive education program.

Cardona (2009) investigated current Spanish student teachers beliefs of the inclusion of students with disabilities and perceived competence to teach them in inclusive class rooms. Results indicated that the majority of respondents agreed with the philosophy of inclusive education, but feel slightly competent to teach and manage their behaviour in inclusive settings compared with the respondents perceived competence of in-service regular and special education teachers.

Horn and Timmons (2009) in a qualitative study investigated teachers perception on the impact of inclusion of children with special needs. Findings revealed that some of the teachers primary concerns were planning strategies and on going professional development to respond effectively to the increasingly diverse need of students in the class rooms.

Narkon et al. (2009) in a study examined pre-service teacher belief about how to teach reading to students with learning disabilities and whether there exists conceptual difference in teachers belief in teaching these two groups of students. Results showed that pre-service teacher instructional and conceptual belief differed between students with and without learning disabilities. The analysis resulted in the identification of factors that believed to aid and impede reading progress for students with and without learning disabilities.

In a study Symenidou and Phatiake (2009) examined one important dimension of inclusive education the development of in-service teacher education program in Cypress. It discusses the issue contextualising teacher training course to teacher’s prior knowledge attitudes and belief about inclusion. Findings revealed that teachers tend to think on the basis of medical and charity model and they favour special schooling for specific group of children.

Thankam(2009) conducted a study on influence of teachers awareness on their attitude towards inclusion of pupil with learning differences. The findings revealed that teacher trainees differ in their awareness towards inclusion of pupil with learning differences,but their attitude do not differ significantly.The result revealed that there is significant effect on attitude by awareness for total sample.Teacher and teacher trainees attitude depends on their awareness.

Michael et al. (2010) conducted a study on pre-service teacher preparation for inclusion. An exploration of higher education teacher training institutions. Study obtained information about pre-service teacher preparation for inclusive class room from a national sample of faculty member in special education; elementary and secondary education and curriculum and instruction at teacher education institution. Results indicated a high level of agreement among respondents regarding training and program effectiveness. The study identified issues with current polices, program co-ordination or collaboration efforts and training needed for pre-service educators.

**CONCLUSION**

In this chapter the investigator has tried to give a brief account of concept of inclusive education and related studies. Review of related studies reveals that sufficient number of studies was conducted on different dimensions of inclusive education like attitude, skill, perception etc. But it shows a lack of studies related to the Awareness on Inclusive Education. As our government in the path of implementing inclusive education, at first the teachers should have adequate awareness on this concept.

Considering this the investigator decided to study the extent of Awareness on Inclusive Education among student teachers and teachers at secondary level. The investigator hopes that the study will prove useful results.

**METHODOLOGY**

Methodology is the procedure or technique adopted in research study. The success of any research work largely depends upon the availability of the methods and tools and techniques the researcher follows to gather data. Hence methodology is of vital importance in any research work.

The present study is an attempt to find out the extent of Awareness on Inclusive Education among student teachers and teachers at secondary level. This chapter contains the description of the methodology adopted and it describes the design of the study under the following heads.

1. VARIABLE
2. OBJECTIVES
3. HYPOTHESES
4. TOOL USED FOR DATA COLLECTION
5. SAMPLE FOR THE STUDY
6. DATA COLLECTION PROCEDURE, SCORING AND CONSOLIDATION OF DATA
7. STATISTICAL TECHNIQUES USED

**A. VARIABLE**

The only variable that is measured and analysed in the present study is Awareness on Inclusive Education.

**B. OBJECTIVES**

The objectives of the study are the following.

1. To find out the extent of Awareness on Inclusive Education among student teachers at secondary level.
2. To find out the extent of Awareness on Inclusive Education among teachers at secondary level.
3. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution and
   4. Subject of Specialisation
4. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on.

a. Gender

b. Locale of Institution

c. Type of Management of Institution

d. Subject of Specialisation and

e Teaching Experience

5 To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level.

**C. HYPOTHESES**

The following are the hypotheses formulated for the present study.

1. There is no significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution and
   4. Subject of Specialization
2. There is no significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution
   4. Subject of Specialization and
   5. Teaching Experience
3. There will be significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level.

**D. TOOL USED FOR DATA COLLECTION**

Collection of relevant data is an important aspect of any research work. Selection of a valid and reliable tool for data collection necessitates utmost care from the part of the researcher.

For the present study, the investigator developed a tool viz., “Awareness Test on Inclusive Education” (2010) in collaboration with the supervising teacher.

**Awareness Test on Inclusive Education**

The tool Awareness Test on Inclusive Education (2010) is constructed by the investigator with the help of supervising teacher. The procedure followed in the construction of the test is described below.

**Planning of the test**

Before preparing the test the investigator went through the literature relating to inclusion and learning disabilities. The test is constructed on the basis that every teachers and teacher trainees should familiar or aware about the concept inclusive education and their role in an inclusive classroom. Discussion with teachers, experts and review of related literature helped the investigator to identify the dimensions to be included in the test. The dimensions selected for the construction of the test are;

1. Concept of Inclusive Education
2. Understanding Exceptionalities
3. Inclusive Education Strategies and
4. Policies on Inclusive Education

**a. Concept of Inclusive Education**

The concept inclusive education is a world wide human right phenomenon that argues for including children with disabilities, including learning disabilities, in to regular class rooms. With in the area of education, inclusive education means a philosophy of education that promotes the education of all pupils in regular schools. Inclusive education is a flexible and individualised support system and is provided in regular schools, committed to an appropriate education for all. Inclusive education recognises and responds to the diversity of the children’s needs and abilities-including difference in their ways and pace of learning. Under this dimension there are 12 items.

Eg:

The term inclusion refers to

1. School fitting around the child
2. Child fitting around the school
3. Separate schools for disabled children
4. Segregation of exceptional children from normal stream.

**b. Understanding Exceptionalities**

Exceptional children are those who deviate significantly from normal ones. “The term exceptional children refers to the children who deviate from normal in physical, mental, emotional or social characteristics to such a degree that they require special social and emotional services to develop their maximum capacity” (Telford and Sawrey 1977)

The term ‘exceptional children’ covers a wide range. The children who are known as backward, mentally retarded, gifted, creative, physically handicapped socially handicapped or delinquents and emotionally maladjusted – all belong to the general class of exceptional children. There are 12 items under this dimension.

Eg;-

A gifted child is one with

1. limited cognitive ability
2. poor abstraction
3. consistent remarkable performance in any worth while line of endeavour.
4. None of these

**c. Inclusive Education Strategies**

Inclusive education strategies refer to the different strategies and techniques to meet the diversity of children’s needs and abilities – including difference in their ways and pace of learning. Inclusive education practice involves collaborative team work, clear role relationship among professionals, meaningful individualised educational plans etc. Collaborative instruction to promote inclusion includes collaborative organisational structures, co-operative learning strategies, instruction and interventions through peer-tutoring and reciprocal teaching activities. 11 items were included under this dimension.

Eg;-

Which of the following strategy is more effective for learning disabled children in an inclusive classroom?

1. Lecture method
2. Discussion method
3. Heuristic method
4. Peer tutoring

**d. Inclusive Education Policies**

Under this dimension items related to policies or acts taken by government for effective implementation of inclusive education were included. The constitution of India ensures equality, freedom, justice and dignity of all individuals and mandates an inclusive society including persons with disabilities. The past few decades have seen many new initiatives being launched by the Government of India both in terms of legislations, policies and schemes in order to address the educational needs of children with disabilities. In 1974, Government of India launched the Integrated Education for Disabled Children Scheme (IEDC), in 1988, The Project Integrated Education for the Disabled (PIED), District Primary Education Program (DPEP) with aims to move towards “Universalisation of Elementary Education”and Surva Shiksha Abhiyan (SSA) in 2001 for meeting the EFA (Education for all) Goals.

Eg:

In which year did Project Integrated Education for Disabled (PIED) was launched?

1. 1987
2. 1988
3. 1986
4. 1980

**Preparation of the test**

Based upon the above mentioned dimensions the investigator developed the test ‘Awareness Test on Inclusive Education’. The test consists of 40 multiple choice test items with four options.

Details regarding items under each dimensions of Awareness test on Inclusive Education are given in Table 1.

**TABLE 1**

**Items under each**

**Dimension of Awareness Test on Inclusive Education**

|  |  |
| --- | --- |
| **Dimensions** | **Item Number** |
| Concept of Inclusive Education | 1, 9, 11, 12, 17, 20, 30, 34, 35, 37, 39 |
| Understanding Exceptionalities | 2, 3, 8, 13, 15, 18, 19, 23, 24, 28, 33, 40 |
| Inclusive Education Strategies | 4, 6, 7, 14, 16, 21, 22, 25, 29, 32, 38 |
| Inclusive Education Policies | 5, 10, 26, 31, 36 |

**Scoring procedure**

Since the test is a multiple choice one, one mark is given for right option and zero for incorrect option. Thus the maximum score in the test is 40.

**Finalization of the test**

The present test being an awareness test all the forty items which were scrutinized by the experts are included in the final test. Hence the final test contains 40 multiple choice test items.

A copy of Awareness Test on Inclusive Education (English Version) is given as Appendix I

**Reliability**

Reliability of the test is its ability to yield consistent results from one set measure to another. According to Best (1996) ‘Reliability is the degree of consistency that the instrument or procedure demonstrates; what ever it is measuring it does so consistently’. The reliability of the present test was found out by test-retest method. The test was administered to a group of 20 secondary school teachers and again repeated in the same group of teachers by giving an interval of three weeks. The scores obtained for the first test was correlated with the scores of the retest. The reliability co-efficient was found to be 0.72 which indicates that the test in reliable.

**Validity**

Validity is that quality of a data gathering instrument or procedure that enables it to measure what it is supposed to measure (Best and Khan 1993). The validity of the present test was ensured by using face validity, content validity and concurrent validity.

A test is said to have face validity when it appears to measure whatever the author had in mind namely what he thought he was measuring (Garret 1993). To ensure face validity the investigator consulted experts during the development of the test and the test was given to the experts for the approval of items and the experts approved the test as an appropriate tool for measuring Awareness on Inclusive Education. This ensured face validity.

“Content validity refers to the degree to which the test actually measures or is specifically related to the traits for which it was designed”. ‘Content validity is based upon careful examination of course, text books,syllabi, objectives and the judgement of subject matter specialists (Best and Khan 2001). In the present study validity of the tool was established by comparing the dimensions of the test with the theoretical dimensions of the content inclusive education. Thus content validity of the tool was ensured.

Concurrent validity of the test was determined by using the scores obtained on tool viz., Awareness Test on Learning Differences developed by Usha and Thankam (2009) as the external criterion. Awareness test on Learning Differences was administered to 20 secondary school teachers. The scores of the present test were correlated with scores of Awareness Test on Learning Differences. The correlation co-efficient was found to be 0.70 which show that the present test is a valid one.

**E. SAMPLE FOR THE STUDY**

Selection of the sample is an important aspect of any research work. A sample is a small proportion of a population selected for observation and analysis, by observing the characteristics of the sample one can make certain inferences about the population from which it is drawn. (Best and Khan 2002)

The sample for the study constituted 450 teachers compraising of 300 student teachers and 150 teachers at secondary level which were selected from training colleges and secondary schools of Malappuram and Calicut districts. The samples were selected under stratified sampling technique by giving due representation to the factors like gender, locale of institution, type of management of institution and subject of specialisation.

**a. Gender**

The gender has great influence on findings of research, In many studies it has been found that sex difference exists in many of the variables. So the investigator decided to give due representation to the male and female subsamples

**b. Locale of Institution**

Sincethe number of training colleges and secondary schools in rural areas are more than the number of training colleges and secondary schools in urban area, the investigator decided to give due weightage to the respective areas.

**c. Type of Management of Institution**

The existing schools in Kerala fall in to two broad categories as government and aided schools, which are managed by private agencies with government aid. Since there are more private aided schools than government schools it was decided to give more weightage to private aided schools.

There are government, aided and unaided institutions conducting B.Ed courses under Calicut University. The investigator felt that nature and strata of the students who get admitted to these institutions are different, owing to different admission criteria followed in these institutions. Hence the investigator gave due weightage to all these categories.

**d. Subject of Specialisation**

While selecting secondary school teachers due representation was given to the teachers those who are handling language, science and social science subjects. In the case of student teachers due representation was given to their optional subjects. (Language, Science, Social Science, Commerce)

**e. Teaching Experience**

In our educational system teachers differ in their teaching experience. The investigator has adopted the criterion for classifying the teachers at secondary level in to three categories based on their period of teaching experience in the institution viz., teachers with low (0-2years), medium (2-10 years) and high (more than 10 years) teaching experience.

**Techniques of Sampling**

As the study requires representation of samples from different strata like gender, type of management of institution, subject of specialisation and locale of institution the investigator followed stratified sampling technique to select sample for the study.

Details of the schools and training colleges selected for data collection in given as Appendix II.

The break up of the sample is as follows

**Break up of the Sample**

Total Sample (450)

Student Teachers

(300)

Teachers

(150)

Male Female

(62) (238)

Male Female

(67) (83)

Rural Urban

(165) (135)

Government Aided Unaided

(32) (36) (232)

Government Aided

(62) (88)

Language (107)

Science / Social Science / Commerce

(123) (56) (14)

Language (50)

Science / Social Science

(60) (40)

Teaching experience

Low / Medium / High

29 91 30

Rural Urban

(99) (51)

**F. DATA COLLECTION PROCEDURE, SCORING AND CONSOLIDATION OF DATA**

In order to find the data for the present study, the investigator approached the intended sample. The investigator met respective authorities and explained the purpose of visit. The need and significance of the study and objectives of the study were explained to the sample. Necessary instructions were given to the subjects to fill the tool with in fixed time duration.

**Scoring and Consolidation of Data**

Before scoring, incomplete response sheets were rejected. All the response sheets which were complete in all aspects were scored according to the respective test manuals and divisions for scoring. All the scored answer sheets were used for consolidation and tabulation of the data.

**G. STATISTICAL TECHNIQUES USED**

After the data has been collected it must be processed and analysed to draw proper inferences. In order to find out the answer to the objectives specified the following techniques were used.

1. Preliminary analysis
2. Percentiles
3. Test of significance of difference between means for large independent samples.
4. ANOVA(one-way)
5. **Preliminary Analysis**

Preliminary statistics like arithmetic mean, median, mode, standard deviation skewness and kurtosis of the selected variable were calculated in order to arrive at conclusions about the nature of distribution

**2. Percentiles**

The percentiles for the subgroups were calculated using the formula

 (Garret, 1981)

Where

P = Percentage of the distribution wanted

l = Exact lower limit of the class interval upon which Pp lies

pN = Part of N to be counted off in order to reach Pp

F = Sum of all scores upon the intervals below l

fp = Number of scores with in the interval upon which Pp falls

i = Length of the class interval

**3.** **Test of Significance of Difference between Means for Large** **Independent Samples (Best and Khan 2002)**

Test of significance of difference between means for the scores of the variable for the two selected sample were done using the formula.

Critical ratio t = 

Where,

 = Mean of the first group

 = Mean of the second group

 = Square of standard deviation of first group.

 = Square of standard deviation of second group.

N1 = Size of the first group

N2  = Size of the second group

If the obtained critical ratio is greater than the required table value at 0.05/0.01 levels of significance, the mean difference is considered to be significant.

**4. ANOVA (one-way)**

Analysis of variance (ANOVA) has been defined as “the separation of the variation ascribable to other groups” (Fisher 1950). In its simplest form the analysis of variance is used to test the significance of the differences between the means of a number of different populations. It is an effective way to determine whether the means of more than two samples are too different to attribute a sampling error.ANOVA is an inferential statistical procedure by which a researcher can test the null hypotheses that two or more variance estimate is computed, and this ratio has as its sampling distribution, the F distribution, determined by two degrees of freedom values. ANOVA can include one or more independent variables. If only one independent variable is included in an ANOVA the analysis is called one- way ANOVA.

For the present study the investigator has computed the analysis of variance (ANOVA) to determine whether the mean scores of Awareness on Inclusive Education differ significantly.

**ANALYSIS**

This chapter deals with the analysis and interpretation of the data described in the methodology chapter. The present study is intended to find out the extent of Awareness on Inclusive Education among student teachers and teachers at secondary level on the basis of gender, locale, type of management of institution, subject of specialisation and teaching experience of secondary school teachers. The analysis is based on the following hypotheses

1. There is no significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on

1. Gender
2. Locale of Institution
3. Type of Management of Institution and
4. Subject of Specialization

2. There is no significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on

1. Gender
2. Locale of Institution
3. Type of Management of Institution
4. Subject of Specialization and
5. Teaching Experience

3. There will be significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level.

The analysis of data has been presented in the following sections

A. EXTENT OF AWARENESS ON INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AT SECONDARY LEVEL.

B. EXTENT OF AWARENESS ON INCLUSIVE EDUCATION AMONG TEACHERS AT SECONDARY LEVEL.

C. COMPARISON OF MEAN SCORES OF AWARENESS ON INCLUSIVE EDUCATION AMONG RELEVANT SUBSAMPLES OF STUDENT TEACHERS AT SECONDARY LEVEL.

D. COMPARISON OF MEAN SCORES OF AWARENESS ON INCLUSIVE EDUCATION AMONG RELEVANT SUBSAMPLES OF TEACHERS AT SECONDARY LEVEL.

E. COMPARISON OF MEAN SCORES OF AWARENESS ON INCLUSIVE EDUCATION BETWEEN STUDENT TEACHERS AND TEACHERS AT SECONDARY LEVEL

**A. EXTENT OF AWARENESS ON INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AT SECONDARY LEVEL**

To see whether the variable Awareness on Inclusive Education among student teachers is normally distributed or not, important descriptive statistical constants like mean, median, mode, standard deviation skewness and kurtosis were computed for the total sample. The details of the statistics are presented in Table. 2.

**TABLE.2**

**Descriptive Statistics of the Variable**

**Awareness on Inclusive Education among Student Teachers**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sample size | Mean | Median | Mode | S.D | Skewness | Kurtosis |
| 300 | 20.10 | 20.00 | 15.00 | 4.73 | - 0.18 | - 0.01 |

Table 2 reveals that three measures of central tendency viz., mean, median and mode of the variable Awareness on Inclusive Education among student teachers are almost equal. The extent of skewness or index of asymmetry is – 0.18. This shows that the distribution is slightly negatively skewed. The measure of kurtosis is – 0.01 which shows that the curve is lepto kurtic (Ku = ∠0.263).

Graphical representation of the scores of the variable Awareness on Inclusive Education among student teachers at secondary level is presented in Figure 1.



FIGURE 1: Frequency curve of the scores of Awareness on Inclusive Education among student teachers at secondary level

The statistical constants and graphical representation of the variable Awareness on Inclusive Education among student teachers at secondary level follow approximately a normal distribution.

The extent of Awareness on Inclusive Education in the total sample was established by calculating the mean score and percentile. The mean score and percentiles of Awareness on Inclusive Education among student teachers in the total sample is presented in Table 3.

**TABLE 3**

**Mean and Percentile Scores of Awareness on**

**Inclusive Education among Student Teachers in the Total Sample**

|  |  |  |
| --- | --- | --- |
| Mean | Percentile | Score |
| Mean=20.10 | P90 | 28.00 |
| P80 | 27.00 |
| P70 | 25.00 |
| P60 | 23.00 |
| P50 | 21.00 |
| P40 | 19.00 |
| P30 | 17.00 |
| P20 | 14.00 |
| P10 | 12.00 |

Table 3 shows that the mean score of Awareness on Inclusive Education among student teachers in the total sample is 20.10.Table 3 also reveals percentile scores for the total sample. For total sample the 10th percentile of the scores of Awareness on Inclusive Education among student teachers is 12.00.It means that only 10 percent of student teachers lie below the score12.00 and 90percent of student teachers lie above that score. Similarly we can interpret all other percentiles for the total sample from Table 3.

**B. EXTENT OF AWARENESS ON INCLUSIVE EDUCATION AMONG TEACHERS AT SECONDARY LEVEL**

To see whether the variable Awareness on Inclusive Education among teachers is normally distributed or not, important descriptive statistical constants like mean, median, mode, standard deviation skewness and kurtosis were computed for the total sample. The details of the statistics are presented in Table 4

**TABLE 4**

**Descriptive Statistics of the Variable Awareness**

**on Inclusive Education among Teachers at Secondary Level**.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sample size | Mean | Median | Mode | S.D | Skewness | Kurtosis |
| 150 | 20.78 | 20.00 | 22.00 | 6.18 | 0.33 | -0.22 |

Table 4 reveals that three measures of central tendency viz, mean, median, mode of the variable awareness on inclusive education among teachers at secondary level are almost equal. The extent of skewness or asymmetry in 0.33 which shows that the distribution is positively skewed. The measure of kurtosis is -0.22 which shows that the curve is leptokurtic (KU<0.263)

Graphical representation of the scores of the variable Awareness on Inclusive Education among teachers at secondary level is presented in Figure 2.



FIGURE 2: Frequency curve of the scores of Awareness on Inclusive Education among teachers at secondary level

The statistical constants and graphical representation of the variable Awareness on Inclusive Education among teachers at secondary level follow approximately a normal distribution.

The extent of Awareness on Inclusive Education in the total sample was established by calculating the mean score and percentiles. The mean score and percentiles of Awareness on Inclusive Education among student teachers in the total sample are presented in Table 5

**TABLE 5**

**Mean and Percentile Scores of Awareness**

**on Inclusive Education among Teachers in the Total Sample**

|  |  |  |
| --- | --- | --- |
| Mean | Percentile | Score |
| Mean=20.78 | P90 | 30.00 |
| P80 | 28.00 |
| P70 | 25.00 |
| P60 | 23.00 |
| P50 | 20.00 |
| P40 | 19.00 |
| P30 | 16.00 |
| P20 | 14.00 |
| P10 | 12.00 |

Table 5 shows that the mean score of Awareness on Inclusive Education among teachers in the total sample is 20.78.Table 5 also reveals percentile scores for the total sample. For total sample the 10th percentile of the scores of Awareness on Inclusive Education among teachers is 12.00. It means that only 10 percent of teachers lie below the score12.00 and 90 percent of teachers lie above that score. Similarly we can interpret all other percentiles for the total sample from Table 5.

**C. COMPARISON OF MEAN SCORES OF AWARENESS ON INCLUSIVE EDUCATION AMONG RELEVANT SUBSAMPLES OF STUDENT TEACHERS AT SECONDARY** **LEVEL**

The comparisons of mean scores of Awareness on Inclusive Education among relevant subsamples of student teachers are discussed under the following headings.

* 1. Group Difference of Awareness on Inclusive Education between Student Teachers based on Gender.
  2. Group Difference of Awareness on Inclusive Education between Student Teachers based on Locale of Institution.
  3. Group Difference of Awareness on Inclusive Education between Student Teachers based on Type of Management of Institution.
  4. Group Difference of Awareness on Inclusive Education among Student Teachers based on Subject of Specialization.

**a. Group Difference of Awareness on Inclusive Education between Student Teachers Based on Gender.**

The group difference of the variable Awareness on Inclusive Education among student teachers based on gender was found out using the t- test of significance of difference between means for large independent samples . The result of the test is given in Table 6.

**TABLE 6**

**Result of Test of Significance**

**of Difference between Means of Awareness on**

**Inclusive Education among Student Teachers Based on Gender**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Gender | N | Mean | S.D | T value |
| Awareness on Inclusive Education | Male | 62 | 19.96 | 4.10 | -0.24 |
| Female | 238 | 20.13 | 4.89 |

From Table 6 it can be seen that there exists no significant difference in the mean scores of Awareness on Inclusive Education between male and female samples, as the critical ratio obtained is -0.24 is less than the tabled value required for significance at 0.05 level. The negative value of critical ratio indicates that female group has higher Awareness on Inclusive Education than the male group.

**b. Group Difference of Awareness on Inclusive Education between Student Teachers Based on Locale of Institution**

The scores of Awareness on Inclusive Education obtained for rural and urban student teachers were compared using the test of significance of difference between means for large independent samples. The result of the test is given in Table 7.

**TABLE 7**

**Result of Test of Significance of Difference**

**between Means of Awareness on Inclusive Education**

**among Student Teachers based on Locale of Institution**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Locality | Number | Mean | Standard Deviation | t Value |
| Awareness on Inclusive Education | Rural | 165 | 19.79 | 5.23 | -1.24 |
| Urban | 135 | 20.47 | 4.03 |

From Table 7 it is evident that the critical ratio obtained is -1.24, is less than the tabled value of t required for significance at 0.05 level. It indicates that the mean scores of Awareness on Inclusive Education among student teachers based on locale of institution is not significant. An estimation of mean scores obtained for rural and urban student teachers reveals that urban student teachers have higher Awareness on Inclusive Education than rural student teachers.

**c. Group Difference of Awareness on Inclusive Education between Student Teachers based on Type of Management of Institution**

Since the Subsamples based on type of management of institution consists of three sub groups viz., government, aided and unaided institutions, the investigator followed one- way ANOVA for locating the group difference. The result of analysis of variance of Awareness on Inclusive Education among the sub samples based on type of management of institution is given in Table 8

**TABLE 8**

**Data and Result of Analysis of**

**Variance of Awareness on Inclusive Education**

**among Student Teachers based on Type of Management of Institution**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source of variation | Sum of squares | df | Mean square | F Value |
| Between groups | 24.37 | 2 | 12.19 | 0.54 |
| With in groups | 6690.62 | 297 | 22.52 |
| Total | 6715.00 | 299 |  |

Table 8 suggest that the F value obtained for analysis of variance among government aided and unaided student teachers at secondary level is 0.54 which is less than 4.71, the tabled value of F for (2,297) degrees of freedom at 0.05 level of significance. Hence there exists no significant difference in the mean scores of Awareness on Inclusive Education among student teachers under government, aided and unaided institutions.

1. **Group Difference of Awareness on Inclusive Education among Student Teachers based on Subject of Specialisation**

Analysis of variance of Awareness on Inclusive Education among student teachers based on subject of specialisation was calculated to determine whether the sample means differ from one another to a greater extent than the test scores differ from their own sample means. The subsamples consist of four subgroups viz., language, social studies, science and commerce.

The result of analysis of variance of Awareness on Inclusive Education among student teachers based on subject of specialisation is given in table 9.

**TABLE 9**

**Data and Result of Analysis of Variance**

**of Awareness on Inclusive Education among**

**Student Teachers Based on Subject of Specialization**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source of Variation | sum of squares | df | mean square | F |
| between group | 212.92 | 3 | 70.97 | 3.23\* |
| With in group | 6502.67 | 296 | 21.97 |
| total | 6715.00 | 299 |  |

\*indicates P<0.05

Table 9 shows that the F value obtained for the effect of subject of specialisation is 3.23, which is greater than 2.65, the tabled value of F for (3,296) degrees of freedom at 0.05 level of significance. Hence there is significant difference in the mean scores of Awareness on Inclusive Education among student teachers based on subject of specialisation.

Since the main effect of subject of specialisation on Awareness on Inclusive Education among student teachers is found to be significant, the investigator tested pair wise group difference by means of t test. The data and result are presented in Table 10

**TABLE 10**

**Result of Test of Significance of Difference Between Means of**

**Awareness on Inclusive Education Based on Subject of Specialisation**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subject | Number | Mean | Standard Deviation | t Value |
| Science  Language | 123  107 | 21.09  19.33 | 4.33  5.09 | 2.83\*\* |
| Science  Commerce | 123  14 | 21.09  20.00 | 4.33  4.24 | 0.91 |
| Science  Social Science | 123  56 | 21.09  19.39 | 4.33  4.71 | 2..32\* |
| Language  Commerce | 107  14 | 19.33  20.00 | 5.09  4.24 | 0.49 |
| Social Science  Commerce | 56  14 | 19.39  20.00 | 4.71  4.21 | 0.47 |
| Social science  Language | 123  14 | 19.39  19.33 | 4.71  5.09 | 0.09 |
| \* indicate P<0.05  \*\* indicate P<0.01 | |  | | |

Table 10 reveals that the critical ratio obtained for test of significance of difference between mean scores of science and language student teacher is 2.83 which is greater than 2.58, the tabled value of t required for significance of 0.01 level. This indicates science and language student teachers differ significantly in their Awareness on Inclusive Education. The estimation of mean scores of Awareness on Inclusive Education for science and language student teachers show that student teachers specialising in science (21.09) have higher Awareness on Inclusive Education than that of student teacher specializing in language (19.33)

Table 10 also reveals that the critical ratio obtained for the test of significance of difference between mean scores of science and commerce teachers is 0.91 which is less than 1.96, the tabled value of t required for significance at 0.05 level. This indicates that science student teachers and commerce student teachers do not differ significantly in their Awareness on Inclusive Education.

From table 10 it can be seen that the critical ratio obtained for the test of significance of difference between the mean scores of Awareness on Inclusive Education of science and social studies student teachers is 2.32 which is greater than 1.96 the tabled value of t required for significance at 0.05 level. This indicates science and social science student teachers differ significantly in their Awareness on Inclusive Education. An estimation of mean scores obtained for science and social science student teachers reveal that science student teachers have higher awareness than social science student teachers.

From Table 10 the critical ratio obtained for test of significance of difference between mean scores of Awareness on Inclusive Education of student teachers of language and commerce is 0.49, which is less than 1.96, the tabled value of t required for significance at 0.05 level. This indicates that student teachers of language and commerce do not differ significantly in their Awareness on Inclusive Education.

The critical ratio obtained for the test of significance of difference between mean scores of Awareness on Inclusive Education of social science and commerce student teachers is 0.47, which is less than 1.96 the tabled value of t required for significance at 0.05 level. This indicates that student teachers of social science and commerce do not differ significantly in their Awareness on Inclusive Education.

Table 10 also reveals that the critical ratio obtained for the test of significance of difference between mean scores of social science and language teachers is 0.09 which is less than 1.96, the tabled value of t required for significance at 0.05 level. This indicates that social science student teachers and language student teachers do not differ significantly in their Awareness on Inclusive Education.

**D. COMPARISON OF AWARENESS ON INCLUSIVE EDUCATION AMONG RELEVANT SUBSAMPLES OF TEACHERS AT SECONDARY LEVEL**

The comparison of Awareness on Inclusive Education among teachers at secondary level was discussed under the following headings.

a) Group difference of Awareness on Inclusive Education among secondary school teachers based on gender

b) Group difference of Awareness on Inclusive Education among secondary school teachers based on locale of institution

c) Group difference of Awareness on Inclusive Education among secondary school teachers based on type of management of institution.

d) Group difference of Awareness on Inclusive Education among secondary school teachers based on subject of specialization.

e) Group difference of Awareness on Inclusive Education among secondary school teachers based on teaching experience.

**a) Group difference of Awareness on Inclusive Education among Secondary School Teachers based on Gender**.

The group difference of variable Awareness on Inclusive Education among teachers at secondary level based on gender was found out using t test. The data and result of the test is given in Table.11

**TABLE 11**

**Result of Test Significance of Difference**

**between Means of Awareness on Inclusive Education**

**among Teachers at Secondary Level based on Gender**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Gender | N | Mean | SD | t value |
| Awareness on Inclusive Education | Male | 67 | 21.11 | 6.25 | 0.60 |
| Female | 83 | 20.51 | 6.12 |

Table 11 reveals that the critical ratio obtained is 0.60 which is less than 1.96 the tabled value of t required for significance at 0.05 level. Hence the difference between the mean scores of Awareness on Inclusive Education of male and female secondary school teachers is not significant even at 0.05 level. An estimation of the mean scores obtained for the male and female shows that male teachers have more awareness than female teachers

**b) Group Difference of Awareness on Inclusive Education among Secondary School Teachers based on Locale of Institution**.

The group difference of Awareness on Inclusive Education among teachers at secondary level based on locale of institution was found out using test of significance of difference between means. The result of the test is given in Table 12

**TABLE 12**

**Result of the Test of Significance of Difference   
between Means of Awareness on Inclusive Education**

**among Secondary School Teachers based on Locale of Institution**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Locality | N | Mean | SD | t value |
| Awareness on Inclusive Education | Rural | 99 | 20.58 | 6.53 | 0.53 |
| Urban | 51 | 21.16 | 5.48 |

From table 13 it can be found that there is no significant difference in the mean scores of Awareness on Inclusive Education between the rural and urban sample has the critical ratio 0.53 is less than the Tabled value of t required for significance at 0.05 level. An estimation of mean scores of Awareness on Inclusive Education of rural and urban secondary school teachers shows that urban teacher’s awareness is slightly higher than that of rural teachers.

**c.) Group Difference Awareness on Inclusive Education among Secondary School Teachers based on Type of Management of Institution**.

The group difference of Awareness on Inclusive Education among teachers at secondary level based on type management of institution was found out using t test .The result of the test is given in table 13.

**TABLE 13**

**Result of the Test of Significance of Difference**

**between Means of Awareness on Inclusive Education among**

**Secondary School Teachers based on Type of Management of Institutions**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Type of management | N | Mean | SD | t value |
| Awareness on Inclusive Education | Government | 62 | 21.22 | 5.99 | 0.74 |
| Aided | 88 | 20.47 | 6.33 |

Table 13 reveals that the critical ratio obtained is 0.74is less than 1.96, the table value required for significance at 0.05 level. Hence there is no significant difference in the mean scores of Awareness on Inclusive Education between government and secondary school teachers. An estimation of mean scores obtained for government and aided teachers show that the Awareness on Inclusive Education of government school teachers is slightly higher than that of aided school teachers.

**d) Group Difference of Awareness on Inclusive Education among Secondary School Teachers based on Subject of Specialization**

Analysis of variance of Awareness on Inclusive Education among teachers at secondary level was calculated for the sub-samples based on subject of specialization in order to determine whether the sample means differ from one another to a greater extent than the test scores differ from their own sample means. The sub samples consist of three subgroups viz., language teachers social science teachers and science teachers.

The result of variance of Awareness on Inclusive Education among the sub samples based on the subject of specialization is given in table 14

**TABLE 14  
Data and Result of Analysis**

**of Variance of Awareness on Inclusive Education**

**among Teachers based on Subject of Specialization**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source of Variation | sum of squares | df | mean square | F |
| between group | 109.84 | 2 | 54.92 | 1.4 |
| With in group | 5585.89 | 147 | 37.99 |
| total | 5695.73 | 149 |  |

Table 14 shows that the F value obtained is 1.44 which is less than 3.94 and 2.68, the tabled value of the f for (2,147) degrees of freedom at 0.01 and 0.05 level of significance. This implies that there is no significant difference in the mean scores of the variable among secondary school teachers specialized in language science and social science.

**e). Group Difference of the Variable Awareness on Inclusive Education among Secondary School Teachers based on Teaching Experience**.

Analysis of variance of Awareness on Inclusive Education among secondary school teachers was calculated for the sub samples based on teaching experience of secondary school teachers in order to determine whether the samples means differ from one another to a greater extent than the test scores differ from their own sample means. The sub samples consists of three subgroups viz., teachers with low medium and high teaching experience. The result of the test is given in Table 15.

**TABLE 15  
Data and Result of Analysis of Variance**

**of Awareness on Inclusive Education among**

**Secondary School Teachers based on Teaching Experience**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source of Variation | sum of squares | df | mean square | F |
| between group | 54.35 | 2 | 27.18 | 0.71 |
| With in group | 5641.38 | 147 | 38.38 |
| total | 5695.74 | 149 |  |

From table 15 it can be found that the F value obtained for analysis of variance among subsample based on experience category of teacher is 0.71 which is less than 4.75, the tabled value of F for (2,147) degrees of freedom at 0.05 level. This indicates that the main effect of teaching experience is not significant at 0.05 level. Hence there is no significance difference the mean scores of Awareness on Inclusive Education among teachers with low medium and high teaching experience.

**E**. **COMPARISON OF AWARENESS INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AND TEACHERS AT SECONDARY LEVEL.**

The group difference of the variable Awareness on Inclusive Education among student teachers and teachers at secondary level was found out using t-test the result of the test is given in table 16.

**TABLE 16  
Result of Test of Significance of Difference   
Between Means of Awareness on Inclusive Education   
Among Student Teachers and Teachers at Secondary Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | Group | N | Mean | S.D | value |
| Awareness on Inclusive Education | Student Teachers | 300 | 20.10 | 4.74 | -1.21 |
| teachers | 180 | 20.78 | 6.18 |

Table 16 reveals that critical ratio obtained is -1.21 is less than 1.96. Since the critical ratio is less than the tabled value of t at 0.05 level of significance. Hence there is no significance difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level. An estimation of means scores obtained for student teachers and teachers reveals that both groups have almost equal awareness on Inclusive Education. The mean scores reveal that both student teachers and teachers are not much aware about the concept of inclusive education as their mean scores are just have of the total scores.

**MAJOR FINDINGS**

The major findings evolved from study are presented below:

**I.**  The extent of Awareness on Inclusive Education among student teachers is presented in Table 17

**TABLE 17**

**Extent of Awareness on Inclusive Education among Student Teachers**

|  |  |  |
| --- | --- | --- |
| Mean score of Awareness on Inclusive Education | Percentiles | Scores |
| M = 20.10 | P90 | 28.00 |
| P80 | 27.00 |
| P70 | 25.00 |
| P60 | 23.00 |
| P50 | 21.00 |
| P40 | 19.00 |
| P30 | 17.00 |
| P20 | 14.00 |
| P10 | 11.00 |

**II.** The extent on Awareness on Inclusive Education among secondary school teachers are presented in Table 18

**TABLE 18**

**Extent on Awareness on Inclusive**

**Education among Secondary School Teachers**

|  |  |  |
| --- | --- | --- |
| Mean score of Awareness on Inclusive Education | Percentiles | Scores |
| M = 20.78 | P90 | 30.00 |
| P80 | 28.00 |
| P70 | 25.00 |
| P60 | 23.00 |
| P50 | 20.00 |
| P40 | 19.00 |
| P30 | 16.00 |
| P20 | 14.00 |
| P10 | 11.00 |

**III. 1.** There isno significant difference in the mean scores of Awareness on Inclusive Education between student teachers based on gender (t=-0.24, P>0.05) the negative value of critical ratio indicates that female student teachers have higher awareness on inclusive education than that of male student teachers.

**2** There isno significant difference in the mean scores of Awareness on Inclusive Education between student teachers based on locale of institution (t=-1.23, P>0.05)

**3** There isno significant difference in the mean scores of Awareness on Inclusive Education among student teachers based on type of management of institution[F=0.54,P>0.05 for (2,297) degrees of freedom]

**4** There is significant difference in the mean scores of Awareness on Inclusive Education among student teachers based on their subject of specialization.

1. Student teachers specializing in Science and Language differ significantly in their Awareness on Inclusive Education(t=2.83,P<0.01)
2. Student teachers specializing in Science and social science differ significantly in their Awareness on Inclusive Education (t=2.32,P<0.05)
3. Student teachers specializing in Science and Commerce do not differ significantly in their Awareness on Inclusive Education (t=0.91,P>0.05)
4. Student teachers specializing in Language and Commerce do not differ significantly in their Awareness on Inclusive Education (t=0.49,P>0.05)
5. Student teachers specializing in Social science and Commerce do not differ significantly in their Awareness on Inclusive Education (t=0.47,P>0.05)
6. Student teachers specializing in Social science and Language do not differ significantly in their Awareness on Inclusive Education (t=0.09,P>0.05)

**IV.1** There isno significant difference in the mean scores of Awareness on Inclusive Education between secondary school teachers based on gender (t=0.60, P>0.05)

2 There isno significant difference in the mean scores of Awareness on Inclusive Education between secondary school teachers based on locale of institution (t=054, P>0.05)

3 There isno significant difference in the mean scores of Awareness on Inclusive Education between secondary school teachers based on type of management of institution (t=0.74, P>0.05)

4 There isno significant difference in the mean scores of Awareness on Inclusive Education among secondary school teachers based on subject of specialization [F=1.44 P> 0.05 for (2,147) degrees of freedom]

5 There isno significant difference in the mean scores of Awareness on Inclusive Education among secondary school teachers based on teaching experience [F=0.71 P> 0.05 for (2,147) degrees of freedom]

V. There isno significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level (t=-1.21, P>0.05)

**TENABILITY OF HYPOTHESES**

Based on the findings, the tenability of hypotheses for the study were reviewed.

The first hypotheses stated that here exist significant difference in the mean scores of Awareness on Inclusive Education among student teacher s based on gender, locale, type of management of institutions and subject of specialization.

The findings of the study show that male and female student teachers do not differ significantly in their Awareness on Inclusive Education. It is also revealed that rural and urban student teachers do not differ significantly in their Awareness on Inclusive Education. No significant difference exists in the mean scores of Awareness on Inclusive Education of student teachers based on type of management of institution. Based on the subject of specialisation student teachers specializing in science and language and student teachers specializing in science and social science differ significantly in their Awareness on Inclusive Education. The mean value of science student occupies first position followed by commerce, social science and language student teachers. Hence the first hypothesis only partially substantiated.

The second hypotheses states that there exist significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based in gender, locale of institution, type of management of institutions, subject of specialization and teaching experience.

The result shows that there is no significance difference in the mean scores of Awareness on Inclusive Education of male and female secondary school teachers. From the study it is also revealed that rural and urban secondary school teachers do not differ significantly in their Awareness on Inclusive Education. When the data was analysed on the basis of type of management of institution, it can seen that there exists no significant difference in the mean scores of Awareness on Inclusive Education among government and aided secondary school teachers. There exists no significant difference in the mean scores of Awareness on Inclusive Education among secondary school teachers specialised in language, science and social science subjects. The findings also indicated that their exits no significant difference Awareness on Inclusive Education among Secondary school teachers with low medium and high teaching experience. Thus the second hypothesis is fully substantiated.

The third hypothesis states that there is no significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level. From the study it was found that student teachers and secondary school teachers do not differ significantly in their Awareness on Inclusive Education. Thus the third hypothesis not substantiated.

**SUMMARY, CONCLUSION AND SUGGESTIONS**

This chapter highlights the significant stages of the study, important findings, their educational implications and suggestions for further research.

**RESTATEMENT OF THE PROBLEM**

The study was entitled as ‘AWARENESS ON INCLUSIVE EDUCATION AMONG STUDENT TEACHERS AND TEACHERS AT SECONDARY LEVEL’

**VARIABLE OF THE STUDY**

The only variable that was measured and analysed in the study was Awareness on Inclusive education.

**OBJECTIVE OF THE STUDY**

The following were the objectives of the present study

1. To find out the extent of Awareness on Inclusive Education among student teachers at secondary level.
2. To find out the extent of Awareness on Inclusive Education among teachers at secondary level.
3. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution and
   4. Subject of Specialization
4. To test whether there exists significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution
   4. Subject of Specialization and
   5. Teaching Experience
5. To test whether there exists significant difference in the mean scores of Awareness on Inclusive education between student teachers and teachers at secondary level.

**HYPOTHESES**

The following were the hypothesis formulated for the present study.

1. There is no significant difference in the mean scores of Awareness on Inclusive Education among student teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution and
   4. Subject of Specialization
2. There is no significant difference in the mean scores of Awareness on Inclusive Education among teachers at secondary level based on
   1. Gender
   2. Locale of Institution
   3. Type of Management of Institution
   4. Subject of Specialization and
   5. Teaching Experience
3. There will be significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level.

**METHODOLOGY**

It deals with the description of the sample, tool and statistical techniques used for the study.

**a. Sample**

The sample for the study constituted 450 teachers compraising of 300 student teachers and 150 teachers at secondary level which were selected from various training colleges and secondary schools of Malappuram and Calicut districts.

**b. Tool:**

The Awareness on Inclusive Education among student teachers and teachers at secondary level was measured by using ‘Awareness test on Inclusive Education’ (Mumthas&Shamina 2010)

**c. Statistical Techniques used**

The following were the statistical techniques used for the present study

1. Preliminary analysis
2. Percentiles
3. Test of significance of difference between means for large independent samples
4. ANOVA(one-way)

**MAJOR FINDINGS**

The major findings evolved from study are presented below:

**I.**  The extent of Awareness on Inclusive Education among student teachers at secondary level is presented in Table 19

**TABLE 19**

**Extent of Awareness on**

**Inclusive Education among Student Teachers at Secondary Level**

|  |  |  |
| --- | --- | --- |
| Mean score of Awareness on Inclusive Education | Percentiles | Scores |
| M = 20.10 | P90 | 28.00 |
| P80 | 27.00 |
| P70 | 25.00 |
| P60 | 23.00 |
| P50 | 21.00 |
| P40 | 19.00 |
| P30 | 17.00 |
| P20 | 14.00 |
| P10 | 11.00 |

**II**. The extent on Awareness on Inclusive Education among secondary school teachers is presented in Table 20

**TABLE 20**

**Extent on Awareness on Inclusive**

**Education among Teachers at Secondary Level**

|  |  |  |
| --- | --- | --- |
| Mean score of Awareness on Inclusive Education | Percentiles | Scores |
| M = 20.78 | P90 | 30.00 |
| P80 | 28.00 |
| P70 | 25.00 |
| P60 | 23.00 |
| P50 | 20.00 |
| P40 | 19.00 |
| P30 | 16.00 |
| P20 | 14.00 |
| P10 | 11.00 |

**III. 1.** There isno significant difference in the mean scores of Awareness on Inclusive Education between student teachers based on gender (t=-0.24, P>0.05). The negative value of critical ratio indicates that female student teachers have higher awareness on inclusive education than that of male student teachers.

**2** There isno significant difference in the mean scores of Awareness on Inclusive Education between student teachers based on locale of institution (t=-1.23, P>0.05)

**3** There isno significant difference in the mean scores of Awareness on Inclusive Education among student teachers based on type of management of institution[F=0.54,P>0.05 for (2,297) degrees of freedom]

**4** There is significant difference in the mean scores of Awareness on Inclusive Education among student teachers based on their subject of specialization.

1. Student teachers specializing in Science and Language differ significantly in their Awareness on Inclusive Education(t=2.83,P<0.01)
2. Student teachers specializing in Science and social science differ significantly in their Awareness on Inclusive Education(t=2.32,P<0.05)
3. Student teachers specializing in Science and Commerce do not differ significantly in their Awareness on Inclusive Education(t=0.91,P>0.05)
4. Student teachers specializing in Language and Commerce do not differ significantly in their Awareness on Inclusive Education(t=0.49,P>0.05)
5. Student teachers specializing in Social science and Commerce do not differ significantly in their Awareness on Inclusive Education(t=0.47,P>0.05)
6. Student teachers specializing in Social science and Language do not differ significantly in their Awareness on Inclusive Education(t=0.09,P>0.05)

**IV.1** There isno significant difference in the mean scores of Awareness on Inclusive Education between secondary school teachers based on gender(t=0.60, P>0.05)

2 There isno significant difference in the mean scores of Awareness on Inclusive Education between secondary school teachers based on locale of institution(t=054, P>0.05)

3 There isno significant difference in the mean scores of Awareness on Inclusive Education between secondary school teachers based on type of management of institution(t=0.74, P>0.05)

4 There isno significant difference in the mean scores of Awareness on Inclusive Education among secondary school teachers based on subject of specialization [F=1.44 P> 0.05 for (2,147) degrees of freedom]

5 There isno significant difference in the mean scores of Awareness on Inclusive Education among secondary school teachers based on teaching experience [F=0.71 P> 0.05 for (2,147) degrees of freedom]

III. There isno significant difference in the mean scores of Awareness on Inclusive Education between student teachers and teachers at secondary level .

**CONCLUSION**

Major findings of the study helped the investigator to conclude as follows:-

The mean scores of Awareness on Inclusive Education reveal that both the student teachers and secondary school teachers are not much aware about the concept inclusive education, as their mean scores are just half of the total score. It is also found that Awareness on Inclusive Education among student teachers and teachers at secondary level do not differ significantly irrespective of their gender, locale of institution and type of management of institution. No significant difference is found in the mean scores of Awareness on Inclusive Education of secondary school teachers based on their teaching experience. The study also shows that the Awareness on Inclusive Education among student teachers differs significantly based on their subject of specialization. The mean value of science student teachers occupy first position followed by student teachers of commerce, social science and language respectively. Student teachers and teachers at secondary level do not differ significantly in their Awareness on Inclusive Education

**EDUCATIONAL IMPLICATIONS**

A teacher with right type of awareness, attitude and competencies is an asset to any institutions. Researches that probe in to the awareness, attitude and competencies of teachers will go along way for policy planning, development and implementation of training programmes to the existing and prospective teachers. The findings of the present study have wide educational implications.

The mean scores obtained for student teachers and teachers on their Awareness on Inclusive Education indicate that both the group do not have adequate Awareness on Inclusive Education. Adequate pre- service and in- service teacher training is essential to improve their awareness. Care should be taken to have adequate Awareness on Inclusive Education by all the student teachers irrespective of their subject of specialisation In the case of student teachers following measures can be taken to make them aware about the concept.

* It is ideal to include a separate paper on ‘Children With Special Needs’ in pre- service teacher preparation course itself
* Provide student teachers more organized school based training in inclusion.
* Strengthen inclusive education content and method at pre- service teacher preparation level.
* Teacher education institutions need to create conducive environment to meet these objectives.
* Organizational changes for promoting effective learning are needed in practice teaching schools.
* Practice on different strategies of inclusive education should be given to teacher trainees.
* Provide awareness through seminars, meeting and private talk with parents of differently abled children.
* Seminars, symposium, documentaries etc can be effectively utilized for disseminating the Awareness on Inclusive Education

For the effective implementation of inclusive education, general classroom teacher are need to be trained in understanding the special needs of children with disabilities. Following are implication for successful inclusion in regular stream.

* In- service courses may be offered to at least one teacher to begin with from each school and need to cover all general classrooms in a region.
* The regular teachers and special teachers should work in co-ordination rather than as isolated professionals.
* General class teachers should get occasional assistance of special teacher to meet the educational needs of children with disabilities.
* An ideal combination of specialist an multi category teacher to support the general classroom teachers can facilitate inclusive education
* Teachers should get guidelines for adjustment of curriculum, adaptation of instructional material and methods to suite the needs of children.
* Different strategies for successful inclusion should be practice in regular classrooms.
* Schools can initiate school based in- service training programmes and could join outside training, organized by the state or private agencies.
* The head of the institutions and professionals with special knowledge and competencies should support the regular teachers in their efforts.
* Organize orientation programmes for the staff of the institution with the help of professionals.
* Promote awareness meetings with regular teachers to prepare them for the inclusion program and clear their doubts.

As an individual teacher you are not always in a position to promote a culture of shared values in your school, but you can improve your class room practices to promote better inclusion and in doing so act as an example of what is possible for others.

**SUGGESTIONS FOR FURTHER RESEARCH**

To get more complete picture, the present investigation can be done under the following areas:-

1. Difficulties faced by teachers while following inclusion practices.
2. Attitude of regular teachers and special education teachers towards inclusive education
3. Study on various strategies adopted by the teachers in an inclusive classroom
4. State wide comparison of enrolment of differentially abled children based on locality and type of management of institution

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|  |  |  |
| --- | --- | --- |
| **Serial No** | **Name of the Institution** | **Type of Management** |
| 1 | Govt.Rajas Higher Secondary school, Kottakkal | Government |
| 2 | G.V.H.S.S BP Angadi,Tirur | Government |
| 3 | G.V.H.S.S Kalpakancheri. | Government |
| 4 | Govt.Boys Higher Secondary School,Manjeri | Government |
| 5 | G.V.H.S.S Chettiyankinar | Government |
| 6 | G.V.H.S.S Payyoli | Government |
| 7 | G.V.H.S.S Kinasseri | Government |
| 8 | Govt.Model Boys Higher Secondary School | Government |
| 9 | M.S.M.H.S.S Kallingal Paramba | Aided |
| 10 | P.K.M.M.H.S.S Edarikode | Aided |
| 11 | I.U.H.S.S Parapur | Aided |
| 12 | Cherulal High School | Aided |
| 13 | K.H.M.SH.S Alathiyoor | Aided |
| 14 | B.E.M.Girls Higher Secondary School | Aided |
| 15 | Savio Higher Secondary School.Medical College | Aided |
| 16 | Rahmaniya Higher Secondary School Medical College | Aided |

**LIST OF SECONDARY SCHOOLS**