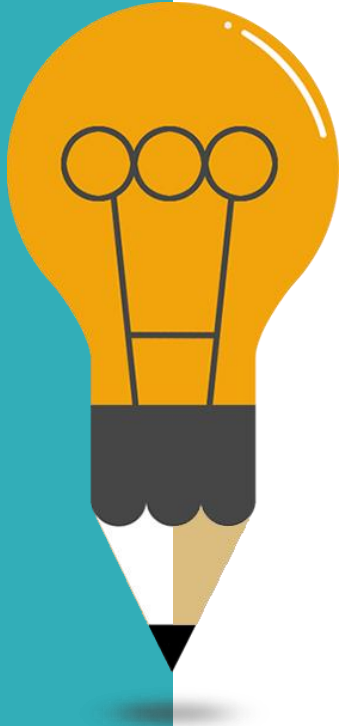


NEP-2020

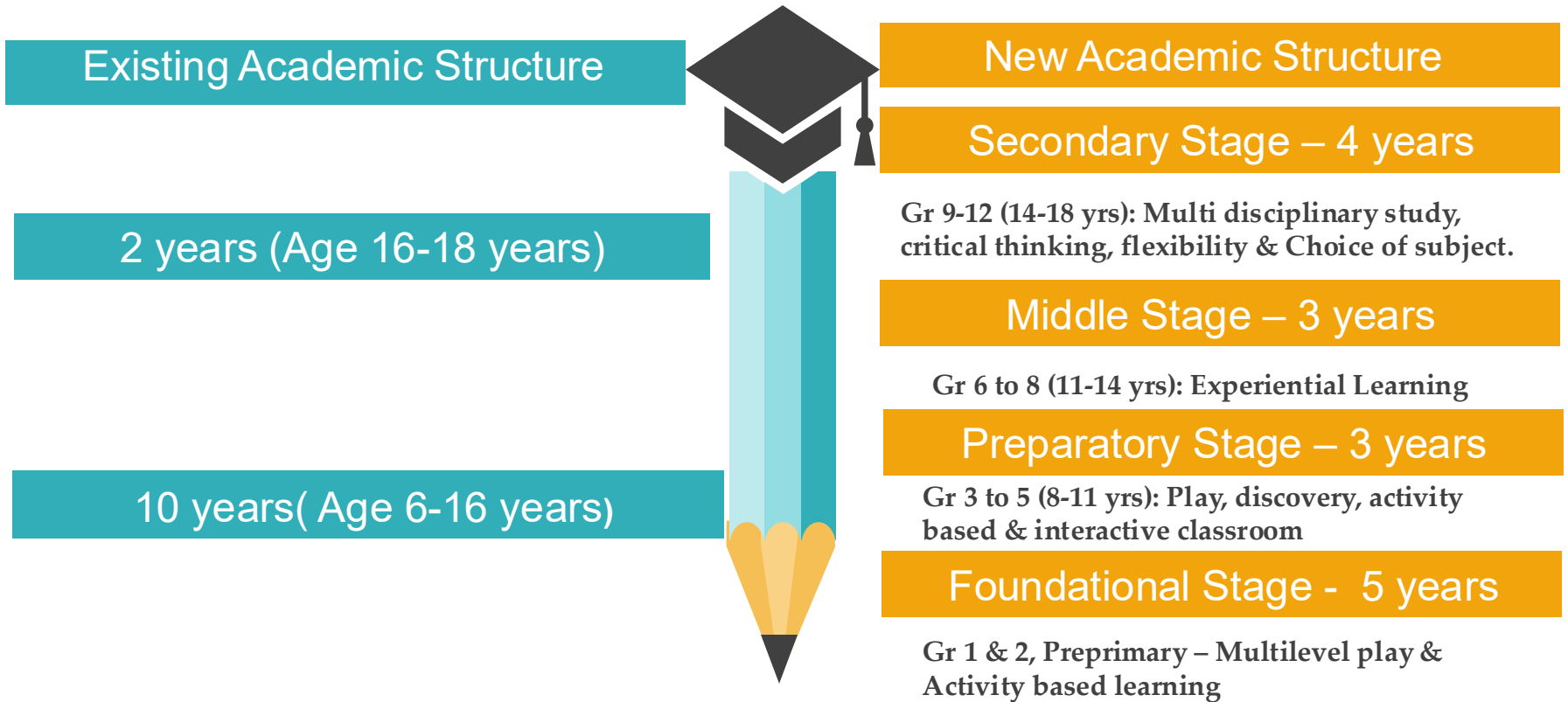
Dewy Lotus Learning Resources
Azvasa Learning Platform

VISION OF NEP 2020

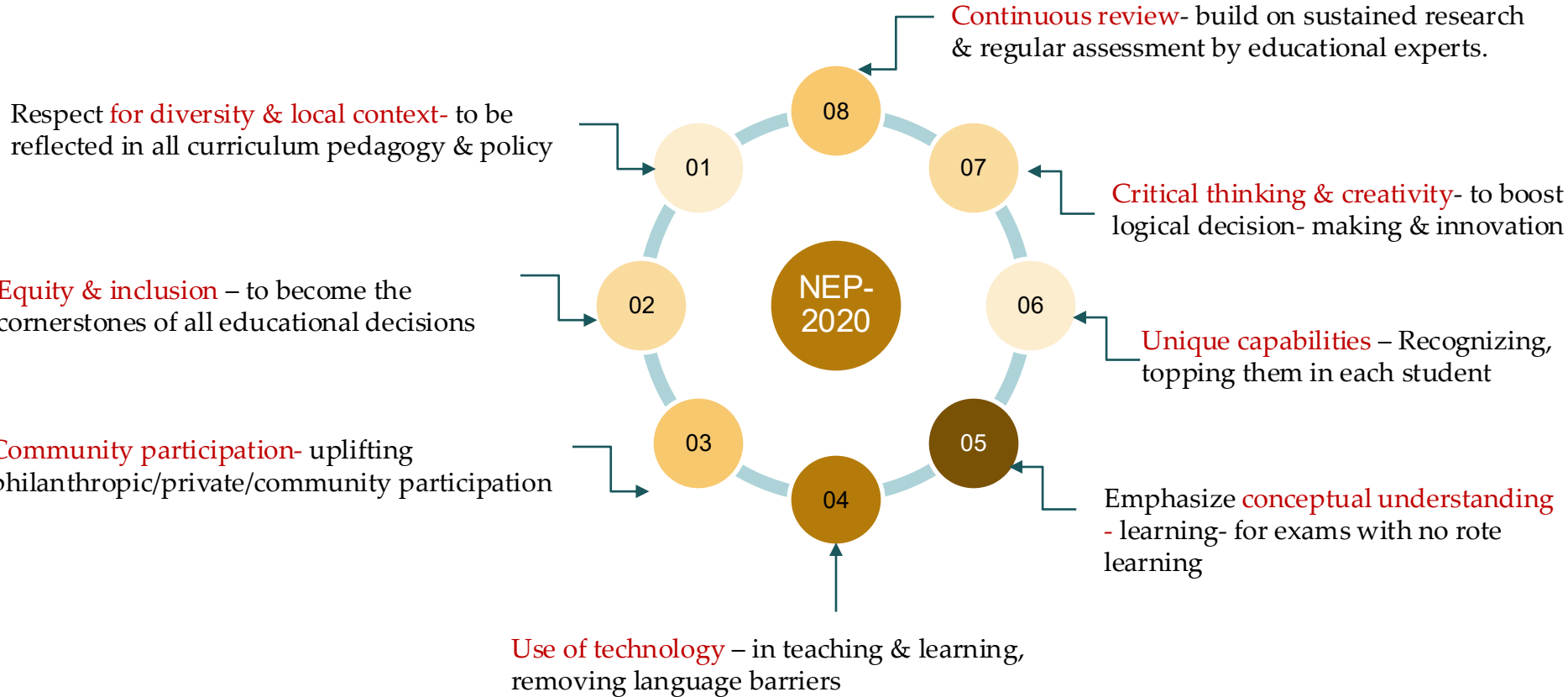


- System that develops an equitable and vibrant knowledge society – **Quality education to all** .
- Develop a **sense of respect & patriotism** towards the Nation
- Develop **conscious awareness** of one's role and responsibility in changing World.
- Instill **skills, values** and dispositions that support responsible commitment to human rights, sustainable development, living and global well-being, there by reflecting a truly global citizen

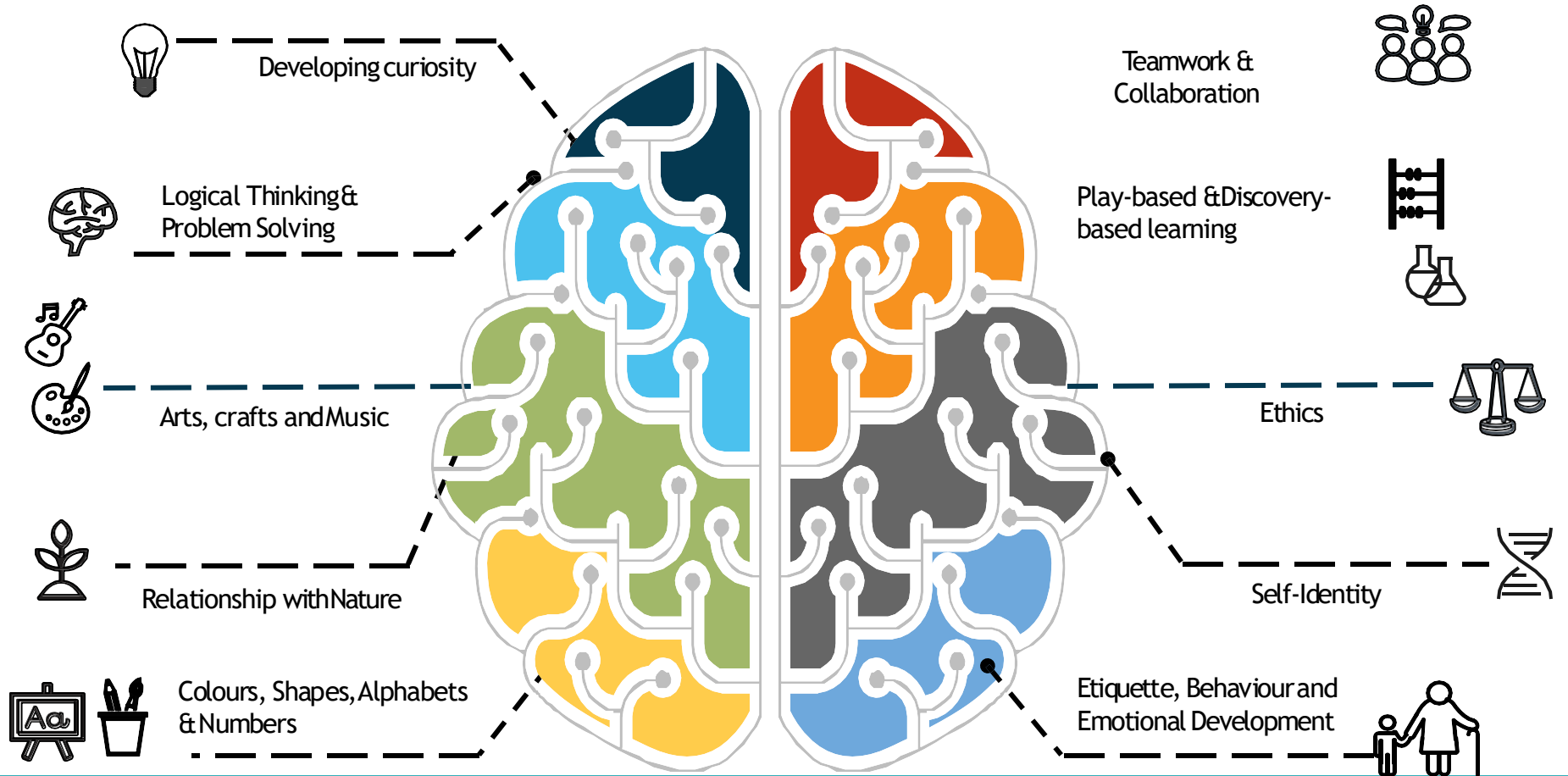
TRANSFORMING CURRICULAR & PEDAGOGICAL STRUCTURE



KEY PRINCIPLES OF NEP 2020

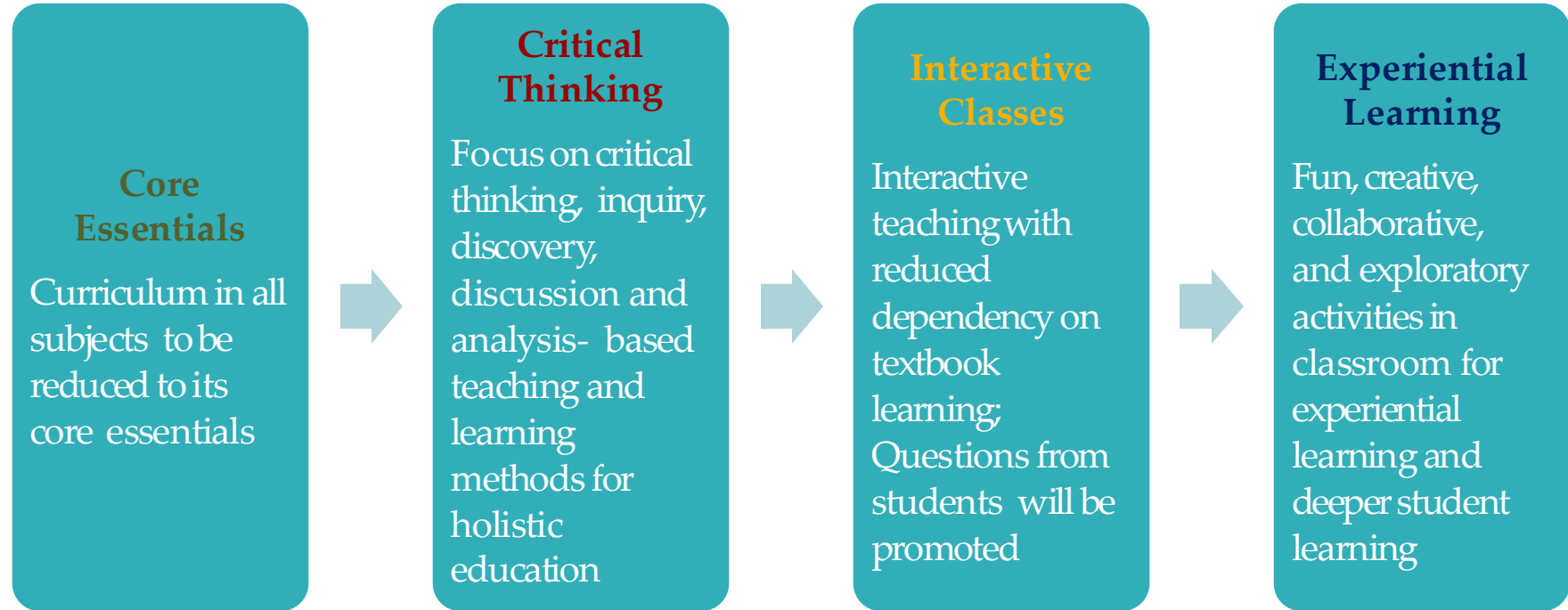


Early Childhood Education: Learning in the Formative Years



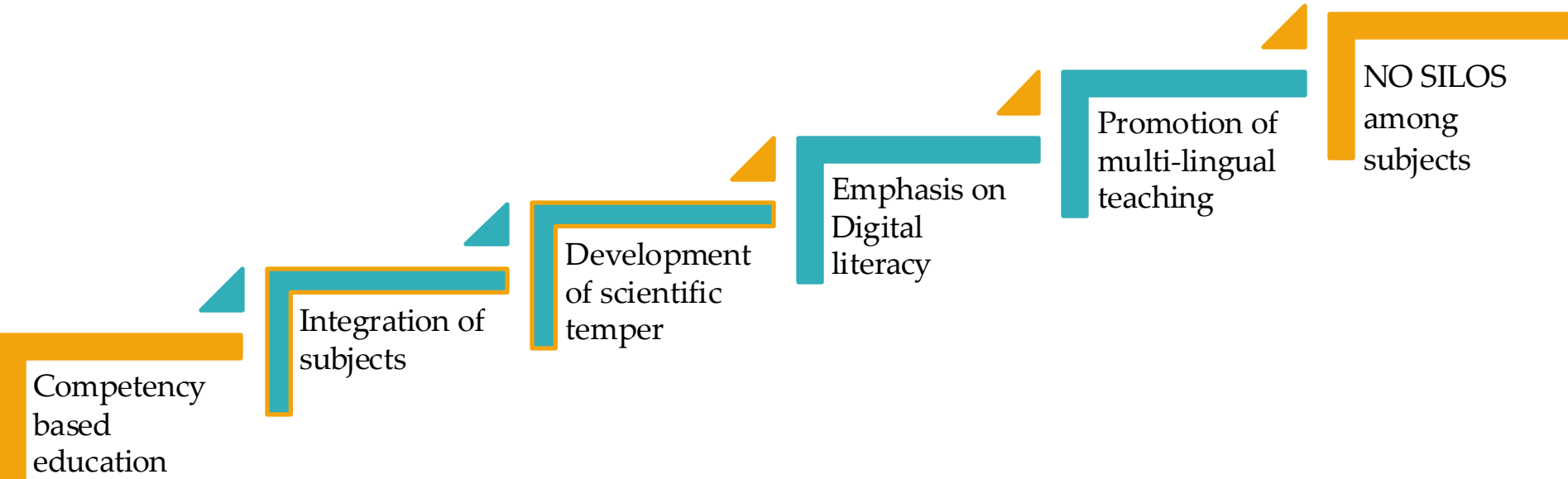
Curriculum

The key overall thrust focuses on moving the education system towards real understanding and away from the present culture of rote learning towards learning how to learn.



Focus on LOs, Competencies and subject - integration

Across all stages there will be a focus on the adoption of experiential, inquiry and discovery-based on teaching-learning methods.



Assessments

The aim of assessment will be to shift from one that is summative and primarily tests rote memorization skills to formative assessment that is more regular, competency-based which promotes learning and development of students and tests higher-order skills, such as analysis, critical thinking and conceptual clarity.

Continuous tracking of each child's learning outcomes will be undertaken.

Promotion of self and peer assessment will be an important part of the assessment procedure.

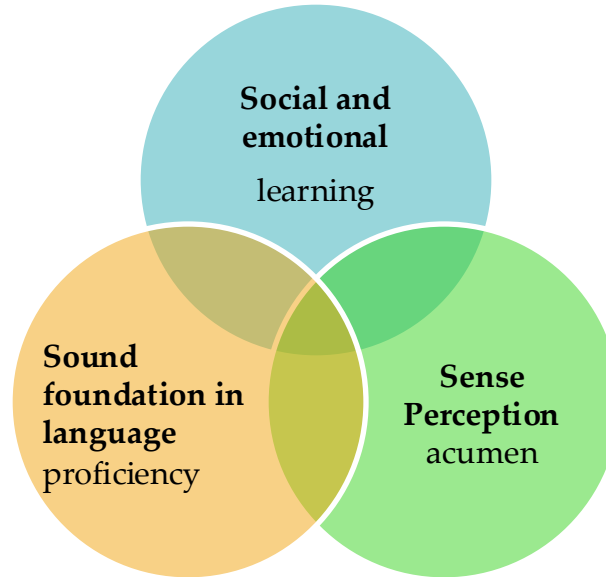
The assessment tools (including assessment “as”, “of” and “for” learning) will be aligned with the learning outcomes, capabilities and dispositions as specified, for each subject of a given class.



OVERVIEW OF AZVASA PEDAGOGY

Pre-Primary Pedagogy

- Research shows that the first 2000 days of a child's life are critical.
- The child's brain absorbs, develops & grows at a rapid speed during this period.
- Azvasa's 3 S Technique:



Pre-Primary Pedagogy



Language & Literacy



Early Numeracy



Aesthetics and creative expression



Motor skill development



Social & Emotional development



Happiness Curriculum

Our Methodology



Pedagogy & Curriculum

adapted to focus on **experiential and concept-oriented learning**



Holistic Learning & Assessments

– both formative and summative



Proven assessment frameworks



Teacher Orientation & Upskilling
to deliver the **competency based curriculum**



Ensuring **compliance** with
NEP 2020 Regulations

Our Key Programs

Academic Excellence

- State of the Art Learning platform to help students learn concept and sub-concepts
- Data driven reports to provide ample insights into learning strategies
- Special focus on Language and Concepts
- Differential strategies and complete handholding of the teachers through readily available teaching resources

Enrichment program

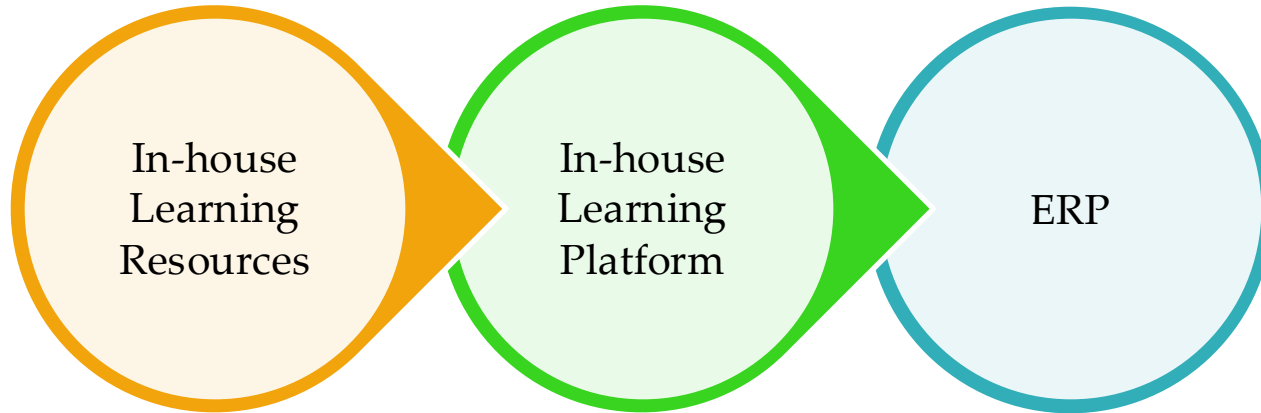
- To shift from rote learning to learning for understanding
- To make confident and independent learners
- To provide support /platforms to children based on their level of understanding
- To provide help and resources to teachers based on analytics

Our Key Programs

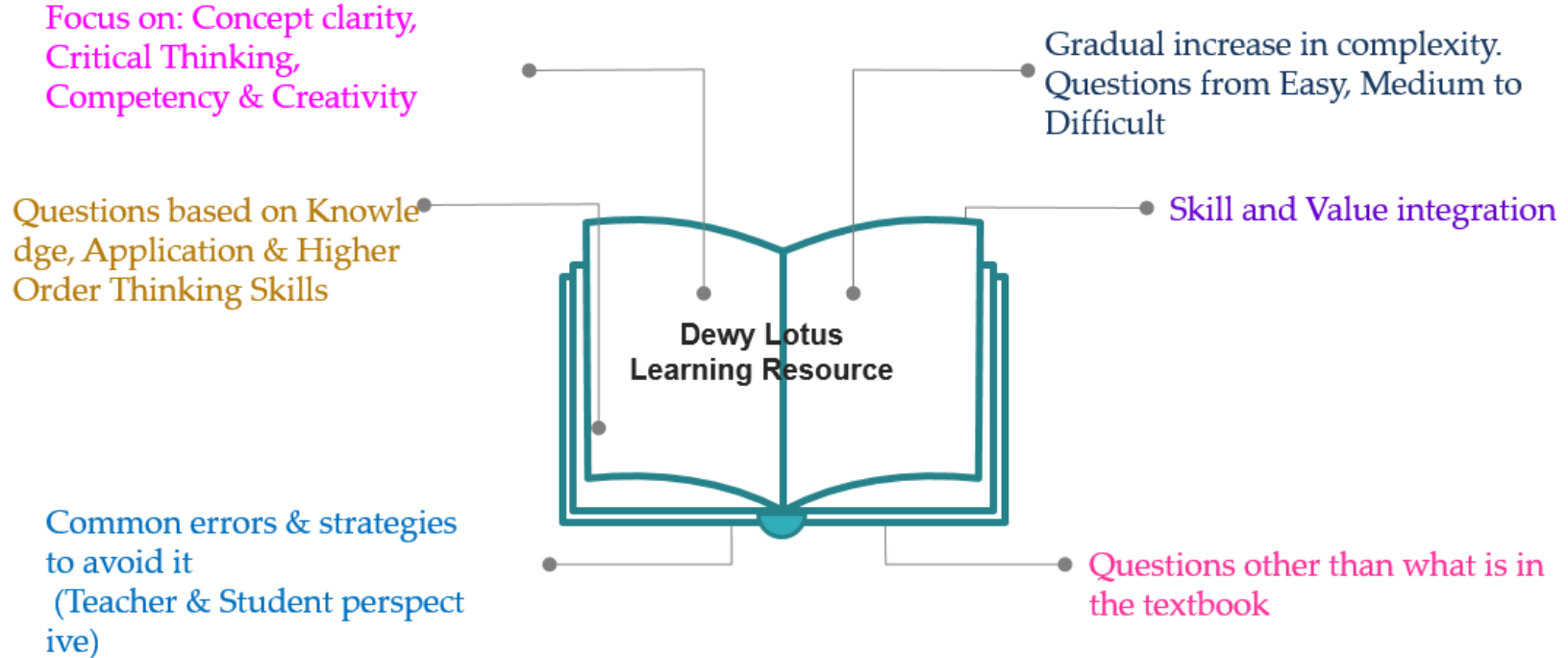
Character development and Leadership program

- Learning Compassion, Humility as skills
- Learning Happiness as Science
- Integration of values in the lesson plans
- Learning Grit
- Enabling them to become Change makers
- Teacher as a leader

How Do We Achieve This?



Salient Features of Dewy Lotus



LSRW skills as per the NEP are covered through various exercises in the English Learning Resources. We focus on Knowledge/Application & HOTS

Vocabulary : Knowledge/Understanding tested

Extract based questions: Knowledge/Understanding tested

I. Give the meanings of the following words:

- 1. Blaze :
- 2. Trundling :
- 3. Beneath :
- 4. Mounds :
- 5. Frosty-fizz :

II. Give the rhyming words:

- 1. Little :;
- 2. Round :;
- 3. Cones :;
- 4. Chilly :;
- 5. Thick :

VII. Read the extracts and answer the following questions:

I. “Beneath his round umbrella, Oh! What a joyful sight!”

a. Who is the ‘he’? What does he have beneath his umbrella?

.....

.....

.....

b. Why is it a joyful sight?

.....

Short Answer : Application skill tested

XI. Answer the following questions:

I. What did the king order the cook?

.....

.....

.....

.....

Grammar – Understanding & Application. Based on Vertical progression

Creative writing – Hots

XII. Creative Writing:

Do you know of any folk tale in your mother tongue?
Write the same in English.

.....

.....

.....

VII. Slot the Nouns under their correct genders:

King, cook, empress, guest, mother, duchess,
gander, coconut, teacher, basket, poet, cart

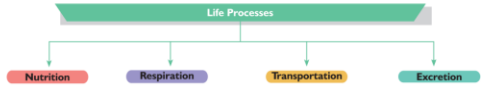
Masculine	Feminine	Common	Neuter
.....
.....
.....

VIII. Punctuate the following:

Where are you going asked the mother to her son Ravi I'm going to buy some vegetables fruits and flowers he said

Concept clarity, critical thinking, creativity, skill development & value integration as per the NEP are taken care in the Science Learning Resources. We focus on Knowledge/Application & HOTS

Life Processes: The basic functions performed by living organisms for their survival and body maintenance.



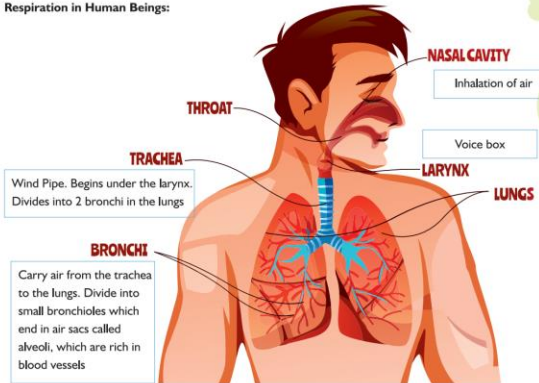
Energy required for carrying out these processes is derived from Carbon-based food sources through nutrition.

NUTRITION

Key Terminologies:

- Autotrophs** - Organisms that prepare their own food from simple inorganic sources like carbon dioxide, water. (Eg: Green plants, Some bacteria)
- Photosynthesis** - The process by which green plants synthesize food in the presence of sunlight, carbon dioxide, water with the help of chlorophyll and give out oxygen as the by-product.
- Heterotrophs** - Organisms which cannot prepare their own food and are dependent on the autotrophs for obtaining complex organic substances.
- Holozoic nutrition** - Involves the ingestion of liquid or solid organic material, digestion, absorption and assimilation of it to utilize it.

Respiration in Human Beings:



NASAL CAVITY
Inhalation of air

THROAT

TRACHEA
Wind Pipe. Begins under the larynx. Divides into 2 bronchi in the lungs

LARYNX
Voice box

BRONCHI
Carry air from the trachea to the lungs. Divide into small bronchioles which end in air sacs called alveoli, which are rich in blood vessels

LUNGS

Concept clarity

Knowledge & Application based questions- to test the concept understanding

Do it yourself (at home practice)

1. After vigorous exercise, why do we experience cramps in leg muscles?
2. Name any two digestive enzymes secreted in human digestive system and write their function.

Questions based on Knowledge & Application

I. Answer the following in about 30 words : [2 mark each]

- Q1. What are enzymes? Name one enzyme of our digestive system and write its functions. .
- Q2. Herbivores have a longer small intestine than the carnivore. Justify
- Q3. Briefly write about the structure of the alveoli, that facilitates maximum exchange of gases.
- Q4. Why does our mouth water, when we eat an appetizing food
- Q5. Mention the effect of the following conditions on the rate of photosynthesis:
(i) Cloudy days (ii) No rainfall in the area (iii) Good manuring
(iv) Stomata gets blocked due to dust.
- Q6. Explain the significance of peristaltic movement that occurs all along the gut during digestion.

IV. Answer the following in about 50 words : [3 mark each]

- Q1. Why is it essential that the oxygenated and deoxygenated blood flow through different channels, in mammals and birds?
- Q2. With the help of a diagram, explain the process of nutrition in amoeba.

Case Study – Application &
Hots questions.
Real life scenario wherever possible

Assertion & Reason: Test the Application & HOTs

ASSERTION REASON QUESTIONS

- I. **Assertion:** The respiratory system in human beings is complex.
Reason: Human skin is impermeable
- | | |
|---|---|
| <input type="checkbox"/> Both assertion and reasoning are correct statements, and the reason is correct explanation of the assertion. | <input type="checkbox"/> Both assertion and reasoning are correct statements, but the reason is not the correct explanation of the assertion. |
| <input type="checkbox"/> Assertion is correct but the reason is wrong statement. | <input type="checkbox"/> Assertion is wrong but the reason is correct statement |

CASE STUDY QUESTIONS:

- Q1. Read the following and answer the questions that follow:

Rohan was very hungry when his mother called him to eat lunch. By mistake, he touched the hot vessel that was kept on the table. Immediately he withdrew his hand. This was the reflex action. This reflex action involved coordination of nerves and muscles.



Value Integration & Real life scenario wherever possible

VALUE BASED QUESTION

1. Arun, a taxi driver was driving his taxi on road. Suddenly, in his rear-view mirror, he saw an over-speeding car coming from behind as if the driver had lost his control over the car. Arun immediately turned his car towards the side of the road and stopped. Soon after that the speeding car collided with another car moving ahead and met with an accident.

Arun came out of the car and went towards the accident site. He took the injured person to the nearby hospital where the injured got first aid and medical care immediately.

Answer the following questions:

- a. What type of mirror is used for rear-view in the car?

is the nature of the image formed by rear-view mirror?

values are depicted by Arun?

Subject enrichment activities

1. Find a flashlight and identify the curved mirror used in it. Find another flashlight and shine the first flashlight onto the second one, which is turned off. Estimate the focal length of the mirror. You might try shining a flashlight on the curved mirror behind the headlight of a car, keeping the headlight switched off, and determine its focal length.
2. Make a presentation on image formation by plane, convex and concave mirrors.
3. Study the images of an object, formed by a concave mirror, when the object is placed at various positions.

Materials: A concave mirror, a mirror holder, a semi-transparent screen fixed to a stand and a small candle with stand.

- a. Fix the concave mirror in the mirror holder and place it on edge of the table.
- b. Mount a small candle vertically on a stand. Place it in front of the concave mirror on the left hand side (i.e., shiny surface) say on focus 'F'.

Subject Enrichment activities – creativity & Critical thinking

MATHS

Concept clarity, critical thinking, creativity, skill development & value integration as per the NEP are taken care in the Math Learning Resources. We focus on Knowledge/Application & HOTS

Concept Clarity – through real life scenario

Knowledge & Application of concepts

PATTERNS

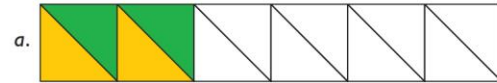
Kavitha's mother is making rangoli in front of their house. She watched her making the patterns drawing different shapes using different coloured powders. Different shapes aligned in different directions following a pattern formed a beautiful rangoli design.



PRACTICE TIME

Exercise 1 (a):

Colour the following shapes to complete the pattern.
Write the rule that makes the pattern as well.



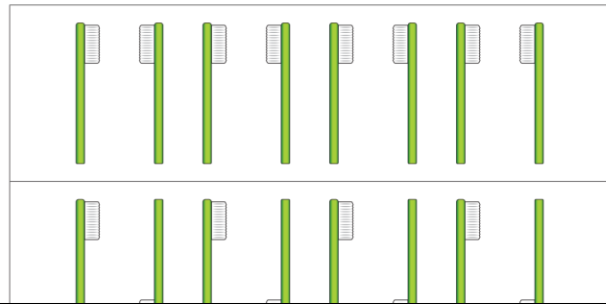
Rule:



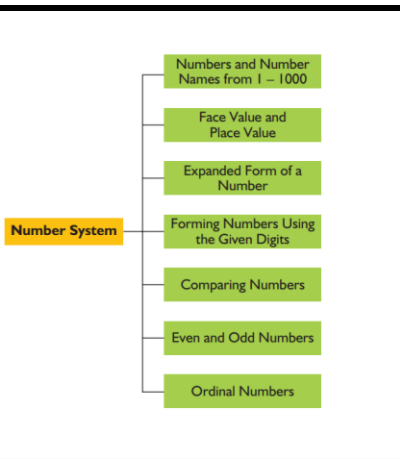
MATHS

Simple Activity based exercises

Using the same shape, we can make many different patterns. Look at the example given below. Four different types of patterns are made using toothbrushes of the same type. Many more patterns can be drawn using the same toothbrushes. How many more patterns can you think of?



Concept Summary



Ample Practice questions

Additional Questions:

1. Check whether the following are rational or irrational: (1 mark each)

- $(3 + \sqrt{3})^2$
- $(3 - \sqrt{3})^2$
- $(3 + \sqrt{3})(3 - \sqrt{3})$
- $(\sqrt{3})^2$

2. Find out whether the rational number $\frac{12}{25}$ is a terminating decimal or not. If it terminates, find the number of decimal places its decimal expansion has. (2)

3. The decimal expansion of the rational number $\frac{2}{275}$ will terminate after how many places of decimals? (Hint: Find the equivalent fraction where the denominator is a power of 10) (2)

4. What are the possible values of remainder, when a positive integer x is divided by 5? (1)

5. Find LCM of numbers whose prime factorisation are expressible as $3^2 \times 5 \times 7$ and $3^2 \times 2^2$. (2)

6. Find the LCM of 72 and 90 by using the Fundamental theorem of arithmetic. (2)

7. If HCF (6, a) = 2 and LCM (6, a) = 60, then find a. (2)

8. Can two numbers have 15 as their HCF and 200 as their LCM? Give reason. (3)

9. If HCF of a and b is 12 and $a \times b$ is 1800, find the LCM of a and b . (1)

10. Let a be an odd number, b be a number that is not divisible by 3. If the LCM of a and b is x , find the LCM of $3a$ and $2b$? (2)

11. Prove that $\sqrt{3} + \sqrt{2}$ is an irrational number. (2)

12. Prove that $\sqrt{7}$ is irrational and hence show that $2 + \sqrt{7}$ is also irrational. (2)

Common errors- help clear misconception & avoid errors

Common Errors:

Common Errors	How to avoid it?
Rational and irrational numbers: All the numbers in a square root or a cube root are often confused as irrational numbers.	Remember that a perfect square inside a square root or a perfect cube inside a cube root gives an integer.
Word problems on HCF and LCM: Difficult to interpret whether the question is of LCM or HCF.	<ul style="list-style-type: none"> • Read the question carefully and remember the definitions of HCF and LCM. • To find a number that completely divides more than one number, you have to find HCF. • To find a number that is divisible by more than one number, you have to find LCM.

Practice Exercise – Gradual increase in complexity

Interdisciplinary Approach- EVS in Math

Value integration

PRACTICE TIME

Exercise 4 (a):

Find the sum of the following.

a. $20 + 3$

T	O
2	0
+	3

b. $15 + 4$

T	O
1	5
+	4

c. $20 + 30$

T	O
2	0
+	3 0

d. $57 + 41$

T	O
5	7
+	4 1

e. $63 + 22$

T	O
6	3
+	2 2

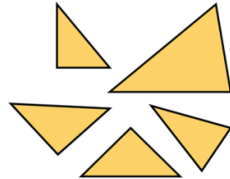
f. $88 + 11$

T	O
8	8
+	1 1

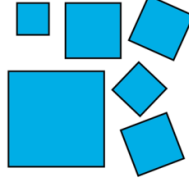
VALUES FOR LIFE

Shapes can be of different sizes and can be oriented in any direction.

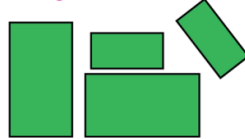
Triangles



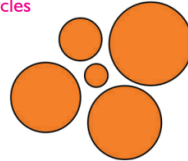
Squares



Rectangles



Circles



Similarly, we human beings may look different in our size, colour and structure. But we all share the basic features of a human being. It is the inner qualities that differentiate us.

NUMBER SYSTEM

Warm-up Activity

Look at the beautiful birds in the picture. They are called the 'Birds of paradise' found in the forests of Indonesia and Australia.

In the picture, every bird is given a number that indicates the population of the bird in the forest. Can you read the numbers and arrange them in a proper order starting from the smallest? Also, write their number names in the table given.



SOCIAL STUDIES

Social Studies is made interesting & simple through questions for various learning levels, interdisciplinary approach

Interdisciplinary Approach – Science in Social

The Amazon Basin

The Amazon basin lies in the tropical zone. It is located in South America. The Amazon is the largest river in the world in terms of the volume of water it carries.

Location

The river Amazon flows through the Andes Mountains in Peru and flows into the Atlantic Ocean in the east. A number of tributaries join the river to form the basin.

The river basin drains portions of Brazil, Peru, Bolivia, Ecuador, Columbia and Venezuela.



Natural Vegetation

The Amazon basin is home to the largest rainforest on Earth. The vegetation is dense and luxuriant. The forests are so dense that sunlight does not reach the ground. The ground is always damp. Only the vegetation which can survive in shade, such as mosses and ferns, can grow on the ground.



Fig 3. Bromeliads growing on a tree

Orchids and bromeliads grow on the branches of other trees to reach sunlight. Ebony, mahogany, and rosewood are important trees which provide excellent hard timber. Brazil has the largest rainforest area.

Wildlife

A wide diversity of wildlife is found here. Toucans, humming birds, bird of paradise are some examples that are unique to the region. They

I. Name the following:

- Any three trees of Ganga-Brahmaputra basin

- Any three animals of Ganga-Brahmaputra basin

II. Identify the picture given below:



WS7-Life of People in Ganga-Brahmaputra Basin

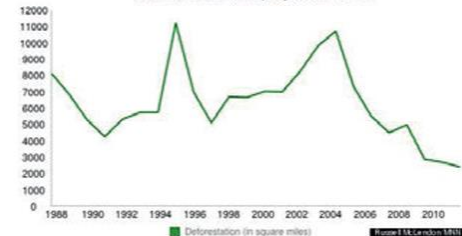
I. Answer the following questions.

- What are the modes of transport available in the Ganga-Brahmaputra basin?

Knowledge based Questions

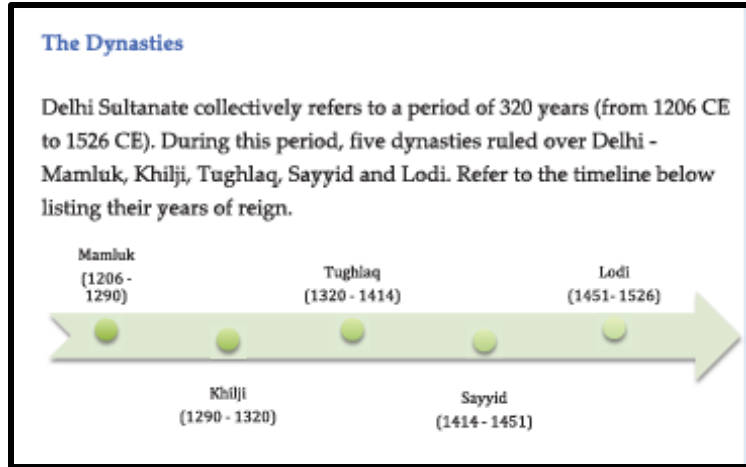
II. Look at the graph and answer the question given below.

Amazon deforestation per year, 1988-2011



Application & Hots questions

Timelines for better understanding



Compare & Contrast

	Alauddin Khilji	Muhammad Bin Tughlaq
Defence against Mongols	Raised a large standing army.	Raised a large army and also planned to attack the Mongols.
Garrison Town	Constructed a new town called Siri for his soldiers.	The residents of the oldest city of Delhi (Dehli-i- Kuhna) were removed and the soldiers were garrisoned there.
Feeding the soldiers	The soldiers were fed through the produce collected as tax from lands between the Ganga and Yamuna. Tax was fixed at 50 % of the peasant's yield	Produce from the same area was collected as tax to feed the army. Along with that additional taxes were levied to meet the need of the large number of soldiers. This coincided with famine leading to severe hardships for the farmers.
Payment to soldiers	Alauddin paid his soldiers salaries in cash. He also controlled the prices of supplies to the army and merchants.	Tughlaq also paid salaries to his soldiers in cash. But instead of controlling prices, he used a 'token' currency made out of cheap metals leading to a glut of fake currency
Administration	Strong administration. It was known for its cheap prices and efficient supplies of goods. He was able to successfully withstand the threat of Mongol invasions	Tughlaq's administration was a failure. Failed expeditions to Kashmir, shifting of capital, flawed tax policies and currency measures were some of his failed experiments.



AZVASA LEARNING PLATFORM

Salient Features of Azvasa Learning Platform



Teacher
Centered
Platform

Resources
and
Dashboards

NEP Aligned
(Blend of
Knowledge,
Skills and
Values)

Holistic
Development
with emphasis on
Character
Development
& Leadership

Assessments
& Analytics -
Providing early
interventions
and enrichment

Control and Coordination Class 10

Science (Bio)
Chapter 7

(7 Sessions)

Learning Objectives:

Knowledge: The student is able to:

- Identify and define co-ordination.
- Explain the structure and function of brain.
- State the various hormones present in the plant and give its functions.
- Describe the tropic and nastic movements in plants.
- Describe the structure of neuron.
- Analyze the response to stimuli in day to day situations.
- Distinguish between the different parts of brain.
- Explain some important hormones and give its functions

Skill: The student is able to:

- develop the ability to metacognise
- develop and set up experiments
- take part in collaborative learning

Value/Behaviour: The student is able to:

- develop compassion towards self.
- understand interdependency as a value.

DAY – VII

Mindful Practice: [5 min]

Character Development: Compassion to Self

Materials Required: A4 sheet and a pen.

Behavioural outcomes:

For teachers: To understand the importance and impact of speaking positive words and the influence it has on other people.

For students: To understand the importance and impact of speaking positive words and the influence it has on other people.

Opening: [10 min]

The teacher speaks about the effect the brain has when we read something positive and how it gets registered, how the brain & mind work.

Activity: [20 min]

Divide the class into 3 groups, each group, will write an Optimistic Charter for the class. The Charter should contain positive feelings and statements for their class members and everyone who enters, it should be a blessing for them e.g. "You are blessed, you are strong, you can achieve whatever you put your heart to" etc. The best Optimistic Charter will be put on the board, outside the Class.

Closure: [5 min]

The teacher will encourage the students to spread positivity through their words and action and teach the impact on the mind when they do this.

Value-based questions:

- The brain is powerful.
 - We should misuse our intelligence.
 - We must spread positivity and happiness.**

Main Value – Humility; Main Value – Compassion to Self

- Not controlling our negative thoughts and not thinking before speaking leads to
 - Possibility of hurting someone and affecting them, thereby them causing them pain.**
 - Hurting others, but it is okay people can deal with it. It is okay to play tricks on people and joke about how they look, it is all part of the game.

Main Value – Compassion towards Others

- How does being positive in your words and actions help yourself and others?
 - It builds us up, makes us and others feel good. Makes others want to be our friends.**
 - It does not impact people in a positive way.

Main Value – Compassion towards Others

- Telling my friend that he can win, if he works and tries hard, is the right and positive way to approach him.
 - I disagree.
 - I agree.**

Assessments in Azvasa Learning Platform

MCQs

- Repository of MCQs after every chapter for practice

Case studies

- Included in the quiz and available for practice (Global, Local & Inference)

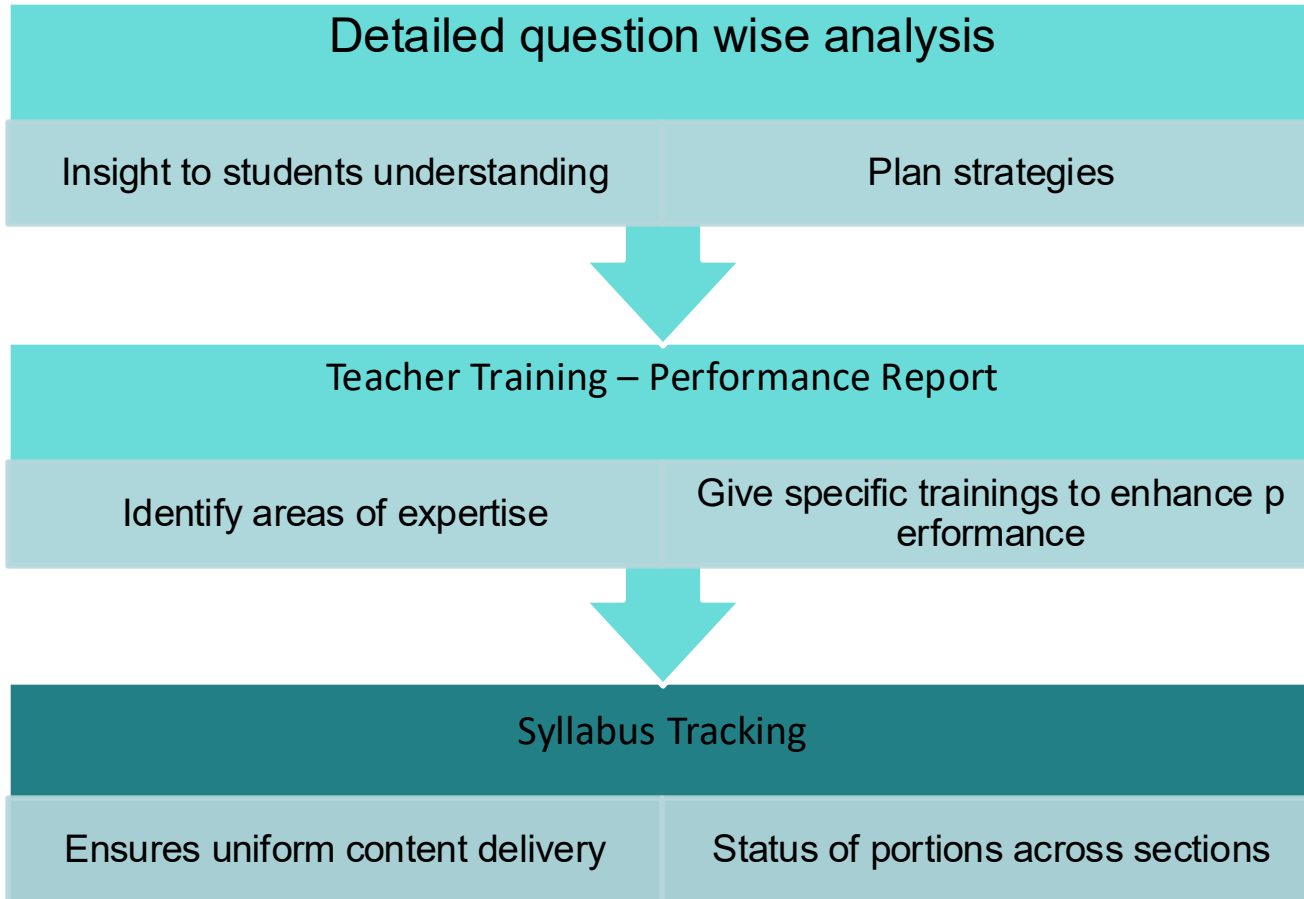
Assertion-Reason

- Part of the quiz and practice questions

Subjective
(Case study, open ended questions, short and long answers).

Learning Platform
Question bank- short answers, descriptive answers, case studies and open-ended questions.

Tracking Through Azvasa Learning Platform



Complete NEP 2020 Implementation Framework



**Induction to the
new system**



**Digital and physical
learning material**



**Learning Resources for
practice and application**



**Proven assessment
frameworks**



**Visual & values based
teaching methods**



**Quality audit
frameworks**



**Reporting and parent
engagement blueprints**

Learning Resource & Learning Platform Integration

Feature	Learning Resource	Learning Platform
Guided learning	Solved examples	Correct answers to wrongly attempted questions
Reinforcement	Practice questions	Practice Assessments/quiz
Writing skills	Descriptive answers	Subject papers – Assessment module
Early intervention	Let's revise/Do it yourself exercises reflect student understanding	Concept wise Student report
Addressing misconceptions	Common errors	Detailed report – 5 questions
Teacher support	Sub concept key points	LPs, Teaching aids, Learning Resource key, Upskill
Home-School connect	Individual student work (as homework)	Parent connect activities

Learning Resource & Learning Platform Integration

Feature	Learning Resource	Learning Platform
Skill & Value integration	Application & value based exercises	Learning Outcome of LP- Skill & Value; Value based sessions
Concept Clarity	Sub concept wise exercises	End of the chapter concept Assessment
Competency based	Questions based on K/A/Hots, assertion & reason, case study	Questions tagged to K/A/Hots
Learning pace	Question complexity – easy, medium & difficult	Differentiate worksheets for reinforcement
Learning Style	Variety of questions (speakathon & creative writing)	Presentation & Videos

