

Educational Psychology

Topic → Psych principles underlying effective teaching & learning process

Teaching & learning both are behavioural acts governed by specific psychological principles. The purpose of teaching is to create situations that facilitate the learning in broader sense. Teaching intent or goal may be learning but not all learning teaching facilitates learning. Because not all teaching facilitates learning a teacher must employ a teaching strategy. Teaching strategy refers to the techniques employed by the teacher to facilitate learning.

Teaching & Learning relationship considers 4 processes of education

① Teacher ② student ③ Learning process ④ Learning situation.

A learning process is an interaction between student & teacher + learning situation includes teacher-taught interaction for all educational programs within or outside the school. The teacher creates a learning situation by performing teaching.

activities. Teachers behavior & learning situation influence the students learning. A learner needs the help of the teacher when he wants to learn or solve the problem. It involves communication between the teacher & the learner.

There are 3 variables that operate in the process of teaching & learning & these are

① Teacher as IV

② Student as DV

③ Content & strategy of presentation as Intervening variable.

Teacher as I.V.

Teacher is I.V. because it is the teacher who plans & executes certain actions which result in certain behavioral changes in the students. Teacher is I.V. as he has the freedom to perform activities for providing learning experiences to pupils.

Student as D.V.

* The student is D.V. because he has to act according to planning & organisation of the teacher.

③ Teaching strategy as Intervening variable

The contents of teachings, strategies, tactics of teaching & the motivation the teacher provides constitutes Intervening Variable. The interaction between the teacher & taught is performed through intervening variable.

Teaching is a complicated activity & according to Jackson it involves 3 phases

① Preactive phase ② Interactive phase ③ Post active phase.

① Preactive phase - In this phase the teacher plans how he will carry out his teachings. It includes operations like

① Decision about content

② Preparing the material & lesson plans

③ Thinking about appropriate ways

(4) Developing teaching strategies about specific subject matter.

(2) Interactive Phase:-

This phase includes all those behaviours w a teacher uses after entering the classroom. It includes all activities presenting the subject-matter - as such as:-

- (a) Sizing up the class.
- (b) Diagnosis of the learners.
- (c) Selection of the stimuli (which information & in what order)
- (d) Presentation of the stimuli.
- (e) Feed back and reinforcement.
- (f) The development of the strategies of teaching

(3) Post active phase:-

The teacher carries out the evaluation. The teacher evaluates the student performance based on classroom teaching. Main operation include:-

- (a) Defining exact dimensions of behavioural change.
- (b) Selecting appropriate testing devices.
- (c) Modifying or changing strategies based on the feedback of the student.

(iii) by providing them feedback on their performance.

Positive - motivation to continue.

Negative - motivation to improve.

(iii) Ensuring that the stimulus input matches with the needs + abilities of the learner.

(iv) Active participation of the learner. Making him learn by doing the things himself.

(v) Making them understand their strengths + weaknesses + by helping them set their goals in a realistic manner.

(vi) Introducing novelty in teaching + satisfying the curiosity of the learner.

(3) Principle of Association:-

Teacher must encourage learners to associate the events - This can be facilitated by giving the relevant examples.

→ By presenting abstract concepts with concrete examples.

→ By providing both positive + negative instances of the concept.

(4) Principle of generalization + Abstraction:-

→ generalization is a process of identifying common properties in otherwise dissimilar things. Both are essential for learning as they make transfer of training possible. A teacher can facilitate these habits by himself performing these + by rewarding them when they themselves do it successfully.

(5) Principle of Memory:-

Memory is a very important part of learning as without retention it's impossible to come up with successful performance. Teacher can facilitate memory by:-

(i) Encouraging students to use mnemonics.

(ii) By presenting the abstract unrelated details with context + examples.

(III) By helping the learner identify the crucial elements in the learning material.

(6) Principle of Comprehension.

Understanding level of each learner is different. It depends upon the intelligence + IQ. of learner. Not much can be done to improve IQ. of learner. However by individualization of instruction it can be ensured that the learner thoroughly comprehends the material before proceeding to next stage & it is not forced to sustain with the pace of his other classmates.

(7) Other steps:-

(i) The teacher must proceed from known to unknown, from simple to complex, from easy to difficult, from empiric to rational relational & from concrete to abstract.

(ii) Make the learner to use maximum of his sensory modalities - auditory & visual are most important.

(iii) To ensure that learner gets sufficient practice once he learns & to encourage him to use daily life examples to understand the concepts.

(8) Principles of communication:-

Teaching is an act of conversation between the teacher & the learner & the principles of effective communication apply both to the teacher & the learner. Most frequently effective communication used, tool to generate motivation, & commitment - learners is fear appeals.

Teacher also uses Prestige appeal (study by Sinha, Tripathi & Mishra) to create teacher's faith in teachers suggestions.

- Teacher uses moderate form of pleasant distractions to
- Interest arousal is an effective principle too.
- Simple language.
- Dramatization & illustration.
- feedback from students

(10) Principles of Personality:-

Learning is a sequence of mental events or conditions leading to changes in learner. Learning process starts because the learner has needs + therefore is in a state of readiness to respond. Effective teaching expedites the process of learning by helping the learner organize his learning + ensuring that he carries it out in a systematic manner. Learning is influenced both by factors intrinsic or extrinsic to learner.

The intrinsic factors include -

- a - Age.
- (b) Health.
- (c) Mental health.
- (d) Attention.
- (e) Intelligence.
- (f) Attitude.
- (g) Emotional stability.
- (h) Memory.
- (i) Interest.
- (j) Self concept.
- (k) Motivational level.

The extrinsic factors are :-

- (a) Classroom climate - also includes teacher taught relationship
 - Peer group interaction.
 - Curriculum.

(b) Home climate →

→ parent child interaction.

→ Parent-parent interaction.

→ educational level + socio economic level of parents.

Psychological Variables operating in teaching.

• learning process.

(1) Knowledge of individual differences.

The teacher must respect these individual differences among the learners + cater the students according to his needs.

(2) Principle of Motivation :-

• No learning can take place without motivation therefore its essential that both teacher + learner could be motivated.

Teacher's motivation comes from :-

(1) Positively reinforcing their desirable behaviour.

The positive reinforcement can be concrete or symbolic depending upon the socio cultural milieu of learner.

Not only positive reinforcement should be provided, but reinforcement should immediately follow the desired behaviour, as it helps to make association between behaviour + reward strong. :-

Learner's personality has an influence on learner's performance. The personality of learner includes his physical makeup, his emotional makeup, his self concept & his world view. All of these are crucial determinants in his success. Physical attractiveness of the learner not only influences teacher-taught relationship, but most importantly it influences relationship between learners, i.e. peer relationship. It's quite likely that learners with below average looks might find themselves marginalized & this can lead to development of negative self image. By being aware of this problem, teacher can ensure that each student comes to know his special qualities which he can use for obtaining necessary recognition & respect.

The emotional stability of the learner is influential not only in determining his equation with his teacher but also with his fellow colleagues. Awareness about level of emotional stability of each learner can help the teacher to establish proper rapport with learner & bring the best out of him.

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LEARNING STYLES

Learning styles are personal ways in which individual process information. Common types are -
Conceptual tempos: These are basic disposition of the individual either to reflect upon his solution of a problem or to make impulsive and unconsidered responses. Jerome Kagan and his associates have identified children with two different conceptual tempos: The child with the impulsive, or fast-temp solves a problem with little or no delay. The child with the reflective, or slow tempo considers alternative problem solutions and therefore delays his responses.

The study of the reflection-impulsivity dimension have shown (Kagan 1965):

- (1) Reflection tends to increase with age as does accuracy
- (2) the tendency to display fast or slow decision times was relatively stable over periods as long as 20 months
- (3) the tendency toward reflection or impulsivity shows in the performance of many tasks - such as selecting the correct response from a list of alternatives, providing the correct response in the absence of an alternative, and answering questions in an interview situation, and
- (4) the dispositions seem to be linked to some basic aspects of the child's personality.

Kagan believes that the study of reflective & impulsive children has three educational implications. First, the teacher should adjust his procedure and the tempo of his teaching to accommodate the two different modes of learning. He should avoid the tendency to view the reflective child as slower and less bright than impulsive child. This tendency shows up in bright, impulsive children themselves, who tend to think that they are brighter than bright reflective children.

Second the teacher should not punish the impulsive child for incorrect answers with sarcasm, laughter or rejection, especially when he rewards children who offer correct answers quickly. The teacher who behaves in this way handicaps the impulsive child with only average ability. Finally vary in their teaching tempos, some speaking fast and offering a rapid flow of ideas, and others encouraging the child to consider alternatives and placing no premium on speed. The tempo of the teacher should be tailored to the tempo of the child.

Selection strategies - Jerome Bruner and his associates (1956) describe various ways in which individuals can learn concepts. These methods called selection strategies, control the order in which examples and non-examples of a concept appear. Selection strategies have

carry them all in his mind. In successive scanning the student tests single hypothesis at a time. Successive scanning reduces the amount of information which must be remembered but it also reduces the amount of information each encounter may provide.

A teacher must adjust the selection strategy to the ability of the child. This will allow the child to avoid disappointment & progress smoothly in his academic work.

Since Cognitive Styles also influences the way we process information, they also influence our learning behavior. Among the cognitive styles which are of interest are

the component of Learning Styles are.

- 1) Levelling & Sharpening
- 2) Field Independence & Dependence
- 3) Tolerance for unrealistic experience
- 4) Constricted vs Flexible style.

A knowledge of these styles & awareness of the particular style being used by the learner can ^{enable} help the teacher make the learner acquire more effective styles.

adjust his teaching to the style ^{characteristics of} the learner.

three purposes: They maximize the opportunity to obtain useful information about the concept; they reduce the strain of assimilating and keeping track of information; and they regulate the amount of risk we take in reaching a solution - we may take either the risky or the safe course.

Four selection strategies have been identified. In the first of these conservative focusing the individual uses an example of the concept as a focus and changes one attribute of the example at a time to find those attributes which are essential.

Focus gambling is a similar selection strategy in that the individual uses a focus example, but it is dissimilar in that he changes more than attribute at a time.

In the two other strategies, simultaneous scanning + successive scanning, the student formulates one or more hypotheses of what the concept may be and then looks for examples. In simultaneous scanning the student formulates several hypotheses about the attributes an object must have. Each time he encounters an instance, he decides which hypotheses to keep and which to eliminate. Simultaneous scanning is, as you can see, very exacting for the individuals must deal with several independent hypotheses and

RETARDED CHILDREN

Mental Retardation is not a disease or a single entity.

It is rather a term applied to a condition of retarded mental development present at birth or early childhood & is characterised by limited intelligence combined with difficulty in adaptation.

Morgan & King have defined mental ^{retarded} retardation as those who obtain -

1) I.Q. of below 70 on standardized test of intelligence.

2) Lack of adaptive skills to carry day to day activity.

Mental retardation is not primarily a mental problem, it is an educational, psychological & sociological problem as well.

Level of mental Retardation:-

AAMD has described following levels of Mental Retardation on the basis of IQ level:-

IQ	Description	
25 below	Profound	Custodial
25 - 39	Severe	Trainable
40 - 54	Moderate	Educatable
55 - 69	Mild	

Mildly Retarded:-

These people are capable of some degree of independent functioning with training. With special efforts they can be made socially or occupationally self independent & thus carry on their life tasks with moderate supervision.

Moderately Retarded:-

They are capable of learning certain basic skills.

~~necessarily~~ They can be trained to take care of their personal needs & hygiene to some extent.

Severely Retarded:-

Cannot be put into formal education. However with vigorous training, their social and personal adjustments can be improved.

Profoundly Retarded:-

Require total care & even persistent training brings about little change.

General behaviour- Characteristics of Retarded

The retarded individuals follow the same ^(stages) sequence of cognitive development as the non retarded population but at a slower pace & generally cease developing (cognitively) at a earlier stage.

Though it is difficult to distinguish between retarded & non retarded children in the early years, but close observation reveals that mentally retarded have following characteristics:-

- 1) Poor memory & generalising ability.
- 2) Lack of insight.
- 3) Low motivation level & expediency.
- 4) Outer directed.
- 5) ^{Short} attention span, poor concentration.
- 6) ^{find it} Difficult to zero on ^{relevant} cues.
- 7) Passive.

Causes of Mental Retardation:-

There are two general causes of mental retardation. The majority of retarded persons, about 75% are those whose I.Q.s fall by chance into the lower ranges of the bell-shaped normal curve. Mental retardation of this type, usually involving I.Q.s.

above 50 is called cultural familial, or sociocultural retardation, when it occurs in people who have at least one retarded parent. A bell shaped distribution results when scores are determined by the action of many somewhat independent factors, each of which can exert only a little influence. In the case of intelligence the factors probably include numerous gene pairs + a broad variety of environmental events. Most people are in the middle of curve, some are lucky and fall heir to favourable combination but others are unlucky + receive unfavourable combinations.

-- Other physiological causes of retardation are environmental, not genetic. eg. pregnant women who contract rubella (German measles) scarlet fever, syphilis, or even mumps may give birth to infants who have suffered brain damage as a result. Also insult or injury to the brain or nervous system before or after birth may result in retardation. Such damage may be done by x rays, by inappropriate drugs, by severe pressure on the infant's head during birth, by oxygen shortages during or after birth + even by severe maternal malnutrition.

Training of Retarded Child:-

Aims of the Training:-

- (a) To develop in the child the feelings of personal adequacy ie the positive self concept, so that he can be at peace with himself.
- (b) It also aims at developing social adequacy ie attitude + disposition to develop social relationship.
- (c) To develop occupational adequacy ie to make the child economically independent.

It however needs to be mentioned that ^{training} ~~training~~ is not effective with the retarded whose I.Q. falls by chance into the lower range of normal curve. For the retardation

caused by catastrophe the fall in the IQ is so low that most children of this group will not respond to the training

methods.

Methods of Training:-

1. Taste of Success:- Retarded children have the history of constant failure as a result, they are extremely demotivated + unwilling to experiment

with the new things. The need is therefore to initially expose him to the tasks which are within his capacity so that he gets success. This will restore his confidence &

will boost his motivation. which is essential for further learning.

(2) Optimal level of arousal:-

As the concentration of retarded children is unfavourably effected by extreme arousal, optimal arousal is a must for the distractibility be reduced to the minimum.

(3) Repetition:-

retarded children have poor memory + attention + therefore repetition of what is being taught is must.

Logan has suggested the use of programmed learning for teaching of the retarded children. The advantages of such learning are -

- (a) It allows the learner to progress at his own pace.
- (b) Novelty & curiosity can be assured.
- (c) Teaching ^{is carried out} place in small sequential steps.
- (d) Complete record of the learner's progress can be kept.
- (e) Immediate feed back.

Programme or Approaches For Helping Ret. Children:-

There are 3 approaches:-

- (1) Modified subject approach.
- (2) Integrated approach.
- (3) Compromise approach.

Modified Subject Approach:-

Subjects are taught separately as it normally happens in the schools, but content & the method of teaching take care of the slow learner, limited mental capacities & his slower rate of learning.

Limitation

- (1) Area of study may become over-compartmentalized & unrelated to reality & hence fail to give the slow learner the broad experiences meaningful to him.
- (2) The subjects taught may be nothing else than the watered down version of the subjects meant for the normals.

Integrated Approach:-

It seeks to break down the subject's barriers & relates what is taught to the needs & interests of the children.

Limitation:-

Effective teaching of the basic skill may suffer because of the difficulties that arise in controlling material of grading work in such fluid situation.

Compromise Approach:-

In this approach curriculum is structured in

40) Arousal of the Interest :-

In order to maintain the learners motivation it is essential that he must find the activity he does interesting. For this it is necessary that the curriculum should be designed in a manner which evokes learners interest.

5) Over learning :-

This is necessary because the learner has low memory & abstraction capacity.

6) The distributive practice

As the retarded child has small attention, continuous practice may not be very fruitful & therefore the learning trials should be interspread with periods of rest.

7) Reinforcement :-

Delayed reinforcement is not functional with retarded learners hence it is necessary, immediately after he does a desired act he must be provided with reinforcement.

8) Sensory Modalities :-

Curriculum should be delivered in such a way that child's maximum sensory modalities are brought to use.

9. Stressing on Accuracy :-

With retarded children stress should be on accuracy instead of speed.

Language

10. Most of the retarded children are deficient in language behavior & therefore it is very necessary to teach them language in everyday context. Also it is necessary that they be encouraged to generalize the skills they have learned into the new situation.

Conclusion :-

1) This ^{above can} can be possible only with active support & the participation of parents, teachers, voluntary agencies & government institutions.

Gifted Children

In early years, only those who scored very high or well standardized individual tests & obtained an IQ score of 130/140 or above were considered gifted. These children are now referred to as intellectually gifted. In recent times, the term gifted is used more broadly & includes those children who display very special talents, creative abilities of high order & exhibit outstanding leadership qualities. Thus in addition to children who are intellectually gifted, those who show signs of having talent in music, graphic arts, creative writing, dramatics, mechanical skills & social leadership are also considered gifted. It must be remembered, however, that children are considered gifted only when their special interests, abilities ^{etc} & educational needs are so far above the average that they can not easily be provided for under ordinary classroom conditions, & some special provisions are required either inside or outside the classroom to meet their needs & develop their capabilities.

Characteristics of Gifted Children:- (G.C.)

Kough & Dehanst have mentioned following characteristics of gifted from the average-

- (1) G.C. learns rapidly & easily.
- (2) G.C. uses lot of common sense & practical knowledge.
- (3) Retains what he has heard or ~~reads~~ ^{reads} without much rote or drill.
- (4) Knows many things which other people are unaware of.
- (5) Reasons out fast - shows reasoning, thinks clearly & logically, recognizes relationship quickly & accurately.

6. Uses a large number of words easily + accurately i.e. large + enriched vocabulary.

7. Can read books that are one or 2 yrs in advance than the rest of the class.

8. Does academic work for 2 yrs advance than rest of the class.

9. Is alert, keenly observant + responds quickly.

10. Loves abstract tasks like physics, maths + grammar.

(Studies):— characteristics of gifted children:—

Terman + Hollingworth together, in their study found that S.C. are stable in their emotional adjustment, are self sufficient + dominant + show lesser incidence of neuroticism. They have the early concern with the ethical + moral problems in society. They are hard working conscientious + oriented to rules + regulations.

Martison studied the G.C. + found them to be tactful, reliable, sincere, patient, steady, realistic, honest + have good commonsense + good judgement.

Gifted Boys Vr. Gifted Girls:— (within)

~~Gifted~~ Studies have shown that gifted girls are more intelligent than ordinary girls but they are less independent than gifted boys. Further unlike gifted boys gifted girls are found to be more docile inhibited less venturesome + more responsive to authority. Gifted boys on the other hand are dominant, exhibit spontaneity + have healthier ego.

Identification of Gifted:—

Gifted can be identified by formal + informal methods—

Informal methods include :-

- (1) Teachers observation
- (2) Opinion of peers & friends.
- (3) ~~Parents~~ Identification by Parents.

Formal methods include -

Use of intelligence & other tests

Teachers Observation :-

Teacher is close to the child as the parent is & therefore he gets a good chance to observe a child in the school & if he is alert observer he can pick out the gifted.

Pignato & Birch (1959) in their study involving first the services of a teacher, to identify the gifted, from the given list, and next doing the same by the means of standardized tests found ~~that~~ an observation error of 31.4% in the case of a teacher. He observed that teachers get influenced by the social leadership qualities & other personality characteristics while finding the giftedness, which is not the true criteria of finding the giftedness of a child.

Opinions of Peers & Friends :-

In addition to observing children themselves the teacher can also ask the children in the class to give their opinion about each other. This can help in detecting the gifted.

Limitations :-

- 1- The children may get carried away by interpersonal attraction preference & social characteristics.
- 2- They may be having some personal likes & dislikes or may be prejudiced.

Identification by parents & family friends:-

The identification of the parents is usually based on the close observational study of the children's rate of development. The giftedness in general develop at a faster rate. They learn to sit, stand, walk & talk at an earlier age than others. The parents can observe this & hence can pick out the gifted.

Limitations:-

- 1- This method can be of help only when the parents are themselves educated.
- 2- Family friends for selfish reasons or for placating the parents may label him prodigy.
- 3- Parents may exaggerate the qualities of the children though he may be just on the better side of average children.

Formal Method:-

consists of administration of various tests.

(1) Individual Intelligence Test :- (I.I.T)

Administration of IIT is the best method of identifying gifted children. It is like a personal interview, however it is too expensive to use with all children as it requires specially trained persons & great deal of time for administering it. Example Weschler test.

2. Group Intelligence Test:-

Standardized tests developed for the use of the children of the similar age or grade.

The shortcomings of these tests are that gifted children with reading difficulties, or motivational problems may not be identified by these tests.

3. Tests of Creative Thinking:-

Conventional intelligence tests do not measure creativity. Therefore in recent times increasing attention is being given to the development of tests used to assess originality & productive thinking. These tests need to be supplemented by observation of parents & teachers as creativity is often expressed in informal situations.

4. Achievement tests:-

These are the standardized tests designed to test the academic achievement of children at different age & grade levels. Problem with this test is that non-availability of the test in our country. Therefore teacher-made objective type test is recommended.

Conclusion:-

Thus we find that both formal & informal approaches have their assets & limitations & the results obtained on the basis of our evaluation can be misleading & thus we should use a comprehensive approach which should use both formal & informal approach.

Problems Faced by Gifted Children:-

(1) Egoistical Attitude:-

When success comes with little effort in competition with persons who possess less mental ability, an egoistical attitude is hard to avoid.

2. Misunderstanding :- Actions of G.C. are often misunderstood because their interests are of more intellectual

types & are different from those than of their age group. They may seek companionship among the children of the older group & this may be considered snobbish by their own age group. Teachers may resent their high level of intelligence & may try to keep them in their place, as they fear that the child knows more than them. Their innumerable questions irritate most teachers who then scold & snub them.

3. Pressure :-

Teachers & parents put too much pressure on children of superior mental ability by making them remain engaged in intellectual activities for most of their waking time. This is unfair because all aspects of personality need to be developed.

4. Misuse :-

Parents & teachers also need to guard against using these children to bring fame to their class, or school, or their families, by always putting them into the limelight. This not only puts the burden on the child, but deprives other children the opportunity to participate in the competitions of various kinds.

5. Maturity levels :-

The G.C. are able to progress through the school more rapidly than average ability students, hence they may begin to demand certain privileges that parents may consider too advanced for their age group. The parents inability to satisfactorily explain as to why they are being denied these privileges may cause conflict at home.

STUDIES SUPPORT HIGHLIGHTING THE PROBLEMS OF GIFTED

① Terman & Oden studied children of IQ ≥ 70 or more & found that they were very poor social creatures. They have adjustment problems & prefer to work in solitude. Their occupational achievement was also not very remarkable. Some girls with IQ ≥ 70 or more ultimately turned up housewives.

② HOLLINGWORTH found that many children with IQ \geq above 180 were poorly adjusted. Many of them were underachievers & were extremely unhappy & some even suicidal. One of the problem seems to be that these extremely bright children are trapped in the world with very few real peers. The picture however improves as these youngsters mature. The picture however

... settings, social... work in which their abilities
prove a real asset. In fact gifted adults appear to be
~~better adjusted than most people.~~

Educating a Gifted Child/-

Providing education to a Gifted Child is not an easy task. This is because we have not only to meet special needs of that children of this group share as a whole but also have to take individual variations into account. Three different approaches have usually been used -

- (i) Spl. Grouping.
- (ii) Use of Acceleration.
- (iii) Enriched curriculum.

Special Grouping:- Spl. grouping for gifted children include

- Spl. schools.
- Spl. classes.
- Modified Spl. classes.

Spl. School & Classes :-

Organising spl. schools & spl. classes is one of the ways by which the authorities have tried to meet the needs of these children. Spl. schools for gifted are commonly found in developed countries. In these schools there are special & extremely talented teachers, who have the capacity & capability to satisfy the need of the gifted. The syllabus & teaching method are so drawn that suits the needs of gifted child.

Because spl. schools are expensive & there may not be so many gifted in a country, or a region that a spl. school for them can be established, in many countries there is a provision of spl. classes in ordinary schools in.

which only the gifted children are admitted & taught. Thus while they go in ordinary school they

have for them separate classes which are different from the classes which their average school mates attend. The problem is -

→ Social maladjustment may result because of this separate treatment.

→ Spl. classes are also expensive even though they might be less expensive than spl. schools.

→ Spl. treatment to certain children may be resented by others.

Navodaya Vidyalaya, Physico Mathematic schools in Russia & Hunter school in N. York are schools for gifted
Modified Special Classes

In modified special classes the gifted children are with their average class-mates for most of the time & only for some classes they are grouped separately & taught advanced lessons. These classes are usually held before the normal classes or after the school hrs when normal classes are finished.

Gallagher has developed a 'Colfax' plan which is an enriched curriculum that can be provided to children in the modified classes.

— M. Spl. classes are economical.

→ They minimise the chances of social-maladjustment.

Acceleration :-

Acceleration means allowing the children to

progress faster academically than in ordinary done. Acceleration if not carried to extreme can

prove beneficial for the gifted children, progress socially, emotionally & physically at a faster rate than the children of their chronological age.

Methods of Acceleration

(1) Early School Admission :-

This means admitting gifted children to kindergarten the first grade at an earlier age, according to the rate of their mental development. M. Age can be determined with the help of standardised intelligence test. Studies have shown that this method is not harmful to the gifted child in anyway. Infact most of the experts favour the idea that M.A & not C.A. should be criteria for admitting a child to the school.

(2) Skipping Grades :-

Popularly known as Double Promotion, was a very common method of accelerating the academic progress until last few years. For example a child who has done excellent work in grade I is sent to grade III & not II. Thus he made to skip one grade. Now this practice has been discontinued as in it child misses the work of one grade completely & in the initial years when the foundation is being laid such 'misses' cause gaps in knowledge & makes the foundation weak.

Telescopic Grade :-

It is another method of acceleration, in which the work of one grade may be covered in 6 months or less.

work of two grades is covered in ¹⁰ ¹⁰ by a gifted child. Thus the child doesn't miss any ~~way~~ work

doesn't get bored by having to work at the speed of his average class mates.

To remove the rigidity in education system the H.R.D ministry in India is considering the abolition of examinations at the primary school stage. This will allow teachers to operate more freely & help the children to proceed at their own rate i.e. make progress in accordance to the rate of their mental development.

Acceleration is beneficial if the children's emotional, social & physical developments are keeping pace with their faster intellectual development. Children whose intellectual development is proceeding at a faster rate than their physical & emotional development are better off with their own age mates.

Enrichment of The Curriculum :-

Enrichment refers to providing the gifted with educational experiences which are over & above those provided in classroom programmes. For eg. additional reading could be prescribed or extra assignments can be given. Enrichment would also mean providing opportunities for the development of spl. talents in the field of sports, art, music, creative writing etc.

Use of Ψ cal Tests in Educational Institutions

Psychological tests are the standardised instruments to measure sample of behavior. These instruments can be used in educational institutions for

① diagnosing the learning difficulties of the children.

② vocational & educational guidance of the children.

③ measuring the academic performance of the children.

④ to identify the learning styles of the children.

⑤ to identify the interest areas of the children.

⑥ to measure the aptitude of the children.

⑦ to find out the adjustment level of the children.

⑧ to measure their stress tolerance ability.

⑨ to detect physical & Ψ cal abnormality if any in the children.

Among the commonly used tests in educational settings are

① Intelligence tests.

② Aptitude tests.

③ Interest tests.

④ Achievement tests.

Intelligence Tests /

Uses of intelligence tests in educational guidance:

(a) The scores on intelligence tests provide a reliable criterion of classifying pupils. Homogeneous grouping

of people pupils enables the teacher & the guidance workers to provide suitable instructions & educational plans. This ensures effectiveness of instruction & training.

(b) The scores on intelligence tests help the pupil to have realistic expectations about his own performance. It also prevents frustration resulting from overestimation about own capacity & underdevelopment resulting from underestimation. It helps to build confidence.

(c) Intelligence testing helps diagnosis of educational backwardness. There may be backwardness due to the emotional blocking, inability to pay attention, lack of discipline, family problems etc. With the test score it becomes clear whether the fault lies in the intellectual capacity or else-where.

Uses of Intelligence tests in vocational guidance:

(a) Help in selection of career:-

Different careers require different levels of intelligence. Predicts the progress of individual in the given area. If the IQ is average, then the individual is guided to jobs which demand an average IQ. eg. clerical assistant to the manager. If a person's score on the test is very high, then guidance is given for a field where his capacity can be developed to the maximum & utilized. Thus, for developing the potentials as well as utilising the same, such test score help.

(b) For selecting candidates for admission to different courses

Screening + eliminating unsuitable saves us from the problems of wastage + stagnation. Intelligence scores reveal whether the person will succeed in the course or fail whether he would continue + complete the training or drop out, wasting a seat.

Selecting the candidate for sponsored + promotional training. After entering certain vocations, extended training is required. IQ scores may help to select the deserving candidates for such training.

Aptitude Tests :-

Aptitude refers to the specific potential of an individual that can be developed through training. It is an ability to benefit from learning. It plays a very important role in making educational plans selecting an occupation.

Application of aptitude tests in educational guidance:

Aptitude tests are used to identify the special abilities of an individual. Aptitudes may not be revealed in day-to-day class-room assessments. The test provides a profile of specific potentials in diverse fields possessed by an individual student. At elementary stage the guidance worker recommends training in the area where the student is likely to be most successful. If training is not provided then the aptitude may remain undeveloped + suppressed. This may result in the wastage of human-resources.

Aptitude test scores prevent the students from wrong

choice of subjects. Wrong choice of subjects lead to failure + the student feels inadequate + worthless. Feelings of frustration can affect his general adjustment + adoption of unhealthy habits.

(ii) Aptitude tests are used at the entrance exams for selection of right candidates. This is to check on the work + failure. Only those candidates who possess the aptitude + the trainability - required in the particular area are selected so as to ensure success.

Use of Aptitude tests in vocational guidance:

(i) In choice of a vocation, an individual must identify his own potential to succeed in the vocation.

Very often the student is not aware of his own ability. Several factors like glamour, prestige in society, current trends, mislead students in choice of vocation. Certain fields require high aptitude + an individual may not possess it. This leads to failure to meet with the demand of the job + maladjustment at the work place. Often it is too late to change the vocation. Hence through aptitude test a vocational guidance worker suggests the job which is most suitable to the person.

(ii) Aptitude tests help in the selection of candidates for training in a vocational course. They predict the performance of the candidates for training in a vocational course. They predict the performance of the candidate on the job.

The aptitude profile of a candidate reflects the likelihood of success in the given field. On the basis of this selection is done. Aptitude tests act as supplement to other psychological tests. At the vocational guidance centre decisions are made by the individual on the basis of several psychological tests. The requirements of each job may be diverse. Aptitude tests may be taken as supplement to the personality, interest, attitude + intelligence test.

Interest Tests:-

Interest is a generalised behaviour tendency of an individual to be attracted to a certain class of activities that are vocational in nature.

The main concern of guidance is to help the individual in making decisions which lead to satisfaction, happiness + better quality of life. Interest determines both success + satisfaction in an activity. Hence interest plays a very important role in educational + vocational guidance. The purpose of interest tests are follows -

- 1) To provide teachers + counsellors with information regarding the student's preference + aversions.
- 2) To clarify + identify the individual's interest in terms of the demands of varied courses + choose work + courses consistent with his interest.
- 3) To channelise the energies of the students in the most preferred direction.
- 4) To help in selection of the right person for the right job.

This saves frustration, unhappiness + disappointment + increases productivity.

Achievement-Tests:-

Achievement-tests are designed to measure the effects of a specific programme of instruction or training. They play an important role in decision making regarding modifications in instructions on the part of counsellors and teachers. They also provide feedback to the learner. Achievement-test batteries provide a profile of an individual's score in major educational areas.