



## A) Understanding the self :-

The aim of the course is to develop understanding of student-teachers about themselves - the development of the self as a person and as a teacher, through conscious ongoing reflection.

The course will address aspects of development of the inner self and the professional identity of a teacher. This shall enable student-teachers to develop sensibilities, dispositions, and skills that will later help them in facilitating the personal growth of their own students while they teach.

The course will enable student-teachers to develop a holistic and integrated understanding of the human self and personality, to build resilience within to deal with conflicts at different levels and learn to create teams to draw upon collective strength.

The course would be transacted through a workshop made by more than one resource persons. The following methodologies for the transaction of the course could be used in interactive session.

- 1) sharing case studies / biographies / stories of different children who are raised in different circumstance and how this affected their sense of self and identity formation.

2) watching a movie / documentary where the protagonist undergoes trials and finally discover her/his potential despite odds.

3) Issue of contemporary adolescence / youth need to be taken up as student- teachers first need to understand themselves, and themselves in relation to their students and classroom situation.

4) different modes of expression can be used in each of the session and at the end of the year the resource person and the co-ordinating faculty can reflect back on whether all modes of expression were included through the ~~session~~ of not.

5) The exercise of developing reflective journals and providing regular feedback on those journals can also be used there here.

6) Orientation through lectures.

7) The themes for this workshops may be related to following:-

1) self concept and self esteem :-

An emotional evaluation of how much value or worth you have, based on positive and negative self-evaluations.

- Some signs of low self-esteem included :-
- Believing others are better than you.
- Having trouble expressing your needs.
- focusing on your weaknesses.
- Frequently experiencing fear, self-doubt, and worry.
- Having a negative outlook on life.

## 2) Life skills :-

Life skills are essential for success in the 21<sup>st</sup> century. they can help people develop self-confidence, deal with challenges, and prepare for adult and working life.

Life skills are a set of basic skills that help people handle everyday programs and issues, they include :-

- ① communication
- ② Critical thinking
- ③ Decision-making
- ④ problem-solving
- ⑤ Interpersonal relationships
- ⑥ self-awareness
- ⑦ coping with stress
- ⑧ self control
- ⑨ perspective-taking
- ⑩ collaboration
- ⑪ personal and social responsibility.

## 3) personality :-

The process of changing, enhancing, or developing one's personality over time.

Some personality traits include :-

- i) Introversion.
- ii) openness to experience.
- iii) Conscientiousness.
- iv) Agreeableness.

#### 4) Knowing oneself :-

Knowing oneself, or self-knowledge, is the process of understanding your own thoughts, feelings, values, beliefs, and behaviors. It's about discovering what makes you who you are, and what's important to you.

Some benefits of knowing yourself :-

- Resilience, Adaptability, better choices, Practicing self awareness, Avoiding distractions, embracing change, Asking yourself questions.

#### 5) Making SWOT analysis :-

A SWOT analysis is a tool that help business and individuals identify their strengths, weaknesses, opportunities, and threats. here are some steps you can take to perform a SWOT analysis.

- 1) set a goal.
- 2) Assemble a team.
- 3) List strength, weaknesses, opportunities, threats.
- 4) Refine and prioritize.
- 5) Create an action plan.

#### 6) Facing an Interview :-

Interviewing skills are your ability to interact with the employer or interviewer and show them why you are the best-fit candidate for the job role. your interview skills give an interviewer in sight into how you will communicate in the workplace and solve problems. It also shows if you can actively listen and be honest in your work.

## 7) Group discussions :-

A group discussion is a structured conversation where a group of people discuss a specific topic or problem. GDs are often used in academic settings, job interviews, and business meetings. They can help evaluate a wide range of skills and qualities including :-

- ① communication skills, teamwork, problem-solving, leadership, knowledge and awareness, time management, persuasive skills, stress management, critical thinking, and adaptability.

Here are some tips for participating in a group discussion:-

- ① Listen actively
- ② Be respectful.
- ③ make eye contact
- ④ introduce yourself with confidence
- ⑤ Practice.

## 8) Debate :-

A debate is a structured argument between two or more sides that present opposing viewpoints on an issue, while a group discussion is a collaborative exchange of ideas on a topic.

Here are some differences between debates and group discussions.

- ① structures
- ② Goal
- ③ Nature
- ④ Audience
- ⑤ Conclusion.

Debates are ideal for competitive events, controversial topics, and situations where you need a definitive resolution.

### 9) Sharing case studies :-

Case studies are detailed studies of a specific subject, such as person, group, place, event, organization or phenomenon. They are commonly used in social educational, clinical, and business research. In marketing, case studies are used as social proof to persuade buyers that a product, process, or service can solve a problem.

- Social media, website, sales presentations, speaking engagements, webinars, video content, Ad campaigns.

### 10) Skits :-

A skit is a short performance in which the actors make fun of people, events, and types of literatures by imitating them. They mock different aspects of life, whether that be a person, situation or an existing piece of literature, film or television.

## B) Basic of Reasearch in educations :

- a) Select any classroom problem and prepare a plan of action for solving it.

Last week during our class meetings, I noticed a disturbing habit developing among my students. Sometimes they don't want to switch seats and move away from their most best friends, and sometimes they want to be the last one standing.

Then we talked about how this might makes everyone else feel and how it might affect our class community we agreed that this was a problem because it did not make everyone feel welcome. finally I asked them for suggestion to solve the problems.

we have been working on problem solvin all year. I started by teaching my students that solutions always need to be related, respectful resonable, and helpful. this is a challenge for students who often think of punishment before solution. As we started talking about possible solutions to this problem, the first few solutions were not surprisingly more like punishments, such as, having the culprits sit out of future greetings and activities until they were being kind, or skipping offenders in the circle. However, the more we talked, the more they began to consider ways to prevent the problem form even occurring. Eventually we settled on two possible preventative solutions.



① They could come to the circle separately and choose a place to sit away from close friends so they wouldn't be tempted to resist moving.

② we could make assigned seats around the circle so that no one would feel uncomfortable about moving if necessary.

③ At this point, I told the class I would consider both solutions. It seems that I have taught them well about how to solve problems fairly because, immediately one student suggested that I let the class vote.

④ It was hard to argue with her logic and faithfulness both solutions were acceptable. So this morning we had a vote.

⑤ I had the kids close their eyes and raise their hands. They voted (20-3) to have assigned seats.

⑥ When they opened their eyes and I announced the winning solution they started fist pumping with excitement.

⑦ I couldn't help but smile. I could never have imagined such a positive reaction to the idea of assigned seats for class activities.

⑧ In fact I suspect that had I forced the idea of assigned seats on them as a punishment or consequence, I would have heard lots of complaints and frustration.

⑨ Yet when they could appreciate the problem and come to the solution on their own, they were more than willing to accept the idea.

⑩ We immediately created a chart with assigned circle seats and by the afternoon they were already reminding each other where they needed to sit.

Teachers can put the four problems-solving steps on a laminated poster for students to refer to —

① fighting over whose turn it is to use the tetherball.

② shoving in line.

③ calling people bad names.

④ fighting over whose turn it is to sit by the window in the car or bus.

## B) Basics of Research in education :-

Action research can be carried out by different method as

- 1) Historical research method.
- 2) Descriptive / survey research method.
- 3) Experiment research method.

out of these three methods, trainee has to select at least one method for his research work according to his problem. the first method i.e. historical research method is applicable to the problems research work which as is related to past activities just to find out reality or truth and accordingly to draw the conclusion.

The second method i.e. descriptive or survey research method is applicable to the problem or research work, related to the present situation / position and accordingly researcher has to think over it and try to find out the solution for problem raised due to the present situation. i.e. in brief this methodology is applicable only for present situation.

The third method of research work is the experimental research method:

This method is applicable to the problem or research work which are related to future events.

Here researcher will can change the situation and after controlled - practice researcher will make comparative study to verify the applicability, compare to all these three methods experimental researcher method.

Third method of research is applicable, as well as useful for the trainee teacher's problem. The trainee teacher carried out his action research plan by using experimental method of research.

Research studied the problem in scientific way. Trainee researcher listed the common errors through observations. He worked on them

~~Seen~~

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## A) Content Cum methodology lesson :-

Teacher must integrate content knowledge with teaching method. This gives rise to teaching effectiveness as the backbone of any learning experience. It gives the necessary information and guidance for learners to grasp new concepts, acquire skills, and broaden their understanding of the subject matter.

The methodology section of your paper describes how your research was conducted.

Teaching methods are the broader techniques used to help students achieve learning outcomes. Teaching methods help students: master the content of the course, learn how to apply the content in particular contexts.

Define :- Content cum methodology is an analytical procedure or technique which enable the pupil/teacher of pedagogical to understand structure, curriculum, objectives syllabus, etc. as whole.

- Content cum methodology is a kind of technique where both content and method are meaningful and systematically interlocked.
- The above stated definition clears the concept of content cum methodology as follows:
  - 1) It does not force to teach the additional content to the teacher trainees.

2) It stresses meaningful integration of the content and method.

3) It also requires the deeper understanding of the concepts he is required to teach in the class.

The teacher should have knowledge of preparing the lesson notes using various methods for the same content and same content at various standards.

### Needs and importance of CCM :-

Now a days it is required for teacher training colleges that they provide teachers who will be able to face new advents of the 21<sup>st</sup> century. Teacher should know the concept of content cum methodology.

### 1) Knowledge of Curriculum, syllabus, textbook, etc :-

Teacher gets the thorough knowledge of curriculum, the principles of curriculum, different syllabi, the textbooks and the relation among the textbooks, syllabus and the curriculum. This makes him aware of the overall picture of the system in which he is working. He also comes to know the relationship between various aspects of the concerned subject.

## 2) Knowledge of hierarchy and structure :-

It gives him knowledge of hierarchy and structure of subject. The knowledge of structure makes him able to tell the relationship of different concepts from the subject. This also helps him to tell the relations of various concepts with the others in different standards.

## 3) Knowledge of content analysis :-

This gives him training in analyzing the syllabi and the content. He comes to know the process of content analysis because which he presents the content more fruitfully.

It also makes him able to choose different methods for different content.

## 4) Knowledge of content preparation :-

He can determine the place of content in the syllabus as well as in the structure. So he comes to know the place of that content in relation with the other items in the syllabus and the structure.

## 5) Knowledge of integration :-

Because of the knowledge of this concept, the knowledge of this concept, the teacher can integrate the content & the method properly. He can prepare different methods for the same content and same content for different standards.



## Flipped classroom :-

Students watch pre-recorded lessons at home and complete assignments in class. This method allows student to work at their own pace, but it's still mostly teacher centered.

## Project based learning :-

Students work on real-world projects that requires them to apply their knowledge and skills. Projects can last from a few days to a semester.

## Inquiry-based learning :-

Students research and form theories in response to open-ended questions or projects assigned by the teacher. This method encourages students to ask questions and develop critical thinking skills.

## Collaborative learning :-

Students work in groups to complete assignments, which can help them develop teamwork, leadership, and presentation skills. Example of collaborative activities include think-pair-share, fishbowl debates, and case studies.

## Learning environment :-

A classroom learning environment is made up of physical, social-emotional, and safe and interactional components.

Teaching :- Classroom teaching is a complex and social process of imparting knowledge and facilitating learning.

Challenges :- Teachers face many challenges in the classroom, including understanding different learning styles, communicating with parents, and staying up to date with learning technology.

Student behavior :- Students may behave in ways that can be problematic, such as arriving late, being rude, cheating, or responding emotionally to course content.

Classroom management :-

Classroom management problems can include distractions, noisy students, lack of engagements, unclear expectations, and inconsistent routines.

Technology :- Technology is being increasingly integrated into classrooms, with a focus on online learning, educational apps, and interactive tools.

Some tips for classroom management include :-

- Engaging students by arousing their curiosity, conveying passion for the subject, and making course material relevant.

- Assigning challenging but achievable tasks.
- Giving students some control over their learning.
- Being available to meet student before and after class and during office hours.

### The teacher's role in classroom communications :-

Some of the most visible communications in the classroom system are those defined by the teachers - from assigned readings, to lectures, to hand-outs of statistics. The readings - frequently from textbooks, but also from other books and articles - are usually done before the class.

Instructors sometimes prepare you by providing background or by focusing your attention on certain issues. Lectures and discussions also sometimes review material you have just read to help you see how it fits into the themes the professor is stressing. However, no matter how much support the professor gives you for the reading, it is up to you to understand the reading and fit it into the puzzle of the course.

Each of the readings or other materials presented in a class was written for a specific audience at a specific time with a particular purpose. In a way the text asks you to take on the role of that original reader. A French political editorial from the eighteenth century asks you to take sides on an issue of French politics of the period.

## B) Psychological Experiment

### 1) Letter digit substitution :-

The letter digit substitution test (LDST) is based on earlier developed substitution test.

The written and oral versions of the LDST were administered to a large, cognitively screened sample of adults aged 24 to 81 years. A low level of education profoundly influenced LDST performance: the effect of a low versus high level of education on LDST performance was comparable to about 20 years of aging. regression based normative data were prepared for both the written and oral versions of the LDST.

### Introduction :-

Substitution tests are widely used as clinical and research tools in neuropsychology, the best known of which is the digit symbol substitution test, one of the subtests from the Wechsler intelligence scales. Substitution tests are essentially speed dependent tests that require the participant to match particular signs - symbols, digits or letters - to other signs within a specified time period. Substitution tests are sensitive to brain dysfunction in a nonspecific way because their performance draws on many different processes. The simple responses generated in substitution tests depend on the many different process integration of complex neuropsychological processes, including visual scanning, mental flexibility, sustained attention, psychomotor speed, and speed of information processing.

## Method :-

Data used for this study were derived from the Massachusetts Aging Study (MAAS), a prospective study of the determinants of cognitive aging. Participants were recruited from the registration. The use of the RNH as a sample frame rather than a general population sample enables the selection of an eligible study sample before hand. Thus individuals with medical conditions known to interfere with cognition such as cerebrovascular pathology, tumors of the nervous system, multiple sclerosis, epilepsy, dementia, organic psychosis, schizophrenia, affective psychosis, and mental retardation, could be excluded from the sample frame.

## Procedure and Instrument :-

The LDST test sheet is given in the key give the numbers 1 to 9, each paired with a different letter. The test items are printed beneath the key. Participants are required to replace the randomized letters with the appropriate digit indicated by the key.

The first 10 items are used as practice items to ensure that participants understand the test instructions. After completion of these items, participants are instructed to replace the remaining items as quickly as possible. The key and the stimuli are the same for the oral and written versions of the LDST.

The number of correct substitutions made in 60 seconds is the dependent variable for both test versions. The written LDST version was administered first, immediately followed by the oral version.

## Data Analysis :-

The normative procedure for the oral and written LDST scores involved the fitting of multiple linear regression models adjusted for Age, sex, and level of education. The level of  $\alpha$  error was set to .005. Level of education was dummy coded with L.E average as the reference category.

The core assumptions of regression analysis were tested for each model. Homoscedasticity was evaluated by visual inspection of the scatter plots of the residuals on the predicted values. The normal distribution of the residuals was investigated by visual inspection of the histograms and the normal probability plots.

## Result :-

Linear multiple regression models were fitted for the oral and written LDST scores. The residuals were sufficiently normally distributed, and no heteroscedasticity was observed. VIFs of the predictors in the regression models had a maximum value of 1.30, which is well below the cut-off value of 10. The outliers had virtually no effect.

Table 2 presents the regression models. Age and low had a significant negative influence on the predicted LDST scores, whereas LE high had a significant

#### 4) Division of Attention :-

Aim :- To check whether the efficiency of the work decreases when two tasks are performed simultaneously.

Material required :-

- Division of attention board.
- paper and pencil.
- stop watch.

Procedure of the experiments :-

#### Activity 1: Two physical tasks

Series 1 :- The subject is seated comfortably and a sheet of paper and pencil are placed before him/her. enquiries are made as to find whether the subject is right or left hand dominant. the following instructions are given -  
when I say ready, I want you to trace as many trapezium pattern as possible on the division of attention board with your right hand. you must stop as soon as I call out stop.

A time interval of 30 seconds is given for this. the total number of trapezium drawn is noted by the experimental. this reading is called  $S_1$ .

Series 2 :- Next, the subject is asked to draw triangle with his/her left hand. the following instructions are given for this procedure.

Now, I want you to draw as many triangles as soon as I call out ready. I want you to stop as soon as I call out stop.

A time limit of 30 second is given for drawing the triangles. the number of triangles drawn are counted and noted down by the experimenter. the reading is taken at  $S_2$ .

series :- The subject is asked to trace the trapezium pattern with right hand and the triangular pattern with the left hand simultaneously.

A time limit of 30 seconds is given for drawing. The number of trapezium and triangles drawn are counted and noted down.

The number of trapezium is to be noted down as  $D_1$  and the number of triangles as  $D_2$ .

## Activity 2 : Two mental tasks.

series 1: The subject is first given a base number of and another number for addition.

Then he/she is asked to add the second number to the base number and keep adding to the previous addition as fast as possible.

The experimenter will note down the number of correct addition for a period of 30 seconds.

the reading is called  $S_1$ .



Series 2 :- The subject is instructed to write the alphabetical letters in the reverse order (Z to A) as fast as possible for a period of 30 seconds. The number of letters correctly written in reverse order is noted down by the experimenter.

Series 3 :- The subject is asked to write the alphabetical letters in the perform both the above two mental tasks (series 1 & series 2) simultaneously for 30 seconds. The correctly added numbers are noted as D1 and the correctly reversed letters are noted as D2 by the experimenter.

Points for analysis :-

Analysis of division of attention division of the subject can be analysed by calculating the co-efficient of division of attention.

$$\text{Index of divisibility (C.D)} = \frac{D_1 + D_2}{S_1 + S_2}$$

Where,

$S_1$  = score on first physical task done individually

$S_2$  = score on second physical task done individually

$D_1$  = score on the first task done along with the second task

$D_2$  = score on the second task when carried out along with the first task.

If the efficiency is affected by the division of attention between two tasks, then the coefficient will be less than one.

### Result and discussion :-

The division of the attention test was carried out to know that what happens to the attention if two tasks are done at the same time. to verify whether or not multitasking is feasible for the participant. the subject was met with difficulties while conducting the task.

The scores received by the subject, which is closer to one. so, this means that the division of attention has affected its effectiveness.

Thus, the hypothesis that the productivity of the operation decreases when two tasks are carried out simultaneously proves to be correct.

A variety of explanations may have contributed to such findings.

first the familiarity of the task since the subject has never done these activities before she faced some difficulties. secondly, environmental disturbances often factors that are almost unnoticeable influence our focus, may be the background noise or the speed of the fan, inappropriate lighting, might have hindered the attention of the subject.

Third, the subject might have got conscious of thinking about the results which may have hampered of performance.

### Conclusion :-

Thus, we can say that the task decreases when two tasks are performed simultaneously.

## Concept formation 8-

Aim :- To study the process of concept formation by promoting methods using a concept formation test based on hanfman and kasanin test.

Hypothesis :- 1) Time taken in the test progressively decreases as the combined concept of size and height is formed.

2) Number of errors committed in sorting the blocks progressively decreases as the combined concept of height and size is formed.

## Introduction :-

The process by which we discover the feature or features which are common to a large number of objects and associate these with a symbol ~~which~~ thereafter may be applied to other similar objects is called concept formation.

As a set can be defined as collective lot of objects events and ideas that share some common quality while differing in characteristics.

A concept is an abstraction or generalization from experience or the result of a transformation of existing concepts.

An organism that has learned to respond to the common quality of a given set has thereby learned a concept.

Concept learning must be distinguished from learning by reciting something from memory or discriminating between two things that differ. However, these issues are closely related, and since memory recall of facts should could be considered a trivial conceptual process.

The process of concept formation starts with experience, which is the process of direct participation in an action, followed on by subsequent processes. Psychologists use the term concept formation, or concept formation of learning, to refer to the development of the ability to respond to common features of categories of objects or events. Concepts are mental categories for objects, events, an ideas that have a common set of features

Concept allows us to classify objects and events. In learning a concept, you must focus on the relevant features and ignore those that are irrelevant. For instance, paperbacks and hard-cover editions are all books. But you must also discriminate on the basis of relevant features. A stack of papers is not a book. Several theories have been proposed to explain how we learn concepts.

The stimulus-response association theory was proposed by Clark Hull (1920). He argued that we learn to associate a particular response with a variety of stimuli that define the concept.

## Concept formation :-

Process by which a person discovers the feature or features which are common to a large number of objects and associate these with a symbol which there after may be applied to other similar objects is called concept formation.

## Types of Concept formation :-

- ① Direct Experience :- It is the first type of concept formation, in which the learner develop concept through direct experience with the particular objects / person / events. It is developed during from the early childhood on wards. for example, the concept about cow.
- ② Indirect experience :- Here the learner develops concept through pictures, photos and reading descriptions, hearing from other. for example, the concept about kangaroo.
- ③ Faulty Concepts :- The concepts or the general ideas we have about the objects, persons or events, are not always adequate and accurate. small children have so many concepts that are quite erroneous and inadequate. for example, one's anxiety over the crossing of his way by a cat or one's felling of hatred towards the person belonging to other caste or religion in the result of faulty concepts.

## Process of concept formation :-

This process of concept formation has three important phases.

1) Perception :- Experiences or learning in any form is the starting point of the process of concept formation. Our perceptions or imaginary experiences, formal or informal learning, provide opportunities for getting mental images of the objects, persons or events.

2) Abstraction :- The mind analyses the perceived + images and synthesizes what is common to all, neglecting what is particular. This process of observing similarities and commonness is named as abstraction.

3) Generalization :- After making such observation in the form of abstraction for a number of times the child is able to generalize or form a general idea about the common properties of some objects or events. On account of this generalization, he will develop a concept about these things or events.

for example :- The child perceives a black cow at the first time and is told that it is a cow he tries to form an idea about it. In the beginning the idea is very particular in nature.

Later on, when he perceives a white or red cow he is having, at present, by perceiving white or red cows. In this way he compares and contrasts the similarities or dissimilarities of his mental images.

## Block formation :-

The concept formation task by Hoffmann and Kagan (1942) is the laboratory learning task. It is basically based on the Vygotsky test of conceptual thinking. The problem situations presented in the experiment performed are at a difficult and higher level.

As these problems make greater demand upon persons of higher mental levels, they may reveal deteriorations in conceptual thinking that would still be unapparent in the subjects, long established response for meeting familiar situations. It is a test to assess conceptual thinking. The Hoffmann-Kagan test provides a means of observing behaviour in a controlled situation and of obtaining information of some significance, to be added to other psychological data.

This test consisted of 24 wooden blocks differing in colour, shape, size and height. Under each was a nonsense syllable. Those which belong to the same category had the same syllable.

## Variables :-

Independent variables :

- 1) size of the blocks.
- 2) Height of the block.
- 3)

Dependent variables :

- 1) Time taken in sorting the blocks.
- 2) Errors committed in sorting the box.



### Extraneous variables :

- colours of blocks.
- Shape of blocks.

### Methodology :-

The following section includes procedure and instruction followed during the experiment.

### Materials Required :-

- The concept formation blocks.
- writing materials and data sheet.
- Stop watch.

### Subject details :-

- Name : XYZ.
- Gender : Female.
- Age : 18 years.
- Education Qualification : college student.

### Precautions :-

- The blocks are properly mixed before starting the test.
- The blocks are so kept that the subject is not able to see the number written below them.
- The order of presentation is changed for each trial systematically.
- There should be no disturbance when the subject takes the test.

### Procedure :-

- The subject is seated comfortably and happen report is established.
- The experimenter takes out all the twenty two blocks from the box and keeps them on a table on a mixed order in front of the subject.
- Instructions are given to the subject to select the blocks, which form a set with the sample block shown by the experimenter.
- five trials are being conducted as such with four set in each of the trials in a particular order.

### Instruction :-

This is a block. you have to select from among all the blocks the ones which go with the sample block shown to you. they are categorised on the basis of some criteria.

### Preliminary setup :-

- The experimenter should make sure that the subject has understood the instructions.
- A maximum of five trials are given
- If the subject is able to sort the blocks correctly without error in two consecutive trials, the experiment is stopped.

## Discussion and Interpretation:-

The purpose of this experiment is to study the process of concept formation by using a concept formation test based on Hauffmann-Kasanin test. Concept formation is the process by which we discover the feature or features which are common to a large number of objects and associate these with a symbol which there after may be applied to other similar objects.

In the given experiment, the subject has to find the concept used for the categorization of 22 blocks on the basis of a criterion. The subjects has to find the concept used for the categorization is made up of the basis of height and shape of the blocks. There are total of four sets in which blocks are being categorized in the experiment. Each set is distinguished with a number written on the base of block.

In the table-1, it has been observed that at initial stages the subjects categories the given block on the basis of colour and shape.

Therefore, in the result table 1, it can be observed that time taken and the number of errors committed in the test progressively decreases as the combined concept of size and height is formed in sorting the blocks in the later trials. Therefore, the hypothesis made in the beginning is accepted.

## C) Cultural and co-curricular activities.

### Tree plantation :-

The sustainable economic development depends on the rational use of environmental resources and minimizing, to the extent possible, adverse environmental impacts through improved project selection and more responsible project planning and design.

Under the strategy the development must be environmentally sound in the broadest sense. In highway development, environmental planning is concerned with good blending of environmental but is also concerned with intergration to local, regional and national socio-economic development.

### Aim and objective of tree plantation :-

- To create green belt and avenues for meeting aesthetic recreational needs to the people.
- To beautify the areas for scenic beauty.
- To reduce the surface run-off discharge and checking soil erosion along the embankments.
- To reduce temperature and increase humidity.
- To reduce noise pollution to the neighboring household population.
- To reduce the impact of air pollution and dust as trees and shrubs are known to be natural sink for air pollutants.
- To provide much needed shade on glaring hot roads during summer.
- moderating the effect of wind and incoming radiation.

## Tree plantation strategy :-

Plantation is one of the most important constituents of soft landscaping. Trees, shrubs and climbers have been used to enhance the soft natural ambience against harsh elements in most of the enhancement schemes. The planting species are decided based on the physical growth characteristics of trees, like form and shape, foliage pattern, growth rate, branching pattern, soil characteristic etc. while selecting the species of trees for landscaping a great care should be taken to choose the species, which already exist on the project corridor.

## Plantation pattern :-

Depending on the availability of the Row plantation pattern is worked out as follows.

- 1) The first row along the expressway to be planted with small to medium size ornamental trees.
- 2) subsequent rows depending on the availability of land will comprise of ornamental or shade bearing species of more height than those in the first row.
- 3) planting of shrubs in the median.
- 4) planting of herbaceous species as ground cover in the median, special landscape on embankment slopes.
- 5)

Tree plantation, you can include details about the event such as the purpose, the participants and the outcomes.

Purpose :- what was the goal of the event? for example to raise awareness about climate change, or to increase green cover.

Participants :- who took part in the event? for example students, teachers, parents, and the local community.

Outcomes :- what was the result of the event? for example how many trees were planted, and what was the community's response.

Here are some example of tree plantation reports :-

Tree plantation Drive in the school campus :-

Student and staff participated in a tree plantation drive to reduce air pollution. they prepared banners and slogans to raise awareness.

The event was organized to raise awareness about climate change. different age groups were given specific plants to plant.

The event was attended by the board director of the DPS North zone as the guest of honor. the students planted trees within the school campus and in nearby localities. the event was led by the school's environment

Tree planting is the process of transplanting tree seedlings, generally for forestry, and reclamation, or landscaping purpose. It differs from the transplantation of larger trees in arboriculture, and from the lower cost but slower and less reliable distribution of trees seeds.

In silviculture the activity is known as reforestation, or a forestation depending on whether the area being planted has or has not recently been forested.

It involves planting seedlings over an area of land where the forest has been harvested or damaged by fire, disease or human activity.

### Objectives of the project :-

- The purpose of plantation is to save the environment which is endangered and to keep alive the beauty of our life.
- Trees are god gifts of nature. they are also known as the best buddies of humans.
- As the world is facing the issue of global warming and other environmental-related problems to recover from such issues planting trees becomes one of the most important aspects of life today.
- It helps to maintain an eco-friendly environment around the whole world and reduces air pollution and improves the greenery.

## Observation and experiences :-

It was pleasure growing plants and trees near our surrounding. We enjoyed growing different types of plants and trees like, flowering plants, fruit trees, vegetable plants and some common plants and trees, and taking care of them on a regular basis.

We influenced some of our friends and relatives to grow more and more plants and take care of them. Some of the glimpses of our project. or

## Achievements / Benefits of the tree plantation :-

- Plantation agriculture is a source of employment. plantation agriculture leads to the generation of employment. due to their extensive size, plantations require a huge workforce to operate various machines in both the farm and processing facilities.

Consequently, plantations offer a lot of employment opportunities, raising the level of living in the regions where they are located.

- Plantation agriculture is a source of government revenue and taxes generations. when plantations sell their goods domestically and abroad, a portion of their profits are paid to the government as taxes and the government may also receive extra income from them in the form of a skills development levy and other fees.



- Plantation agriculture leads to foreign exchange reserves  
plantation agriculture provides a positive surge of high foreign exchange reserves.

- Plantation agriculture promotes agricultural and research development, plantation farms support research that results in better than and higher-quality crops.

many plantation include research facilities that focus on creating high-yielding, disease-resistant seeds to secure high-quality crops.

- plantation agriculture leads to infrastructural development: plantation farming is a sophisticated system that involves building not just industrial facilities but also public infrastructure such as roads, housing developments, educational institutions, medical facilities, administrative buildings, etc

Eventually, the rate of urbanization accelerates plantation farms employ a large number of people thus to keep them, they provide a variety of social services like hospitals, schools, and markets rural areas may become urbanized as a result of the development of these infrastructures.

## Social awareness programs :-

Social awareness is the ability to be aware of the problems that different societies and communities face on a day-to-day basis. It also includes being conscious of the difficulties and hardships of society.

- Emerging challenges in contemporary india: This includes, social, political, economic, and cultural issues.
- India's cultural and religious diversity: This includes secularism, communalism, fundamentalism, Indian politics and religion, and problems of the minority and women.
- Major social problems and mindset in india: This includes indian resources and poverty, ignorance in governance and corruption, indian education system and illiteracy, caste discrimination, child abuse, child labour, and violence against women.
- Role of the youth in social engineering: This is a topic that can be covered in a social awareness program.
- social awareness is the ability to be aware of the problems that different societies and communities face on a day to day basis. It also includes being conscious of the difficulties and hardships of society.

## Some example of social awareness include:

- Understanding ecological issues and the impact of human activity on the environment.
- Being knowledgeable about political systems, policies and the implication of legislation on society.
- Learning into other's perspectives with curiosity.
- Recognizing and acknowledging the inherent strengths in others.
- Demonstrating empathy and compassion.

## Awareness program:-

Rajendra academy for teacher's education crucially promotes and nurtures the social awareness through various activities and community program. These social program help in enriching social upliftment and holistic approach towards development as a whole.

the procedure for social and emotional learning nurtures social awareness, the ability to understand and empathize with other points of view, this part of the SEL toolkit contains strategies and varied resources for increasing young people's social awareness.

social awareness helps in increasing the interactive activities and manages the emotions judiciously.

Rajendra academy for teachers education, truly inspires students to reload the essence of social awareness and its vast impact.

Social awareness requires staff and educators to acknowledge, value support and responds to the cultural values, traditions, communication, learning, styles, contributions, and relational patterns of all students in the classroom.

- Improve academic skills.
- Increase college retention.
- Build self-esteem.
- provide role models.
- Increase parental involvement.
- Build college and career awareness
- promote college attendance.
- Increase aid awareness.

### Awareness programs at college :-

Awareness programs at college premise are to increase the level of thinking among the students and staff. The programs are finely crafted under the able guidance of many many teachers and experts. Social awareness is defined as being aware of the problem that different societies and communities face on a day-to-day bases and to be conscious of the difficulties and hardships of society. Our social awareness societies at rajendra academy for teacher's education strive to achieve this through interaction and education.

### Traffic rules and road safety :-

The college organizes traffic rules and road safety awareness program to initiate the significance of road rules among the students promoting safe drive and save life strategy.

Gardening :- The activity of gardening is infused in students to make them understand the importance and efforts require planting and gardening.

It is the best way to nature of the feeling of co-operation, teamwork, focus and patience enhancing social skills.

plantation :- plantation is best way to save environment awareness in this connection is important and efforts required creating in mass. focus of students for promotion of plantation is needed to make regular activity of students.

Anti-drug :- This activity is organized to implement the significance among students of the college who end up controlling the drug and alcohol addiction.

Blood donation :- Rajendra academy for teachers education is a dedicated and caters to the need of the committed, competent and efficient teachers. the college gives priority to enhance the competencies of the teacher trainees for excelling in the task of nation building with commitment and sensitization.

- Beti Bachao Beti pathao :- Rajendra academy for teachers education functions with the objective of imparting qualitative teacher education programmes irrespective of the gender. the college stands to the philosophy that women with adequate skills and knowledge have the power to bring socio-economic changes for the welfare.

- World No tobacco day :- Every year, on 31 may, the rajendra academy for teacher's education celebrates world No tobacco day. the awareness campaign is an opportunity to raise awareness on the harmful and deadly effects of tobacco use.

- Aids awareness program :- The college promotes activities to be held upon AIDS awareness programs providing an opportunity to educate communities around the world about the importance of AIDS prevention, research, HIV testing, and the issues for particular population groups.

- Basic services :- The awareness programs serves the interest of the students and cater's to their need are typically delivered on a college campus or at an elementary or secondary school, and may include.

- academic mentoring & tutoring.
- study skill training.
- college awareness and visits.
- Test - taking preparation.