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INTRODUCTION

Education is one of the important factors which prepare an individual for better life. It is a productive and beneficial factor in any person’s life. The training of a human mind is not complete without education. Only because of education, humans are made better citizens with all social values, skills and professions.

Gandhiji (1937) stated that education is drawing out of the best in child and man - body, mind and spirit. Swami Vivekananda explained that education is the manifestation of the perfection that is already in man. Education is the development of all those capacities in the individual, which will enable him to control his environment and fulfill his possibilities. (John Dewey)

Education is a never ending process intricately interwoven with human life, enriching the individual with a variety of experiences, kindling the flames of knowledge through constant probing into the mysteries of life. Education plays an important role in the economic and social development of the country, in the building of a truly democratic country, in the development of a truly democratic society, in the development of a truly patriotic citizen, in the promotion of national integration and, above all, in the transformation of the individual for the endless pursuit of excellence and perfection.

Education plays an important role in shaping the future of a nation. Education has an immense effect on the political, economic and social development with the increasing recognition by all the countries. Humayun Kabir (1959) rightly emphasized that ‘a nation, however rich in national resources, cannot prosper unless its human resources are properly developed and, such a development is essentially, a function of education.
Children and youth vary in intelligence, personality, aptitude, interests and achievements. However, schools tend to emphasize the importance of differences in intelligence and personality to reach the desired achievement levels.

I. INTELLIGENCE

Human individual is considered to be endowed with certain cognitive abilities, which make him a rational being. He can reason, discriminate, understand, adjust and face a new situation. Definitely he is superior to animals in all such aspects of behaviour. But human beings themselves are not all alike. There are wide individual differences. Some learn with a good speed while others remain lingering too long. There are some who need only one demonstration for handling the tools properly while for others even the repeated individual guidance brings no fruitful result. What is that causes one individual to be more effective in his response to a particular situation than other. No doubt, interest, attitude, desired knowledge, skill, etc. count towards his achievement. Still, there is something that contributes significantly towards these varying differences. In Psychology it is termed ‘intelligence’. In ancient India our great Rishis named it ‘viveka’.

Intelligence is a native capacity and not an acquired one. It is manifested in different mental activities. It is the ability to learn to make use of acquired knowledge in new and complex situations. It is the ability to think abstractly, to solve problems, to perceive relationship and to profit from experience.

Meaning of Intelligence

Intelligence is the capacity to acquire and apply knowledge.

Alfred Binet (1905) defined intelligence as the ability of an individual to direct his behaviour towards a goal. He said that intelligence manifests in purposive direction, active adaptation and conscious correction and it is the ability to take and maintain a given mental set, the capacity to make adaptations for the purpose of attaining the desired end and the power of self criticism. Ausubel defined intelligence as a general level of cognitive functioning, as reflected in the ability to understand
ideas and to utilize abstract symbols (verbal, mathematical or spatial) in the solution of intellectual problems.

Ballard defined intelligence as the relative efficiency of mind measured under similar conditions of knowledge, interest and habituation. Buckingham (1921) said that intelligence is the learning ability. Burt (1949) defined intelligence as inborn, all round efficiency. It is the power of readjustment to relatively novel situations by organizing new psycho-physical coordination. Calvin defined intelligence as the ability to learn to adjust to one’s environment. Charles Darwin and Herbert Spencer stated that intelligence has been regarded as an inherent capacity for profiting by experience, adaptation to environment and ability to learn. Charles Spearman defined intelligence as the analytic and synthetic ability of mind.

David Wechsler (1950) defined intelligence as the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment. Dearborn defined intelligence as the capacity to learn or to profit by experience.

E.L. Thorndike (1931) defined intelligence in general as the power of good responses from the point of view of truth or fact. F.N. Freeman (1937) said that intelligence is represented in behaviour by the capacity of the individual to adjust himself to new situations.

Gates and others (1955) defined intelligence as a composite organization of abilities to learn, to grasp broad and subtle facts, especially abstract facts, with alertness and accuracy, to exercise mental control and to display flexibility and sagacity in seeking the solution of problems. G.D. Stoddard (1943) said that intelligence is the ability to undertake activities that are characterized by difficult, complexity, abstraction, economy, adaptiveness to a goal, social value and the emergence of originals and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces. Goddard defined
intelligence as the degree of availability of one’s experiences for the solution of immediate problems and the anticipation of future ones.

Henry Garrett (1946) defined intelligence as the abilities demanded in the solution of problems which require the comprehension and use of symbols, i.e., words, numbers, diagrams, equations, formulae. Helm said that intelligent activity consists in grasping the essentials in a given situation and responding appropriately to them. Howard Gardner defined intelligence as an ability to solve a problem or fashion a product that is valued in one or more cultural settings.

Jiddu Krishnamurthi said that intelligence is much greater than intellect for it is integration of reason and love. Intelligence is the perception of the essential. Jean Piaget (1926) said that intelligence is the adaptation to physical and social environment. Knight said that intelligence is the capacity for relational constructive thinking, directed to the attainment of some end. L.M. Terman (1921) told that an individual is intelligent in proportion as he is able to carry on abstract thinking. Norman Munn defined intelligence as the flexibility or versatility in the use of symbolic processes. P.E. Vermon (1927) defined intelligence as all round thinking capacity or mental efficiency. Pinter thought of intelligence as the ability of the individual to adapt himself adequately to relatively new situation in life.

Raven explained that, in order to act intelligently in any situation, a person needs both the necessary information and the capacity to form comparisons and reason by analogy. Stern (1941) said that intelligence is the general capacity of an individual, consciously to adjust his thinking to new environment and it is a general mental adaptability to new problems and conditions of life. Thales defined intelligence as the general intellectual capacity.

Wagnon defined intelligence as the capacity to learn and adjust to relatively new and changing conditions. Webster’s New International Dictionary defined intelligence as the capacity for knowledge and understanding, especially, as applied to the handling of novel situation; the power of meeting a novel situation successfully by
adjusting one’s behaviour to the total situation. Wells remarked intelligence as the
property of recombining our behaviour pattern so as to act better in a novel situation.
William James (1907) defined intelligence as the ability to adjust oneself successfully
to a relatively new situation. William McDougall (1923) said that intelligence is the
capacity to improve upon native tendency in the light of past experiences. William
Stern explained that intelligence is the general adaptability to new problems and
conditions of life. Woodrow said that intelligence is an acquiring capacity.
Woodworth and Marquis said that intelligence means intellect put to use. It is the use
of intellectual abilities for handling a situation or accomplishing any task.

Nature of Intelligence

There is a distinction between the nature of intelligence and its origin or
source. The nature of intelligence is how intelligence works in situations calling for it.
It is the process working itself out. For purpose of analysis, issues relating to the
process can be discussed independently of issues relating to the origin of intelligence,
although obviously the two cannot be regarded as unrelated. The two most prominent
theories of the nature of intelligence are that (1) it is the capacity to learn and (2) that
it is the ability to act with foresight.

- Intelligence as capacity to learn

Psychologists who think of intelligence as capacity to learn have advanced
numerous competing ideas concerning its exact nature. Alfred Binet (1857-1911), a
French psychologist, opinioned that intelligence was unitary in the sense that each
person had a certain amount which could be used for any purpose; it was a general
ability to learn. Accordingly, if a person did better in one field of activity than in
another, it was not due to any fundamental variation in intelligence relative to the two
fields, but to factors such as learning, interest and motivation. Lewis Terman (1877-
1956), an American psychologist, saw intelligence as the ability to do abstract
thinking, an ability which can be directed towards repairing an automobile motor just
as well as towards solving a problem in quantum mechanics. William Stern (1871-
1938), a German professor, regarded intelligence as the adaptability to new problems and conditions of life. Charles E. Spearman (1863-1945), an English psychologist, thought that two factors contributed to every intelligent act: \( g \), a general factor operative in all situations, and \( s \), a specific factor operative only in situations where that specific factor is involved. Edward L. Thorndike divided intelligence into mechanical, social and abstract. Hence they have constructed the nature of intelligence as capacity to form new responses to stimuli in rapid and accurate manner in situations which so permit.

- **Intelligence as the ability to act with foresight**

  When one acts with foresight, he looks ahead; he tries to anticipate the consequences of acting in a particular way. He makes forecasts regarding the outcome of alternative lines of action. These forecasts are based upon experience. For example, if experience has taught a person that although rattlesnake bites are not usually fatal they do make one very ill; he will behave very cautiously in rattlesnake country so as to avoid getting bitten. In difficult situations, they are able to test their hunches or hypotheses intellectually so that in their overt behaviour they appear to do a minimum of fumbling and they choose the correct act almost instantly. With an increase in age and experience, a mature person may show increased flexibility of behaviour and imagination. It harmonizes well with a relativistic, cognitive-field psychology, it does not square with the notion that intelligence is based upon the capacity to form and retain connections in the nervous system.

**Sources of Intelligence**

Where does intelligence come from? What causes one person to act with high intelligence and another low? Three positions which may be taken on this matter are that (1) intelligence as a genetic endowment, (2) intelligence as a product of learning, and (3) intelligence as a function of interaction of self and environment.
• **Intelligence as a genetic endowment**

Intelligence bears a one-to-one relation to the quality of genes which determine the structure and functioning of the organic-neutral-endocrine system. Intelligence is a function of the way an organism is put together. In other words, intelligence hinges on physical structure. This outlook harmonizes well with a psychology that emphasizes physiology as a determiner of what can be achieved. The two traits crucial to intelligence – complexity and modifiability of the nervous system – supposedly were transmitted from parents to offspring. Thus connectionistic psychologists reasoned that intelligence, like other physical traits, is determined by physical inheritance and that its level is constant for each individual just as the colour of his eyes and skin is constant.

• **Intelligence as a product of learning**

All people, except those who are obviously defective, have the same potential at birth. Accordingly, the intelligence they achieve stems from opportunities for learning which they have had. Intelligence is, at least in large measure, learned. Some of the studies of changes of IQ in individuals give support to hypothesis that intelligence is learned rather than inborn.

• **Intelligence as a function of interaction**

Intelligence is the capacity to act with foresight, i.e., to assess accurately the consequences of a proposed action, and then goes on to by-pass completely the issue of whether intelligence is inherited or learned. Intelligence is a product of the interaction of a human self and its perceived environment.

To summarize and restate the position, intelligence is a product of the interaction of a person and his perceived psychological and physical environment. But, we may attribute no particular portion of intelligence to heredity and no particular portion to environment.
Types of Intelligence

The four types of intelligence are concrete, abstract, social and emotional intelligence. The ability of an individual to comprehend actual or concrete situations and to react to them adequately is **concrete intelligence**. **Abstract intelligence** means the ability to respond towards numbers and letter, etc. **Social intelligence** means the ability of an individual to deal with social situations. **Emotional intelligence** is the capacity to reason with emotions in four areas namely (1) awareness – to perceive emotion, (2) acceptance – to integrate it in thought, (3) attitude – to understand it and (4) action – to manage it. An emotionally intelligent person controls all his emotions and sees that unfavourable incidences are not repeated again and again. The key domains of emotional intelligence are: knowing one’s emotions, self-awareness, managing emotions, motivating one’s self, recognizing emotions of others – empathy and handling relationships.

Theories of Intelligence

The theories of intelligence propagated from time to time have tried to answer what are the different components or elements of intelligence. Some of the theories of intelligence are as follows.

- **Unitary Theory or Monarchic Theory**

  Intelligence is regarded as an adaptiveness which enables a creation to adjust itself to changing environment. This is a popular view which regards intelligence as a single unit or a unitary faculty that determines the level of man’s achievement in any intellectual enterprise he may undertake. An inborn all round mental efficiency is a sign of intelligence.

- **Factor Theory or Eclectic Theory**

  Charles Spearman thought that two factors contribute to every intelligent act: \( g \), a general factor operative in all situations and \( s \), specific factor operative only in situations where that specific factor is involved. Thus, he thought that a person’s
capacity to act in any situation depends both upon his general capacity and upon the special capacity involved in that particular act. To illustrate: a person might have a fairly mediocre general intelligence but a very high order of special capacity in, say, music.

- **Group Factor Theory**

  Factor analysis and correlations were suggestive of possible main factors which surpassed even the multifactor theory. Thurstone was the prominent propagator of group factor theory of intelligence. He found correlations of appropriately 60 separate tests and differentiated nine factors: (a) Verbal factor ‘V’ concerns with comprehension of verbal relations, words and ideas; (b) Spatial factor ‘S’ involves in any task in which the subject manipulates an object imaginatively in space; (c) Numerical factor ‘N’ is ability to do numerical calculations rapidly and accurately; (d) Memory factor ‘M’ involves the ability to memorize quickly; (e) Word fluency factor ‘W’ involves whenever the subject is asked to think of the isolated words at a rapid rate; (f) Reasoning ‘R’ found in tasks that require the subject to discover a rule or principle; (g) Inductive reasoning ‘IR’ : Deductive reasoning ‘DR’; (h) Perceptual factor ‘P’ is the ability to perceive what is exactly there; and (i) Problem-solving ability factor ‘PS’ is the ability to perceive the problem and solve it.

- **Anarchic Theory or Multifactor Theory**

  Thorndike, E.L., an American psychologist, developed multifactor theory. Intelligence, according to him, is forming a number of actual or potential specific connections between specific stimuli and responses. From the point of view of the tasks performed by people, intelligence can be understood as: concrete intelligence – ability to deal with concrete aspects, abstract intelligence – ability to deal with abstract phenomena, and social intelligence – ability to deal with people and relations. He distinguishes four attributes of intelligence: (a) Level refers to task difficulty in which the test items are arranged in sequential order of increasing difficulty determining the level or altitude of intelligence, (b) Range or width refers to the
number of tasks, at any degree of difficulty, which we can solve. It is the breadth of experience represented by items of equal difficulty; (c) Area means the total number of situations at each level. It is the summation of all ranges at each level of intelligence; and (d) Speed is the rapidity with which we can respond to test items. Speed and altitude are positively correlated.

- **Sampling Theory**

  Sampling Theory, proposed by G.H. Thomson, assumes that the mind is made of many independent bonds or elements. This theory seems to combine various theoretical viewpoints: (i) It appears to be similar to Thorndike’s multifactor theory except that he concedes to the practical usefulness of a concept like ‘G’. (ii) Thomson seems to maintain that the concept of group factor ‘g’ is of equal practical usefulness. Thus, any mental operation or task involves three kinds of basic factors: (a) Spearman’s general factor ‘g’ – common to all tasks, (b) Group factor ‘G’ – common to the tasks belonging to specific group, and (c) Specific factors s₁, s₂, s₃ etc. – very specific to the task.

- **Hierarchical Theory**

  Vernon (1950) developed analytic view of organization of intelligence on the basis of empirical data. He suggests that intelligence tests measure an overall ‘G’ factor as well as two main types of mental abilities, viz., Ved: verbal, numerical and educational, and K.M.: practical, mechanical, spatial and physical. These two major factors can be divided into minor group factors such as mechanical and manual. These minor factors can be further divided into various Specific factors. It accounts for the proliferation of apparently conflicting findings and multiplicity of ability factors. Different kinds of factors operating at different levels and the tests serve different purposes in assessment and prediction.
• **Structure of Intellect**

The Guilford’s Structure of Intellect or Theory of Intellect has 150 factors or specific factors of intelligence and 16 categories of intelligence, all come under 3 heads, namely, contents 5 (five), operations 5 (five) and products 6 (six). It is in the form of a cube, i.e., $5 \times 5 \times 6 = 150$.

1. **Contents** refer to the nature of information obtained in the environment, i.e., the information we get from the environment, the kind or material of content to which the person responds and the type of information available in the environment. There are five kinds of materials, namely: (a) Visual – information in the visual form, (b) Auditory – information in auditory form, (c) Symbolic – information in the form of signs which have no significance by themselves, (d) Semantic – information in the form of meanings, and (e) Behavioural – non-verbal information used in human interactions.

2. **Operations** refer to what one has to do with the environment, which includes the act of thinking. Mental operations are classified into five major groups of intellectual abilities, namely: (a) Cognition – discovery, rediscovery or recognition of information is the most important information operation in learning process, (b) Memory – retention and recall of what is recognized and it is a primary mental process, (c) Divergent production – searching for all possible situations and varieties of thinking and it is a component of creativity which shows the relationship between intelligence and creativity, (d) Convergent production – generation of information from the given information. Conventionally accepted and best outcomes are emphasized. The given information fully determines the response, and (e) Evaluation – making decisions or judgments concerning criteria as to goodness, correctness, suitability or adequacy of what we know, what we remember and what we produce in productive thinking.

3. **Product** is the result of an operation upon the content which produces the final result. When a certain operation is applied on certain kind of content, six kinds
of products may be resulting factors: (a) Units – they are segregated wholes or a small portion of a big unit, (b) Classes – a set of objects with similar properties, (c) Relations – some kind of connection between two things, (d) Systems – patterns of organizations of inter-dependent and interacting parts, (e) Transformation – a change or revision of one’s knowledge, and (f) Implication – a prediction or expectation from a given information.

• **Theory of Multiple Intelligence**

According to this theory intelligence is not a single factor. It is a combination of different abilities developed autonomously according to heredity and environment. Gardner proposed the Theory of Multiple Intelligence and called the eight types of intelligence independent as each intelligence is a relatively autonomous intellectual potential which is capable of functioning independently of the others.

1. **Linguistic Intelligence** is the ability to read, write and communicate with words having components like syntax, semantics and pragmatics. The best examples are authors, journalists, poets, orators, comedians and other professionals like lawyers.

2. **Logico-Mathematical Intelligence** is the ability to reason, calculate and to think things in a logical and systematic manner. These types of abilities and skills are highly developed in engineers, scientists, economists, accountants, detectives and the members of legal profession.

3. **Visual Spatial Intelligence** is concerned with the abilities, talents and skills involving the representation and manipulation of spatial configuration and relationship. Architects, artists, sculptors, sailors, photographers and strategic planners rely on it in their own ways.

4. **Musical Intelligence** is the ability to make or compose music to sing well or understand and appreciate music, one’s capacity for pitch discrimination,
sensitivity to rhythm, texture and timber, ability to hear themes in music and abilities pertaining to the field of music.

5. **Bodily-Kinesthetic Intelligence** is the ability to use body skillfully to solve problems, create products or present ideas and emotions, the ability displayed for athletic pursuits, artistic pursuits such as dancing and acting, or in building and construction and the ability to perform skillfully and purposeful movements. Lancers, athletes, surgeons, etc., demonstrate it to high degree.

6. **Intra-personal Intelligence** is the ability to know himself, his own cognitive strengths, styles and mental functioning as well as one’s feelings, range of emotions and skills to utilize one’s fund of knowledge in practical situations. Philosophers, yogis and saints demonstrate this kind of intelligence.

7. **Inter-personal Intelligence** is the ability to understand and work with others, to relate with other people, display empathy and to notice their motives and goals. Teachers, sales people, politicians and religious leaders possess this type of intelligence.

8. **Naturalistic Intelligence** is the ability to recognize flora and fauna, to make other consequential distinctions in the natural world, and to use this ability productively in farming, biological science and hunting. Farmers, botanists, conservationists, biologists and environmentalists would display this.

**Testing of Intelligence**

Intelligence is tested in terms of Intelligence Quotient (IQ). IQ means a child’s mental age divided by its chronological age multiplied by 100.

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\text{Mental age} \times 100 \quad \text{Chronological age}
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Mental age is an index of intelligence which means that a given person’s performance in a contest is like the average performance in the same test of persons of a given chronological age.
Chronological age is the physical age of a person, counted from the date and time of his/her birth. It is counted in terms of years, months and hours. Suppose a nine years old individual has a mental age of eleven years, his IQ will be 122. IQ is not the quantity of an individual’s intelligence, all tests do not yield an identical IQ and IQ changes at least once every three years.

Even when a person is examined by the same test a number of times, then IQ shows a change. The difference differs from test to test. The IQ of any person does not remain constant. In fact, it registers a very wide change. IQ is the result of both heredity and environment. Thus, a change in environment may change IQ. According to Garret, the good and bad environments show a difference of 10 points.

There is a possibility of increase in IQ along with a rise in the social and economic status and a possibility of increase in IQ with degradation. It generally remains constant from 5 years to 14 years of age. The mental level develops gradually.

Binet’s classification of Intelligence Quotient (IQ) according to range of IQ and class are as: below IQ 20 – idiots, IQ between 20 and 39.9 – imbeciles, IQ between 40 and 59.9 – moron, IQ between 60 and 69.9 – borderline, IQ between 70 and 79.9 – very backward, IQ between 80 and 98.9 – backward, IQ between 99 and 109.9 – average or normal, IQ between 110 and 119.9 – superior, IQ between 120 and 129.9 – very superior, IQ between 130 and 139.9 – extra-ordinary and IQ 140 and above – genius.

*Intelligence Tests*

In the ancient period, measurement of intelligence was on the basis of knowledge or learning. In ancient literature, the dialogue between Indra and Bruhaspati and in Mahabharata between Yudhishthir and Yaksh is an olden form of intelligence testing. In the medieval age, intelligence testing was on the basis of physical structure. In eighteenth century, Gall and Spurzheim tried to measure the intelligence of individuals on the basis of the measurements of the skull. In the
modern era, testing of intelligence is by accepting it as a natural and innate power. In 1905, Binet, in association with Simon, undertook the task of devising a test which could help the detention of mentally deficient children. This scale consists of 30 test items. They are arranged in an order of difficulty. In 1908, Binet started finding out mental age of the children. The idea of mental age was utilized in 1908 Revision of the Binet-Simon Scale. When the Binet-Simon Scale of 1908 was used on children and its results reported, some of the weaknesses of the tests were brought to light. In order to remove these anomalies, the scale was revised in 1911. The Stanford-Binet test of 1916 was standardized on a sample of 1000 children of whom 905 were between five and fourteen years of age. It includes 90 test items. In 1937, Terman and Merrill Revision or Second Stanford-Binet Revision Test was standardized on 3000 children in eleven states of USA. In 1939, David Wechsler has contributed a scale along with Bellevue and called it Wechsler-Bellevue Scale which was meant for adults. In 1955, the Wechsler Scale was revised and they called it Wechsler Adult Intelligence Scale. The first scale of intelligence prepared in India by C.M. Rice of Lahore in the year 1922 and he called it Hindustani-Binet Performance Scale.

The general belief is that children learn faster and better than adults. Studies on learning and age relationships indicate that the ability to learn new material increases until the age of 16 years. Therefore, it remains constant till 20s after that there is a slight drop. Apart from these differences, we find a number of differences in the way people conduct themselves in various situations of life. People differ in many traits of personality. Personality traits appear to be products of a totality of interacting organismic and environmental influences.

Intelligence tests can be grouped under three heads – verbal tests, non-verbal tests and performance tests depending upon the contents of the tests. Some intelligence tests require the use of language or verbal ability, the ability to read, write or understand words. A test which requires the use of verbal ability of the subjects is called a verbal test. Tests of intelligence which requires no use of language in its
administration or in the subject’s answers which are non-language in character are known as non-verbal tests.

**Uses of Intelligence Tests:** 1. Intelligence tests/scales are used for the purpose of making selection of suitable candidates for activities like admission in a particular course or instruction, deciding the cases of scholarships, choosing candidates for participation in various co-curricular activities, etc. 2. Help the teacher to classify the students as bright, dull or average and bringing efficiency in teaching learning process. 3. Promoting the individuals not only in educational fields but in all other occupational and social situations where one to go higher on the ladder. 4. Revealing the potentialities of an individual and predicting one’s success in a particular field to give guidance, helping in learning process and to establish proper level of aspiration. 5. Exceptional children like gifted, backward and the mentally-challenged can be detected with the help of intelligence tests and they help in the diagnosis of the root causes of problematic behaviour of the child and likewise to suggest the possible remedies. 6. Useful in psychological, sociological and educational research. 7. Reveal the mental age or mental level of a child, which indicates the educability or readiness of a child for learning. 8. Help the teachers in having homogeneous grouping among children.

**Abuses of Intelligence Tests:** 1. Intelligence tests cannot accurately estimate the intelligence of the individual. 2. They may develop complexes like inferiority and superiority. 3. The teachers form only permanent ideas about the students and may show partiality. 4. Classifying them into different groups may bring differences in the students. 5. Intelligence of the individual is dependent on other factors like health, mood, time of the examination, etc. 6. Intelligence is innate and fixed. 7. The intellectual development reaches a peak in adolescence and then gradually declines. 8. Calculation of IQ requires the chronological age of the child. Sometimes parents hide the real age of the child, thus IQ becomes unreliable. 9. For children who are handicapped in the use of language, verbal intelligence tests cannot be applied. 10. Unless experienced and trained persons are available for scoring, the interpretation
becomes invalid. 11. Intelligence tests, especially individual tests, are too costly. 12. IQ tests assess abilities that are too narrow and tell nothing about creativity, motivation, honesty, friendliness, and other human traits and characteristics.

II. PERSONALITY

Ordinarily, personality is taken as the external appearance of the individual. In philosophy, the meaning of personality has been interpreted in the sense of the internal self. But, in psychology, the personality neither is the external appearance nor is the internal self, but it includes both and much more.

The word personality has been derived from the Latin word “persona”. The word persona was used for the cover, utilized by the actors to change their appearance; but in the Roman times it was taken as the particular character itself. This second meaning has been taken in the modern for the word personality. Thus, personality is not a fixed state but a dynamic totality that is continuously changing due to interaction with the environment. Personality is known by the conduct, behaviour, activities, movements and everything else concerning the individual. It is the way of responding to the environment, the way in which an individual adjusts with the external environment is personality.

Personality includes the totality of one’s behaviour and hence both inner and outer (covert as well as overt) behaviour should be taken into consideration. In dealing with various aspects of the situations in human life, especially the ones connected with teaching and learning, one is bound to encounter the peculiar style in which each teacher behaves and each learner receives. The behaviour of a teacher implies lot of social skill or adroitness and an influence direction arising from the salient impression which one creates on the other. In all this, there is a manifest distinct or unique method of approaching or influencing one another in the classrooms. This uniqueness of a person is generally known as ‘personality’.

Behaviour requires integration. This integration of various traits is found differently in different persons. As a general rule, every healthy individual has some
sort of integration. The peculiar forms of integration in a particular individual are his personality traits. Thus, personality is the most characteristic integration of an individual. It is the personality which marks distinction in one man and another.

The personality is the integration of internal and external activities. It includes the external appearance, qualities, aptitude, capacities, etc. It is the result of the interaction of the individual with the environment. It is not a collection of the traits, but a particular organization of them. It is the total quality of the individual’s behaviour. Individual affects other individuals through his personality. Thus, personality is manifested in his various activities. In short, personality is the total quality of the behaviour, attitudes, interests, capacities, aptitudes and behaviour patterns, which are manifested in his relation with the environment.

The compulsive personality is characterized by excessive cleanliness, orderliness, obstinacy and stinginess. In extreme cases, behaviour becomes repetitive and ritualistic. Psychoanalysts believed that this personality structure arose through excessive cleanliness training in the period of early infancy.

The authoritarian personality is said to arise out of extreme parental rejection or domination in childhood, leading to repressed hostility. Such a personality structure includes highly conventional behaviour, superstition, destructiveness and cynicism, desire for power and concern over sex.

The Indian concept of personality is mostly referred to Bhagavad Gita. According to Gita, the man who is a tattvavit, who knows the truth, realizes that he does nothing at all and all are reflexes and bodily reactions. The higher self is one’s friend and the lower self is one’s enemy. The lower self consists of reflexes, bodily needs, feelings and emotions and the higher self manifests itself when the individual has gained full awareness of his needs and limitations. According to Nyaya, personality consists of the self, the atman, the manas, mind and the body. The self is a unique substance to which all cognitions, feelings, and actions belong as its qualities; it controls and synthesizes activities of the mind and the body; it is the self that is
responsible for the unity of all the cognitions and actions. Man’s behaviour and personality are governed by the defects which arise out of the delusion. So, the remedy is to overcome false knowledge and acquire true knowledge. Thus the mental apparatus consists of the subtle body, but it cannot function without the physical body. The subtle body contains the samskaras, the impressions of the past experience. Every experience leaves an impression behind and becomes a samskara. Every cognition takes the form of modification of buddhi.

**Meaning of Personality**

Allport, C.W (1937) defined personality as the dynamic organization within the individual of those psycho-physical systems that determine his unique adjustment to his environment.

Boring explained that personality is an individual’s typical or consistent adjustment to his environment. Brown, W. (1946) said that personality is the total differentiation which the individual makes by incorporating the inherited and acquired powers to stimulate and to activate the imagination of others in art, science and public affairs and also to live in and partake of a super-individual and super-temporal world of values. Burgess E.W. told that personality is the integration of all traits which determine the role and status of the person in society.

Cattle, R.B. (1967) said that personality is that which permits a prediction of what a person will do in a given situation. Dashiell, J.F. (1929) defined personality as the sum total of behaviour trends manifested in his social adjustments. Eysenck, H.J. (1947) told that personality is a stable and enduring combination of a person’s various physical and mental aspects. Guilford, J.P. (1967) explained that an individual’s personality is his unique pattern of traits - a trait is any distinguishable relatively enduring way in which one individual differs from another.

Fredenburgh defined personality as a stable system of complex characteristics by which the life pattern of the individual may be identified. Jones, A.J. (1930) said
that personality consists of the way you look, the way you dress, the way you talk, the way you walk, the way you act, the skill with which you do things, and your health.

Kemph defined personality as the integration of that system of habits that represent one individual’s characteristic adjustment to his environment. Kolb, L. said that each individual’s characteristically recurring patterns of behaviour are known as personality. Lewin, Kurt (1935) defined personality as a dynamic totality of systems.

McClelland defined personality as the most adequate conceptualization of a person’s behaviour in all its detail. McDougal, J.W. (1932) defined personality as a synthetic unity of all mental features and functions in their interplay. Morton, Prince (1914) defined personality as the sum total of all biological innate dispositions, impulses, tendencies, aptitudes and instincts of the individual and the dispositions and tendencies acquired by experience. Munn explained personality as the most characteristic integration of an individual’s structure, modes of behaviour, interests, attitudes, capacities, abilities and aptitudes. Murphy, G. (1933) defined personality as a unitary mode of adjustment in relation to which each specific activity is not to be taken into consideration. Ogden, R.M. (1926) said that personality is the expression of man’s inner life and character is the expression of what he does or achieves.

Shaffer explained that personality consists of observable behaviour which is individualistic and intrinsic and personality is defined as an individual’s typical or consistent adjustment to his environment. Sullivan stated that personality is the relatively enduring pattern of recurrent interpersonal situations which characterize a human life. Valentine defined personality as the sum total of innate and acquired dispositions.

Warren, H.C. (1935) stated that personality is the entire mental organization of a human being at any stage of development. Watson, J.B. (1924) defined personality as the sum of activities that can be discovered by actual observation over a long enough period of time to give reliable information. William Healy regards personality as an integrated system of habitual adjustments to the environment, particularly to the
social environment. Woodworth defined personality as the study of the sum total of the behaviour of an individual, which includes not only the physical, emotional behaviour and intellectual aspects, but also their organized patterns.

**Aspects of Personality**

The three aspects of personality are the dynamic aspect, the economic aspect and the topographic aspect.

The **dynamic aspect** of Freud consists of id, ego and super ego. **Id** is the raw self of the individual which has no contact with reality. It is based on pleasure principle. It has unconscious instinctive impulses, frustrated desires and repressed feelings which very much influence the conscious life of an individual. **Ego** is the self of the individual and it is in contact with reality. It has the concept of time, distance and reality. It controls the animal wishes of the id and in turn is controlled by super ego. **Super ego** is called conscience to the ordinary sense. It is a counter check over the id and keeps the ego under control. It allows the individual to follow moral, ethical and social values.

The **economic aspect** consists of Eros and Thanatos. 99.5% people have the instinct to live, i.e., **Eros**, to think to live, to be happy, to do good to self and others, to do constructive work to self and society and improvements in any area. Normally eros is present in all and it is natural. **Thanatos** is the death instinct. It is the instinct to die, to do destructive work to self and others verbally or physically. Now-a-days, in normal persons also, thanatos is dominating since many are committing suicide and passing on physical comments.

The **topographic aspect** of personality consists of consciousness, pre-consciousness and unconsciousness. It is the arrangement of physical structure in some aspect. The **conscious** state is a state of awareness and tells what a person does at present. **Preconscious** state is a layer just below the conscious state in which the recent incidents are stored. The material from the preconscious level can be brought to conscious level with little effort. The deeply lying layer of the mind is the
unconscious state in which are stored our childhood experiences, wishes and desires. The matter from unconscious level cannot be brought to the conscious level. But, Freud said that with a special technique, hypnosis, some of the unconscious experiences can be brought to the conscious level. According to Freud, by observing (conscious behaviour) only 1/8th part of the personality can be assessed. Remaining 7/8th part is subconscious and unconscious behavioural personality. The part which we cannot see is unconscious.

Nature of Personality

Personality is a whole rather than the sum of parts. Just as the various parts of the automobile mechanically joined do not enable it to perform its function, so is the case with the various ingredients of personality. Personality implies an integration of various traits; the integration of various traits results into a ‘distinct whole’ which is known by the name of personality of an individual. Personality represents a unique integration of traits so as to differentiate one person from another on the basis of this very quality; the unique way, in which we laugh or smile, weep or cry, talk or lecture, greet or salute elders, becomes the watermark of the personality. Personality is the result of both heredity and environment; personality is the outcome of the dynamic inter-action of an organism with his soul, psychological and physical environments and heredity is represented by ‘genes’ and environment is represented by any stimulation minus genes. Personality is composed of traits which are by and large learned or acquired. By the time we become a mature personality, the contribution of learning is so prominent that we often misinterpret personality as equivalence of learning. Each personality can be identified with some motive force: the concept of motives as drives - the pushing force, the incentives - the pulling force and the ego - involved, all become relevant in understanding the formation of our personality from early infancy to adulthood.
Determinants of Personality

Some important determinants of personality are genetic factors, physiological determinants such as ductless glands, nervous system, emotions, psychological factors, and social and cultural factors that mould personality.

If the factors other than heredity are termed environmental they include family factors, school factors and social factors. The endocrine glands or ductless glands, viz., pancreas, thyroid, adrenal gland, pituitary and gonads influence the personality of an individual. The behaviour towards different individuals is modified to some extent according to their physical structure. This difference in behaviour makes a change in the personality. Chromosomes and gene structures obtained at the time of conception determine a number of other characteristics.

The family climate, the nature of the members of the family and the way the interaction among them and their influence on the growing children, the atmosphere at school and in classroom, curricular subjects, co-curricular activities, parent-teacher interactions, influence of mass media – television, films, print-media - social, cultural and political environment and religious harmony, all determine the personality of an individual.

Structure of Personality

The search for the nature of personality will be rather incomplete if we do not mention some important theories of personality which attempt to explain the very structure of personality. This helps us in classifying the people into some categories according to their personality characteristics and gives a base for the assessment of their personality. The theories of personality, in general, can be classified into four broad categories according to their modes of approach.

The theories which adopt Type-approach: the view points of Hippocrates, Kretschmer, Sheldon and Jung belong to this category.
The theory which adopt Trait-approach: worth mentioning in this category is Cattell’s Theory of Personality belongs to this category.

The theory which adopt type as well as trait approach: Eysenck’s Theory of Personality belongs to this category.

The theories which adopt developmental approach: Psycho-analytical Theory of Freud and Theory of Individual Psychology by Adler come into this category.

(A) **Type Approaches of Personality**

1. **Hippocrates classification** tried to classify all human beings into four characteristic groups according to their temperaments as: (i) *Choleric* – active but irritable and emotionally weak but bodily strong; (ii) *Phlegmatic* – happy but lazy and emotionally strong but bodily weak; (iii) *Sanguinic* – excessive blood, cheerful energetic and optimistic, and bodily strong and emotionally stable and (iv) *Melancholic* – no energy and no happiness, pessimistic and emotionally as well as bodily weak.

2. **Kretschmer classification** classified all human beings into certain biological types according to their physical structure and has allotted definite personality characteristics associated with each physical make-up as follows: (i) *Pyknic* have excess fat in their body, and are happy, jolly, easy-going, sociable and good-natured and mostly seen in social activities; (ii) *Athletic* have muscular body build, and are good in athletics and emotionally balanced, take risks, do adventures, energetic, optimistic and adjustable; and (iii) *Leptosomatic* are very lean, thin and bony, and are pessimistic, unsociable, reserved, shy and sensitive.

3. **Sheldon classification** classifies human beings into certain types according to their physical structures and attached certain temperamental characteristics to them as: (i) *Endomorphic* person having highly developed viscera but weak somatic structure like Kretschmer’s Pyknic type. They are easy going, sociable and affectionate; (ii) *Mesomorphic* person having balanced development of viscera and somatic structure like Kretschmer’s Athletic type. They are craving for muscular
activity, self-assertive, loves risk and adventure; and (iii) *Ectomorphic* person who has weak somatic structure as well as undeveloped viscera like Kretschmer’s Leptosomatic type. They are pessimistic, unsociable and reserved.

4. **Carl Gustav Jung** has divided all the human beings basically into two distinct types namely introverts and extroverts according to their social participation and the interest which they take in social activities. The *introverts* are unsociable, careful, lonely, thinking type, good writers poets and painters, maintain poor social relations, suffer themselves but do not express outside, rigid followers, reserved, sensitive, pessimistic and very silent. On the other hand, the *extroverts* are sociable, easy-going, live with people, acting and expressing type, good orators, good in maintaining social relations and at social activities, express their ideas outside, flexible, leaders, optimistic and balanced and controlled. Jung has been criticized for explaining these extreme categories only. So later he has given *ambiverts* who have some of the qualities of extroverts and some of the qualities of introverts. These people lie between introverts and extroverts.

(B) **Developmental Approach**

1. **Sigmund Freud**’s anatomy of personality is built around the concept of Id, Ego and Super ego. Each of these aspects of personality is related with the other two. (i) *Id* is the raw, savage and immortal basic stuff of a man’s personality. It consists of such ambitions, desires, tendencies and appetites of an individual as are guided by pleasure seeking principle. It knows no laws, follows no rules and considers only the satisfaction of its needs and appetites; (ii) *Ego* acts as a policeman to check the unlawful activities of the Id. It is the executive unit with Veto powers. It follows the principle of reality and acts with intelligence in controlling, selecting and deciding what appetites have to be satisfied and in which way they are to be satisfied; and (iii) *Super ego* is the ethical moral arm of the personality. It is idealistic and does not care for realities. Perfection is its goal rather than pleasure. It is a decision making body which decides what is bad or good, virtue or vice according to the standard of society,
which it accepts. All the above personality constituents, viz., Id, Ego and Super Ego are inter-related. Although each has its own function yet it can never exist alone.

2. **Adler** opposed the Freudian’s structure of personality. He told that sex is not the life energy or the centre of human activities. Actually, power motive is the centre urge. Human beings are motivated by the urge to be important or powerful. All of us strive towards superiority but each strives in a different way. He named it as ‘style of life’. Therefore, what kind of personality one possesses can be understood by studying his style of life, i.e., the goals of life he has set for himself and the way of striving for achieving these goals. In this way, he gave birth to *individual approach* in the study of personality pattern and maintained that there are no definite personality types or classes. Each individual is a unique pattern in himself because everybody has definite goals and style of his life.

(C) **Trait Approach**

1. **Cattell**’s view: For giving the structure of personality, an empirical and scientific base, the trait approach was adopted by R.B. Cattell. It intends to give certain specific dimensions to personality so that the human behaviour, related to a particular situation can be predicted. Cattell has adopted factor analysis as a technique for this work: (a) Cattell began by attempting to obtain a complete list of all possible human behaviours. He collected a list of 171 words related with personality and called these as trait elements; (b) The next step is to find out how they are related. He found that each trait element correlated high with some others and low with some. In this way, he managed to form some specific groups and called them *Surface Traits*; (c) Again he went on examining these surface traits in terms of their inter-correlations. There was overlapping. The removal of such overlapping gave him desired basic dimensions which he called *Source Traits*; and (d) after obtaining source traits (which were 15 in numbers), he tried to use them to predict behaviour employing what is called a specification equation:

\[
\text{Response} = s_1 T_1 + s_2 T_2 + \ldots \ldots s_n T_n
\]
In this way, the response or behaviour of an individual is predicted from the degree to which he exhibits each source trait \( T \) modified by the importance of the trait for that response \( s \).

2. **Eysenck**’s view: Eysenck gave more specification by grouping traits into definite types. Hence his approach is trait-cum type-approach. There are four levels of behaviour organization: (i) At the lowest level, we have specification responses. They grow out of particular responses to any single act. For example, ‘blushing’ is a specific response; (ii) At the second level, we have habitual responses. If the individual reacts in the similar fashion when the same situation reoccurs, we get habitual responses. For example, not easily picking up friendship, hesitant to talk to strangers, etc., are habitual responses; (iii) At the third level, we have organization of habitual acts into traits. The behaviour acts which have similarities are said to belong to one group called trait. In the above examples, the habitual responses give birth to a group or trait called ‘shyness’; and (iv) At the fourth level, we have organization of traits into general type. A type is defined as a group of correlated traits. The traits which are similar in nature give birth to a definite type of trait. A person now can be classified as ‘introvert’, if he has traits as described at level iii, habits and habit systems as described at level ii and responds specifically as described at level i.

Eysenck has given the following distinct types: **introversion**, **extroversion**, **neuroticism** and **psychotism**. He has also tried to link different traits and characteristics with each of these types.

**Types of Personality**

**Bhagavad Gita** describes three different typologies based on the three gunas, the typology based on mortality and the typology based on social classification. Human nature is composed of the three elements called **gunas** or qualities, namely, sattva, rajas and tamas. The three gunas are mingled in varying quantities which bring about differences in qualities. But the self is above and beyond these three qualities. **Tamas**, the principle of inertia, is passive and suffers all shocks. It is driven by the
kinetic power of rajas which is embraced by an innate thought imposed preserving principle of harmony and balance and knowledge, the sattva. The man dominated by tamas develops a personality which is prone to confusion and delusion. This type is characterized by inattention, lack of understanding, indolence and languor. The person in whom rajas is predominant is given to attachment to the objects of desire. He is full of unrest, lustful and greedy. He is a creative of impulses and emotions. The man dominated by sattva guna is characterized by intelligence and clarity of vision. His desires and emotions are under control. He is free from lust, anger and greed. His actions in society are motivated by the well being of the whole society.

According to Charaka, 3rd century BC, human beings are divided into three classes on the basis of three gunas. The Brahman type of man is pure, devoted to truth, self-controlled with good memory and understanding, free from desire, anger, greed, conceit, envy and equally well disposed to all. The Rishi type is one who is devoted to study, yagnas, celibacy. The third type is Indra who is endowed with lordship and is authoritative in speech, and is brave and energetic.

There are six varieties of rajas type which are Asura – valiant, Rakshasa – cruel, Pisacha – bullies, Sarpa – rouses fear, Preta – covetous, and Sakuna – fickle and intolerant. The three groups in the tamas type are the animal type – un-intellectual, fish type – greedy of food, and plant type – lazy and devoid of mental ability.

The Ayurvedic thinker Sushruta, 3rd century, classified people according to the preponderance of the three doshas – Vata, Pitta and Kapha. The Vataja is wakeful and dishonest; the Pittaja is bold, eats a lot, irritable and cools down quickly, has good memory and intelligence; and the Kaphaja temperament is grateful, self controlled and unselfish.

**Functions of Personality**

The functions of personality according to Murray and Kluchotm are:

Personality is the continuity of functional forces and forms manifested through
sequences of organized processes in the brain from birth to death. They further observe that understanding a personality requires following its development through time, study of the processes of differentiation and integration, knowledge of the personality’s endowments.

Some other functions of personality are: 1. to allow for the periodic regeneration of energies by sleep; 2. to exercise its processes; to express its feelings and valuation; to reduce successive use of tensions; 3. to design social programmes for the attainment of distant goals; 4. to reduce conflicts between needs by following schedules, this results in a harmonious way of life; 5. to rid itself of irreducible tensions by restricting the number and lowering the levels of goals to be attained; 6. to reduce conflicts between personal dispositions and social sanctions, between the vagaries of antisocial impulses and the dictates of the superego by successive compromise formations, the trend of which is towards a whole-hearted emotional identification with both conservative and creative forces of society.

**Measurement (Assessment) of Personality**

The measurement or the assessment of one’s personality is a difficult task and it is one of the most important areas of evaluation in education. In fact, all the knowledge of psychology helps in understanding of personality of the child and all educational effort is to help in the betterment of the personality makeup of the individual. Different methods are adopted for assessing the personality and all such methods can be broadly categorized under four headings, viz., 1. **Subjective Methods** (Observation, Case Study, Interview, Autobiography, Cumulative record, Questionnaire, Introspection), 2. **Objective Methods** (Rating Scales, Check List, Controlled Observation, Sociogram, Inventory, Situation Test, Anecdotal Record), 3. **Projective Methods** (Rorschach’s Ink-Blot Test, Thematic Apperception Test (TAT), Children’s Apperception Test (CAT), Projective Questionnaires, Sentence Completion Tests, Psychodrama, Drawing, Painting and Sculpture, Machover’s Draw a Person Test (DAP), Word Association Test, Story Completion Test, Play
Technique), and 4. **Psycho-analytic Methods** (Word Association Tests, Dream Analysis, Daily Diary).

**Uses of Personality Testing:** 1. Personality testing helps the students in proper educational and vocational choice. 2. Personality testing helps the individual in resolving emotional conflicts. 3. Personality testing helps the teacher and counsellor. 4. Personality testing helps the clinical psychologist to choose the best therapy for his patients. 5. The teacher can understand the cause behind the deviant behaviour of the child to some extent. 6. The teacher may educate the parents about effective child-rearing practices and healthy relationship between parents and their children. 7. The teacher can ensure that the atmosphere in the school inter-personal relationships between the teacher and the child, teacher’s expectations and behaviour patterns, quality of teaching, etc., are all conducive to the well-being of the child. 8. The teacher, in collaboration with his colleagues, may adopt good healthy practices in the school. 9. The teacher can refer the child to appropriate professional for proper treatment, if the child is found not curable in the regular school programmes.

**Difficulties in the Measurement of Personality:** 1. Personality is not the thing; it is an abstract idea which is not clear to measure and is a dynamic process which is ever in a process of change and modification from time to time. 2. Satisfactory instruments which are exact, reliable and valid for measuring personality are not available. 3. In assessing the personality, we are not interested in a person’s best behaviour but want to find out his typical behaviour in ordinary situations. 4. A person who is being questioned about his personality may not be reluctant to disclose information that will show him in an unfavourable light. 5. Besides obtaining an accurate picture of a person’s personality the psychologist often has to ask questions about sensitive areas, such as the person’s emotional adjustment to life, his relations with other people, his intimate family history and his attitudes. This can be construed as an unwarranted intrusion in the privacy of an individual. 6. The subject’s reluctance to disclose sensitive information.
III. ACHIEVEMENT

Education plays a vital role in building the society. A modern society cannot achieve its aim of economic growth, technical development and cultural advancement without fully harnessing the talents of its citizens. Educationists, thus, strive to fully develop the intellectual potential of the students and make efforts to see that their potentialities are fully realized and channelized for the benefit of the individuals and that of the society.

The term achievement can be understood as one’s learning attainments, accomplishments or proficiencies in performing a given task in education. Achievement is directly related to the growth and development of students in educational situations, where teaching and learning go hand-in-hand. The concept of achievement involves the interaction of three factors, viz., aptitude for learning, readiness for learning and opportunity for learning. The concept also involves health and physical fitness, motives and desires, and emotional balances of the individuals in the fulfillment of the given tasks. Achievement in education implies one’s knowledge, understanding or skills in a specified subject or a group of subjects.

According to Webster’s third Micro International Dictionary (1961), achievement means “the capacity to achieve the desired results”. In the Oxford English Dictionary, achievement has the meaning: “The accomplishment, execution, carrying out, working out of anything ordered or undertaken, the doing of any action or work.” “Something performed or done, an action in emphatic sense, a notable deed, achievement.”

The term achievement is a very broad term, which indicates generally the learning outcome of students. Achievements or these learning outcomes require a series of planned and organized experiences and hence learning is called a process. In this process of achievement of change in behaviour, one cannot say that all students reach the same level of change during the same span of time. The level of achievement reached by the students is called the academic achievement of students.
Educational opportunities, though open to all, do not seem to engage to any reasonable extent the capabilities of those who seek to avail of them. An eternal question baffling parents, educators and national planners is why do students of demonstrated ability flop in their academic efforts at school or college examinations? Academic under-achievement, more than academic failure, constitutes a grave problem as it amounts to wastage of human resources that is considered as an irreparable loss to society, which a developing country can ill afford. This stimulated a number of researchers to undertake studies on factors influencing academic achievement. (Digumarti Bhaskara Rao, 1989)

The situations and the environments in which the learning is to be made by the learner influence the learning process. A well equipped healthy class-room environment proves a motivating force. The child likes to read, write or listen to the teacher carefully if he finds favourable environment and appropriate learning situations. The suitability of the building, the seating arrangement and other physical facilities available and affection he gets from his teachers, the mutual cooperation and help he gets from his class-mates, the opportunity or participation he gets in the co-curricular activities, etc., will influence and motivate the learning behaviour of the child. Therefore, efforts should be made to provide suitable learning situations and environment for effective learning and enhancement of academic achievement and achievement motivation.

Learning affects three major areas of behaviour of students: cognitive, affective, and psychomotor, respectively. It is difficult to say without proper evidence, that the students reach the same level in all the three domains at a time. Students may be at a somewhat higher level in one domain and at a somewhat lower level in other domain. This means that students may be at different levels of achievement in different areas. As the areas of affective domain and psychomotor domain are not sufficiently explored, it is generally a custom to restrict the term “college performance” to the level of achievement of students in the cognitive areas of various college subjects. Here, one should not restrict oneself to only academic
performances but also to the accomplishments in other areas. In order to find out the academic achievement of students, evaluation is necessary.

Evaluation is an integral part of the teaching-learning process and it involves identifying and defining instructional objectives in behavioural terms, using suitable learning experiences, and constructing suitable evaluation instruments and appraising various learning outcomes.

Virtually, all the teachers use some kind of tests to evaluate the progress of their students. Here are some of the principles of measurement of educational achievement as given by Robert Ebel (1971): 1. The measurement of educational achievement is essential to evaluate effective education. 2. An educational test is no more or less than a devise for facilitating, extending and refining a teacher’s observation of students’ achievement. 3. Every important outcome of education can be a measurement. 4. The most important educational achievement is command of useful knowledge. 5. Written tests are well suited to measure the student’s command of useful knowledge.

There are many students who pass the examination, yet they fail to achieve as much as they can in terms of their abilities. These students are known as under-achievers. They are the persons who are quite capable, but fail to achieve in conformity with their capacities for several reasons. Perhaps, certain non-intellectual factors may interfere with their achievement.

Achievement is a function of personal as well as environmental factors, individuals tend to mainly attribute their behaviour or level of performance more to one than the other of these two factors. Applied to education, it is an attempt to explain individual differences as the causes of their failures and successes in academic task and the effects of such beliefs. (Weiner, et al, 1971).

Achievement is the performance of the student’s accomplishment in a subject. Study of achievement with some of its correlates has become a topic of key interest among the researchers today. Academic achievement depends on a number of
variables. Important among them are the students’ socio-economic status and their achievement motivation.

Underachievement, more than academic failure, constitutes a grave problem as it amounts to wastage of human resources which is construed as an irreparable loss to the society, which a developing country like India can ill-afford. This stimulated a number of researchers to undertake studies, like the present study, on academic achievement. There are a number of researches on achievement and the factors that are influencing the achievement of students. Achievement is influenced by many factors like values, intelligence, creativity, socio-economic status, the level of aspiration, etc.

Taylor (1964) stated that the value the student places upon his own worth, effects his achievement. Very low level of expectation tends to make a student accept very low standard of achievement, very high expectation leads to discouragement and diminished effort because he feels he cannot live up to what is required of him. To be practical, the level of expectation needs to be general to suit to each individual’s capability.

Achievement, as excellence in all academic disciplines, includes excellence in sporting, behaviour, confidence, communication skills, punctuality, assertiveness, arts, culture, and the like. Academic performance refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers. Academic achievement/performance is the ability to study and remember facts and being able to communicate your knowledge verbally or down on paper, and it is measured by various kinds of tests.

Generally, the tests or the methods of examinations are of three types: Essay type examination (traditional type examination), Short answer type tests, and Objective type tests.

In fact, it is true and premature to think of giving up the essay type of test or the traditional type of test. What is needed is the removal of the defects of the
traditional type of tests, short answer type of tests and objective type of tests. This would make the examination system scientific. This is true with English as well.

With these aspects in view, a study has been undertaken to study the level of intelligence, personality and achievement and their relationship with each other at secondary school level.

**STATEMENT OF THE PROBLEM**

A Study of Intelligence, Personality and Achievement of Secondary School Students

**NEED OF THE STUDY**

All individuals differ in mental abilities, as well as in physique and traits of personality. None of us is like any other. Everyone is influenced by a number of genetic factors and environmental factors which influences different behaviour. People differ in varied ways. No two individuals are alike says an adage. Individual differences among the students are a characteristic feature usually observed by a teacher. Some pupils are bright while others are dull; some are able to adapt themselves to new situations easily while others find it difficult to do so; some are quick while others are slow; some learn with little effort while others have to labour hard for it; some are able to solve problems directly and quickly while others fumble with them for a long time and so on and so forth. Though people differ from one another it is only in the extent of the characteristics but not definitely in ability characteristics.

The intellectual development comprehends the development of intellect, mental capabilities, imagination, thinking, emotion, violation and other mental processes. The teacher’s duty is to assist the student in the development of his abilities. What is essential for man, whether young or old, is to live fully, integrally, and that is why our major problem is the cultivation of that intelligence which brings integration. It is really very important that we approach our human problems with an integrated point of view. To be an integrated human being is to understand the entire
process of one’s own consciousness, both the hidden and the open. We attach great importance to the cultivation of the mind, but inwardly we are insufficient, poor and confused. This living in the intellect is the way of disintegration; for ideas; like beliefs, can never bring people together except in conflicting groups.

Personality is the integration of internal and external activities. It includes the external appearance, qualities, aptitude and capacities, etc. It is the result of the interaction of the individual with the environment. It is not a collection of the traits, but a particular organization of them. It is the total quality of the individual’s behaviour. Individual affects other individuals through his personality. Thus, personality is manifested in his various activities. In short, personality is the total quality of the behaviour, attitudes, interests, capacities, aptitudes and behaviour patterns, which are manifested in his relation with the environment.

Achievement is one’s learning attainments, accomplishments or proficiencies in performing a given task. Achievement is directly related to the growth and development of students in educational situations, where teaching and learning go hand-in-hand. The achievement involves the interaction of three factors, viz., aptitude for learning, readiness for learning, and opportunity for learning. The achievement also involves health and physical fitness, motives and desires, and emotional balances of the individuals in the fulfillment of given tasks. Achievement in education implies one’s knowledge, understanding or skills in a specified subject or a group of subjects.

Intelligence, personality and achievement are the very essentials of a man. Even if one is lacking, life becomes meaningless. It is not correct to say that all intelligent persons possess right personality. Always there are individual differences and different traits responsible for intelligence, personality and achievement. In fact, intelligence is a part of personality. A secondary school student can only succeed in his life when he/she rightly uses all these three concepts in his/her life.

So, teacher educators, administrators, policy planners and guidance personnel connected with school education programmes should think of ways and means of
enhancing the levels of intelligence, personality and achievement of secondary school students so that they can perform still better when they step out of the school and go for higher studies.

**SCOPE OF THE STUDY**

The present study is confined to Kadapa district, Andhra Pradesh. The sample selected for the study was secondary school students. The sample size chosen for the study was 1000 (one thousand) school students studying in secondary schools.

The variables chosen for the study were the gender, locality, school management, type of school, medium of instruction, caste reservation, religion, parental education and economic status of the family.

The other factors that contribute to the present study, viz., home background, age, creativity, birth order, adjustment, etc., were not taken into consideration because of lack of time and resources.

**OBJECTIVES OF THE STUDY**

The objectives proposed for the present study were:

1. To find out the intelligence of secondary school students.
2. To find out the intelligence of male and female secondary school students.
3. To find out the intelligence of rural and urban secondary school students.
4. To find out the intelligence of government and private secondary school students.
5. To find out the intelligence of residential and day-scholar secondary school students.
6. To find out the intelligence of Telugu medium and English medium secondary school students.
7. To find out the intelligence of reserved and unreserved secondary school students.
8. To find out the intelligence of Hindu and non-Hindu secondary school students.
9. To find out the intelligence of secondary school students of literate parents and illiterate parents.
10. To find out the intelligence of parents of secondary school students with an annual of below Rs.1,00,000 and above Rs.1,00,000.
11. To find out the personality of secondary school students.
12. To find out the personality of male and female secondary school students.
13. To find out the personality of rural and urban secondary school students.
14. To find out the personality of government and private secondary school students.
15. To find out the personality of residential and day-scholar secondary school students.
16. To find out the personality of Telugu medium and English medium secondary school students.
17. To find out the personality of reserved and unreserved secondary school students.
18. To find out the personality of Hindu and non-Hindu secondary school students.
19. To find out the personality of secondary school students of literate parents and illiterate parents.
20. To find out the personality of parents of secondary school students with an annual of below Rs.1,00,000 and above Rs.1,00,000.
21. To find out the achievement of secondary school students.
22. To find out the achievement of male and female secondary school students.
23. To find out the achievement of rural and urban secondary school students.
24. To find out the achievement of government and private secondary school students.
25. To find out the achievement of residential and day-scholar secondary school students.
26. To find out the achievement of Telugu medium and English medium secondary school students.
27. To find out the achievement of reserved and unreserved secondary school students.
28. To find out the achievement of Hindu and non-Hindu secondary school students.
29. To find out the achievement of secondary school students of literate parents and illiterate parents.

30. To find out the achievement of parents of secondary school students with an annual of below Rs.1,00,000 and above Rs.1,00,000.

31. To find out the correlation between intelligence and personality of secondary school students.

32. To find out the correlation between intelligence and personality of male and female secondary school students.

33. To find out the correlation between intelligence and personality of rural and urban secondary school students.

34. To find out the correlation between intelligence and personality of government and private secondary school students.

35. To find out the correlation between intelligence and personality of residential and day-scholar secondary school students.

36. To find out the correlation between intelligence and personality of Telugu medium and English medium secondary school students.

37. To find out the correlation between intelligence and personality of reserved and unreserved secondary school students.

38. To find out the correlation between intelligence and personality of Hindu and non-Hindu secondary school students.

39. To find out the correlation between intelligence and personality of secondary school students of literate parents and illiterate parents.

40. To find out the correlation between intelligence and personality of parents of secondary school students with an annual of below Rs.1,00,000 and above Rs.1,00,000.

41. To find out the correlation between intelligence and achievement of secondary school students.

42. To find out the correlation between intelligence and achievement of male and female secondary school students.
43. To find out the correlation between intelligence and achievement of rural and urban secondary school students.
44. To find out the correlation between intelligence and achievement of government and private secondary school students.
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46. To find out the correlation between intelligence and achievement of Telugu medium and English medium secondary school students.
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48. To find out the correlation between intelligence and achievement of Hindu and non-Hindu secondary school students.
49. To find out the correlation between intelligence and achievement of secondary school students of literate parents and illiterate parents.
50. To find out the correlation between intelligence and achievement of parents of secondary school students with an annual of below Rs.1,00,000 and above Rs.1,00,000.
51. To find out the correlation between personality and achievement of secondary school students.
52. To find out the correlation between personality and achievement of male and female secondary school students.
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58. To find out the correlation between personality and achievement of Hindu and non-Hindu secondary school students.
59. To find out the correlation between personality and achievement of secondary school students of literate parents and illiterate parents.
60. To find out the correlation between personality and achievement of parents of secondary school students with an annual of below Rs.1,00,000 and above Rs.1,00,000.

**EDUCATIONAL IMPLICATIONS**

Intelligence, personality and achievement are important components in a student’s life as they influence each other.

Based on the intelligence level of the secondary school students observed in the study, can take necessary steps to place the students at appropriate subject areas, can plan suitable remedial measures, can modify the teaching learning strategies, and can assess and evaluate appropriately.

Based on the type of the personality of the secondary school students noticed in the study, can consider appropriate measures to bring the balanced personality in the students, can place the students in suitable positions, can make them avoid the use of defensive mechanisms, and can guide them in a suitable way.

Based on the level of the achievement of the secondary school students found in the study, can use appropriate assessment and evaluation tests and procedures, can plan to change the teaching strategies, can try to enhance the achievement of the students, can use appropriate remedial measures, can use motivational techniques, and can fill confidence in students.
Based the correlation between/among intelligence, personality and achievement, necessary steps can be initiated to use intelligence judiciously, to bring balanced personality, and to improve the academic achievement of the secondary school students.

The school, the teachers and the parents will take all the necessary steps to make the secondary school students do well in every aspect.