A Story by

Padhkar Kumar & Karkar Kumari

EXPERIENTIAL LEARNING

CENTRAL BOARD OF SECONDARY EDUCATION

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Padhkar Kumar
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2, Community Centre, Preet Vihar, Delhi-110092

Price : ₹ Unpriced

CBSE, Delhi-110092

Paper used : 100 GSM Art Paper

Published by : The Secretary, Central Board of Secondary Education, Shiksha Kendra, 2, Community Centre, Preet Vihar, Delhi-110092

Design, Layout & Printed by : Vijaylakshmi Printing Works Pvt. Ltd., B-117, Sector-5, Noida, Ph.: 0120-2421977, 2422312

भारत का संविधान

उद्देशिका

हम, भारत के लोग, भारत को एक सम्पूर्ण [1][प्रभुत्व-संपन्न समाजवादी पंथनिरपेक्ष लोकतंत्रात्मक गणराज्य] बनाने के लिए, तथा उसके समस्त नागरिकों को:

सामाजिक, आर्थिक और राजनैतिक न्याय,
विचार, अभिव्यक्ति, विश्वास, धर्म
और उपासना की स्वतंत्रता,
प्रतिष्ठा और अवसर की समता
प्राप्त कराने के लिए
तथा उन सब में व्यक्ति की गरिमा
और [2][राष्ट्र की एकता और अखंडता]
सुनिश्चित करने वाली बंधुता बढ़ाने के लिए

दृढ़संकल्प होकर अपनी इस संविधान सभा में आज तारीख 26 नवम्बर, 1949 ई॰ को एतद्द्वारा इस संविधान को अंगीकृत, अधिनियमित और आत्मार्पित करते हैं।

1. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से "प्रभुत्व-संपन्न लोकतंत्रात्मक गणराज्य" के स्थान पर प्रतिस्थापित।
2. संविधान (बयालीसवां संशोधन) अधिनियम, 1976 की धारा 2 द्वारा (3.1.1977) से "राष्ट्र की एकता" के स्थान पर प्रतिस्थापित।

भाग 4 क

मूल कर्त्तव्य

51 क. मूल कर्त्तव्य – भारत के प्रत्येक नागरिक का यह कर्त्तव्य होगा कि वह –

(क) संविधान का पालन करे और उसके आदर्शों, संस्थाओं, राष्ट्रध्वज और राष्ट्रगान का आदर करे;

(ख) स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखे और उनका पालन करे;

(ग) भारत की प्रभुता, एकता और अखंडता की रक्षा करे और उसे अक्षुण्ण रखे;

(घ) देश की रक्षा करे और आह्वान किए जाने पर राष्ट्र की सेवा करे;

(ङ) भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करे जो धर्म, भाषा और प्रदेश या वर्ग पर आधारित सभी भेदभाव से परे हों, ऐसी प्रथाओं का त्याग करे जो स्त्रियों के सम्मान के विरुद्ध हैं;

(च) हमारी सामासिक संस्कृति की गौरवशाली परंपरा का महत्त्व समझे और उसका परिरक्षण करे;

(छ) प्राकृतिक पर्यावरण की जिसके अंतर्गत वन, झील, नदी, और वन्य जीव हैं, रक्षा करे और उसका संवर्धन करे तथा प्राणिमात्र के प्रति दयाभाव रखे;

(ज) वैज्ञानिक दृष्टिकोण, मानववाद और ज्ञानार्जन तथा सुधार की भावना का विकास करे;

(झ) सार्वजनिक संपत्ति को सुरक्षित रखे और हिंसा से दूर रहे;

(ञ) व्यक्तिगत और सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ने का सतत प्रयास करे जिससे राष्ट्र निरंतर बढ़ते हुए प्रयत्न और उपलब्धि की नई उंचाइयों को छू ले;

[1](ट) यदि माता-पिता या संरक्षक है, छह वर्ष से चौदह वर्ष तक की आयु वाले अपने, यथास्थिति, बालक या प्रतिपाल्य के लिये शिक्षा के अवसर प्रदान करे।

1. संविधान (छयासीवां संशोधन) अधिनियम, 2002 की धारा 4 द्वारा (12.12.2002) से अंतः स्थापित।

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a [1]**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the[2] [unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs, by the Constitution (Forty-Second Amendment) Act. 1976, sec. 2, for "unity of the Nation" (w.e.f. 3.1.1977)

THE CONSTITUTION OF INDIA

Chapter IV A

FUNDAMENTAL DUTIES

ARTICLE 51A

Fundamental Duties - It shall be the duty of every citizen of India-

(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c) to uphold and protect the sovereignty, unity and integrity of India;

(d) to defend the country and render national service when called upon to do so;

(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;

(f) to value and preserve the rich heritage of our composite culture;

(g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;

(h) to develop the scientific temper, humanism and the spirit of inquiry and reform;

(i) to safeguard public property and to abjure violence;

(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;

[1](k) who is a parent or guardian to provide opportunities for education to his/her child or, as the case may be, ward between age of six and forteen years.

1. Ins. by the constitution (Eighty - Sixth Amendment) Act, 2002 S.4 (w.e.f. 12.12.2002)

About this Handbook

"For the things we have to learn before we can do them, we learn by doing them."

Aristotle

Learning is an ongoing process. We learn as students, teachers, parents, educators and as humans. What is the fun, if we are only able to work or read others' experiences rather than living the experiences ourselves? Learning should thus be experienced and it should be challenging enough to have problem-solving and decision-making ingredients in it.

This is what Experiential Learning is all about. Experiential Learning has been an important pedagogy since a long time. With the increased significance and thrust in education for acquiring 21st Century Skills, Experiential Learning has gained momentum. Therefore, we as educators must strive to imbibe the qualities and skills of the future in our learners, rather than acquiring the talent to simply read and reproduce the text. Let us all move out of the four walls of the classroom, out of the limited pages of the text-books, and let learning thrive and magnify.

This Handbook is meant to change the way we teach, the way children learn, and the way skills are acquired. This handbook is the first step towards taking the education scenario by storm, by making the learners responsible for their own learning. This manual essentially probes deeper into the essence of experiential learning and how to bring it to the class to make learning joyful, engaging and at the same time connected to real life.

Happy experiencing!

ACKNOWLEDGEMENTS

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Sh. Sanjay Dhotre, Minister of State for Human Resource Development, Government of India

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PROLOGUE

It was the little boy's first day of school. He was very excited and couldn't wait to start learning new things. He was having a lovely day, and after Recess his teacher said, "Children, now we are going to do some drawing."

Good! Thought the little boy. He loved drawing. He got out his pencils and was about to start drawing out a fantastic story about tigers and dragons, when the teacher said, "Wait! Today we are going to draw some flowers."

Good! Thought the little boy, he loved flowers, and he began to draw all different sized flowers with beautiful shapes and colours. He drew some of the beautiful flowers his Mum grew in their garden.

But then, the teacher said "Wait! Let me show you how to draw a flower. A good flower has five petals, with a green stem. You can colour the petals red."

Okay, thought the little boy, I can draw a flower like that. So he drew a flower with five red petals and a green stem.

"Well done," said the teacher, pleased the little boy's second drawing.

The next day, after Recess, the teacher once again announced that they were going to do some drawing. Good! Thought the little boy, eager to draw something exciting. But before he had a chance to begin, the teacher said, "Wait! Today, we will draw a house."

Great! Thought the little boy, and he began by drawing the backyard of his house first, with his dog inside the fence. But before he got far, the teacher said, "Wait! Let me show you how to draw a house. You can use a square for the main part, with a triangle for the roof. The door can be a rectangle and the windows some more squares."

The little boy placed his first attempt in the rubbish bin when he realised it was not what the teacher wanted. He then set to work on a square house with a triangular roof. When the little boy showed the teacher she said, "Beautiful work!" Good! Thought the little boy.

As time went on, months in fact, the little boy realised each day after recess was time for drawing. He learnt to sit quietly and wait for the teacher to tell the class what to draw and how to draw it. The teacher was always very pleased with his work, as he listened very carefully to what she wanted. Then one day, something

happened. The little boy's father got a job far away, so the little boy had to leave his school, and go to a new one near his father's new job.

The little boy liked his new school, and his new teacher was very nice. On his first day, the teacher said to the class, "Please get out some paper, it's time for some drawing." Good! Thought the little boy, and he sat patiently, waiting to be told what to do next.

He waited for a while, then his teacher came up to him and said, "Johnny, why haven't you started your drawing?" "Because you haven't told us what we are going to draw," replied the little boy.

"If I told you what to draw," said the teacher, "then everyone's picture would look the same and I wouldn't be able to tell them apart. The room would look fairly boring, don't you think?"

"Oh," said the little boy, with a confused look on his face. Then the teacher said with a smile, "You can draw whatever you like." The little boy's face lit up. "Anything?" Asked the little boy. "Anything", said the teacher. Good! Thought the little boy happily, I can do that!

And he began to draw a flower with five red petals and a green stem.

By HELEN E. BUCKLEY[1]

[1](https://steemit.com/teaching/@janne/the-little-boy-helen-e-buckley-story-about-what-kind-of-teacher-not-to-be **accessed on 26th May 2019 at 9.30 AM extracted verbatim**)

Introduction

Our Characters:

1. **Padhkar Kumar**

2. **Karkar Kumari**

3. **Teacher**
4. **Students**
5. **David Kolb (Guest Speaker)**

Setting: A classroom in a CBSE School

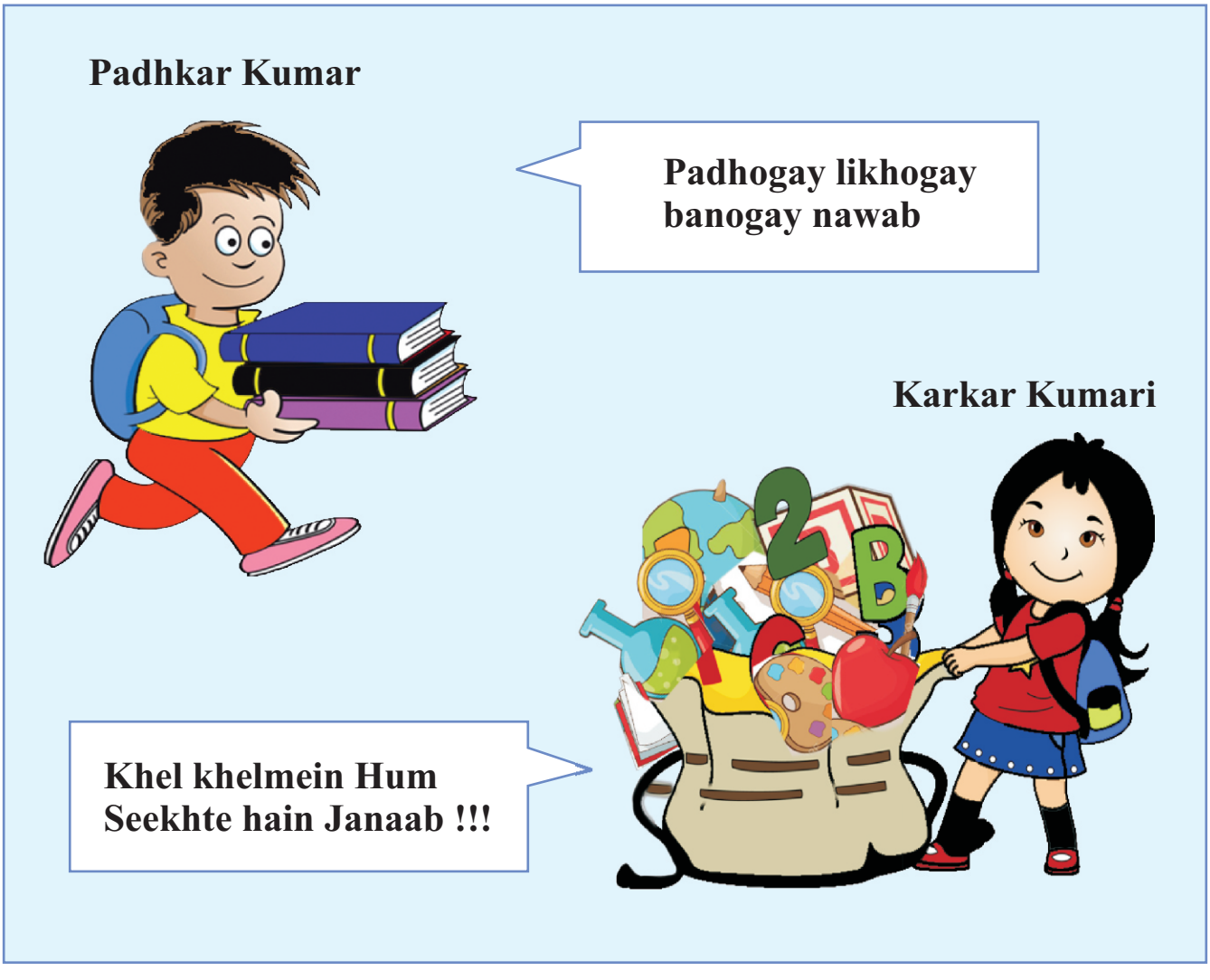
Time: A week in the school

CHAPTER 1

Padhkar Kumar and Karkar Kumari: Views on Education System

Let us introduce you to Padhkar Kumar and Karkar Kumari! Both study in the same school, but are taught by different teachers. Padhkar Kumar and his teacher believe in only Padhai[2]. But Karkar Kumari believes in Padhai with Khel[3] and Khushi.[4] Her teacher also engages her in activities which give her real-life experiences.

We shall experience the concept and implementation strategies of Experiential Learning along with these two children.



[2]Studies
[3]Play
[4]Happiness

(It is a usual day at school. Both Padhkar Kumar and Karkar Kumari have entered the school premises a little before school time. They are walking together towards the assembly ground and are engaged in deep discussion.)

Karkar Kumari: The Indian Education System is changing and going through a developing phase.

Padhkar Kumar: "Yes! We are learning to unlearn all over again. Did you know that a well-established education system existed in India even in ancient times! There used to be residential schools known as ***Gurukuls*** for teaching theology, philosophy, arts, military education, public administration, etc. The gurus were responsible for the holistic development of their students. Unlike today, the guru did not teach a class of forty to forty-five students, but instead concentrated on senior pupils only, who were just five to six in number. With the evidenced contention that the best way of learning is teaching, these senior students passed on their knowledge to the junior students by acting as gurus for them. This practice was known as monitorial system as these senior pupils monitored the progress of the junior students."

Karkar Kumari: Well, the world has come full circle and now once again the emphasis is on peer-learning as one of the crucial methods for enhanced learning.

Padhkar Kumar: Is that so? Well, I gave you this background because I found this so interesting.

1.1 Education in colonial era

Karkar Kumari: But tell me, what happened next, Padhkar?

Padhkar Kumar: Education System underwent certain changes after the British invaded India. Let me show you a picture which will tell you everything in a nut-shell! Here it is.

Did you get anything from this picture?

Karkar Kumari: Yes! One-sided classroom, teacher is the master, students are doing meekly what has been told.

Padhkar Kumar: Yes, Indeed! Indian schools were like that only. The Britishers encouraged their own practices and beliefs and brought about a complete change in the education system of India. Education became a part of the government sector rather than being owned by the local community. The text book and syllabus were decided and taught as per the guidelines given by the Education Inspectors. The teacher's role was limited to questioning and pupil control or maintaining discipline in the class. This kind of teaching could only produce students with textual knowledge and a community of rote learners, and individuals were meant to be brought up only to follow not to question.

Our education in the contemporary times is still influenced by the British Education System. Even today, the methods of rote-memorization remain in our schools in large measure. I wish that were not the case.

Karkar Kumari: I only partially agree, because you are missing out on the new developments. New pedagogical skills and teaching methodologies are emerging in a splendid manner with the training of the facilitators. But contemporary practices yet remain to be imbibed in the current education scenario. Introduction of various pedagogical skills and teacher training has not been able to bring about constructive and productive outcomes on a larger scale as required.

Result of achievement surveys like NAS, various SLAS conducted by states, exams like PISA, etc. and a general debate in the country for better quality of education have become the catalysts in bringing about the much-needed movement towards the Experiential learning pedagogy, with a focus on hands-on experience through real-life situations, to raise the competence level of the Indian students.

A great deal of Research is being undertaken regarding the benefits of introducing and practicing strategies like Experiential Learning, Blooms Taxonomy, Multiple Intelligence etc. to strengthen our education system. This is the future of our education system**.**

Padhkar Kumar: Arey suno[5], ***What is Experiential Learning?***

Karkar Kumari: Wait! You have asked a wonderful question. Now that I have caught your interest, let me take you through the system. First and foremost, just see this:

Experiential approach aims at making the educational environment student centered.

The students have control over their own learning – over the pace of learning, method of learning, and over the skills they need to utilize for this learning.

They are able to evaluate, think critically, make decisions and master knowledge by constructing it.

The teacher facilitates or guides the students.

Learning experience may be cooperative, collaborative or independent, encouraging the students to work together and learn how to question and evaluate evidence rather than accepting truths communicated by their teacher.

Padhkar Kumar: This seems to be yet another management jargon to me. You know the kinds that laptop wielding executives can mesmerize you with?

Karkar Kumari: Certainly not! This is indeed different and is now established as the future of education. In fact, it is the recommended pedagogy of almost all countries that are considered to be providing the best quality of school education. In an article I saw on the internet, the following 7 of the 8 points are elucidated as the reasons as to why Experiential Learning is the future of Learning and is true for school education too:[6]

[5] The Hindi version of 'Hey Listen', used to address somebody close/friendly, or while trying to catch the attention of someone, or even to drive home a point.

[6] 8 reasons why Experiential Learning is the future of Learning, by Rajiv Jayaraman (https://elearningindustry.com/8-reasons-experiential-learning-future-learning)

1. **Accelerates Learning:**

   Repetitive Learning or learning by rote has long been replaced by 'Learning by Doing.' Experiential Learning methodology uses critical thinking, problem solving and decision making to deliver a training module. This has become an established method to accelerate learning.

2. **Provides a Safe Learning Environment:**

   Simulations are a part of Experiential Learning and they can even use real life scenarios that depict several challenges, which a participant will eventually face after the course completion. It is only natural that mistakes happen during the course of learning, and using simulations is like taking kids to a playground, and getting them to have fun, try new things and learn, in a safe controlled environment.

3. **Bridges the Gap Between Theory and Practice:**

   By moving beyond theory to the realm of "learning by doing,' the trainee gets a first-hand experience of practicing what has been taught. This plays a crucial role in retaining concepts and ideas.

4. **Produces Demonstrable Mindset Changes:**

   There are very few learning methods that can have a dramatic impact on the participant's mindset. Experiential Learning is one of them. Management guru Henry Mintzberg pointed out long ago that, "Leadership, like swimming, cannot be learned by reading about it".

5. **Increases Engagement Levels:**

   The high focus on collaboration and learning from each other benefits the participant as it increases engagement. On the other hand, since the participant is immediately involved in the problem-solving activity or event, the level of ownership of the outcome is high.

6. **Exceptionally effective for retention:**

   Experiential learning is personal and effective in nature, influencing both feelings and emotions as well as enhancing knowledge and skills. It goes beyond classroom learning and ensures that there is high level of retention.

7. **Enables Personalized Learning:**

   In order to enable personalized learning, every program needs to enable a journey through the following phases: Assessment, teaching and learning strategy, and curriculum choice. Experiential learning methodology is highly effective in meeting these requirements to enable personalized learning. It is a radical departure from traditional learning methods and takes the learning beyond the classroom. The participants set their own learning pace. This has introduced the concepts of flipped classroom, where the learning goes to the students and not the other way.

Pdahkar Kumar: Can you sum it up please?

Karkar Kumari: Allow me to sum it up in the words of two authors, C.Beard and J.Wilson, "Experiential learning can be defined as a sense making process of active engagement between the inner world of the person and the outer world of the environment": it is thus the active engagement of the whole person through thoughts, feelings and physical activity. [7] The senses play an important role, because we interact with the environment through our senses. The latest research in neurosciences too speaks of 'embodied cognition' which means using our body to learn. This leads to increase in neuron connections in the brain and in turn leads to higher retention and recall.

Padhkar Kumar: Now it is making *sense* to me. Using our own senses to learn can be so empowering and I can see why you are so excited about this form of pedagogy. Like you, I too would enjoy a class so much more if the concepts are taught through engagement of our senses, where we students take the lead in learning. Now that you have made me sufficiently interested and curious about it, I want to know more about what other countries are doing.

Karkar Kumari: Countries like Finland and Singapore have already taken a lead in practicing and implementing Experiential Learning at their school education. At Finnish schools, the term "outdoor education" represents teaching and learning that takes place outside the classroom with the aim to achieve goals in the National Core Curriculum for Basic Education (NCC, 2004,39) and in the National Core Curriculum for upper secondary schools. In Singapore, in 2005, the Ministry of Education has taken a stand for transforming learning from quantity to quality "more quality and less quantity" in education. This is in line with the national vision of 'Thinking Schools, Learning Nation'.

My dear Padhkar, **this is indeed the future of education in the world.** This can help us benchmark our progress to the international standards of education. An approach like experiential learning can surely bring about the required change in the competency level of Indian students and they can be at par with the best in the world, if appropriate actions are taken timely.

[7] Beard, C., & Wilson, J. P. (2006). Experiential learning: A best practices handbook for educators and trainers. London: Kogan, page 19.

CHAPTER 2

Padhkar Kumar and Karkar Kumari: Experiencing the Experiential Learning – Policy and Framework

Both Padhkar Kumar and Karkar Kumari decide to go to Karkar Kumari's teacher, to know more about Experiential Learning. The teacher is very happy that Karkar Kumari is advocating the benefits of this form of learning. She gives them the task to research on the following:

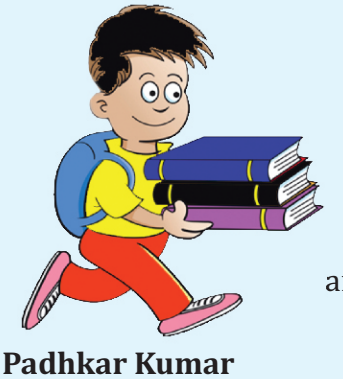
i. Perspectives on Experiential Learning in MHRD[8], through the National Curriculum Framework

ii. State governments' initiatives for promoting Experiential Learning

iii. UNESCO's initiative on Experiential Learning

iv. CBSE and Experiential Learning

In line with the Experiential Learning methodology, the teacher tells them to do this research in a collaborative manner. Working as a member of a group for collaborating on the same activity is a new experience for Padhkar Kumar, who is used to doing all his academic tasks on his own. Padhkar Kumar initially tries to compete with Karkar Kumari in getting more information by keeping to himself, but Karkar Kumari slowly cajoles him into discussions. Padhkar Kumar soon realizes that doing the same task together with his peers through active discussions and analysis actually helps him understand things better, asks more questions and gains more confidence by being able to find solutions to his queries, and even acquires perspectives he had not thought of. Hence, the task is jointly and joyfully completed by Padhkar Kumar and Karkar Kumari.



Padhkar Kumar and  **Karkar Kumari** go to the class for presentation.

Both approach the Teacher and show their work to her.

Teacher: If you are really keen on gaining an understanding on the three issues on which you have done your research, then why don't you explain what you have learnt today to the whole class.

[8] Ministry of Human Resources Development is the ministry looking after education sector in the Government of India.

Padhkar Kumar: No, no. It is alright. I have understood. I don't feel the need to go and make a fool of myself before the rest of the class.

Teacher: You know you experience the concepts better if you teach them to others.

Padhkar Kumar: But what if someone asks me a question that I do not know the answer for? Will it not be embarrassing for me?

Teacher: Nobody has all the knowledge. Knowledge is an acquired process. Even those who ask you questions are doing so out of curiosity and an urge to learn more. It is this curiosity and reflection that becomes the basis for a firm understanding of topics and concepts.

Karkar Kumari: So why should you feel embarrassed? We can do more research on those areas, and it will in fact help us understand the topic from many more different angles.

Padhkar Kumar: Fine, if you are so confident, then you go first.

Teacher: Yes, Karkar Kumari, why don't you start? (Addressing the class) Class, today Padhkar Kumar and Karkar Kumari are going to talk to you about the manner in which I teach you every day. Are you interested?

Chorus: Yes Ma'am! Why not? Sure! Very much!

Karkar Kumari begins her presentation to her classmates on her findings as follows:

Karkar Kumari: My dear friends, as you have noticed our teacher is unique in the way she teaches us. She initiates our learning process and then gives us an activity or task to do that we can relate to real life, and she plans well in advance. We do the task in small groups, sometimes different groups do different tasks, but when each group makes presentations in class through

power point or quizzes, or charts, or role play, etc., each one of us acquires clarity on the topics. And we tend to retain the understanding too in the long term. Well, did you know that this form of pedagogy or method of teaching and learning has a name and is extremely popular in the developed countries? Does anyone know the name?

Student 1: Joyful Learning!

Student 2: Art integrated learning!

Student 3: Activity Based Learning!

Student 4: Fun, games and studies!

Student 5: Sport Integrated Learning!

Student 6: Inquiry based learning!

Student 7: Collaborative learning!

Student 8: Assessment as learning!

Student 9: Learning by doing!

Student 10: Best Teachers' method!

Padhkar Kumar: Now I am really confused.

Karkar Kumari: There is nothing to be confused about. All of you are more or less right in your understanding. This method is known as Experiential Learning and it encompasses everything that all of you just said and much more. Today I am going to limit my presentation to giving us a perspective on how it is also a part of the education system of our country. This is how I have planned my presentation.

I shall first take up the Government of India's position on Experiential Learning which is elaborated in the National Curriculum Framework, 2005. Next, I will give you examples of what states are doing to promote it. Then I will take you through what UNESCO recommends, and lastly, I will come to my favourite part, that is, what CBSE has taken up.

Padhkar Kumar: (by now gaining confidence and looking at the Teacher) And I will keep pitching in during Karkar Kumari's presentation.

Teacher: That sounds good. Go ahead.

Karkar Kumari: I would like to submit to you:

2.1. The need

The need for active student-oriented teaching learning has been recognized and envisioned by policy makers, educationist and supporting educational governing bodies - NCERT[9] and MHRD[10].

[9] National Council for Educational Research and Training
[10] Ministry of Human Resources Development

2.2. Emphasis in National Curriculum Framework

A curriculum framework consists of a clear and implementable policy on how the growth and progress of education is envisaged with the help of various tools like syllabus, textbooks, pedagogy, extra and co-curricular activities, etc. It is a set of guidelines and standards that are expected to be achieved by students while being imparted education by the schools. It is a set of goals of learning, manner of learning and teaching, areas to be focused upon, how assessment should be done, etc. The last national curriculum framework has been framed in 2005 and it has put greater emphasis on designing tasks-based learning experiences that challenge students thinking and encourage independent thought and action.

You can see for yourself as I quote from the NCF 2005:

Children learn in a variety of ways—through experience, making and doing things, experimentation, reading, discussion, asking, listening, thinking and reflecting, and expressing oneself in speech, movement or writing—both individually and with others. They require opportunities of all these kinds in the course of their development.(NCF, 2005 page 34)

Learning occurs through interactive experiences:

Learning tasks that are designed to ensure that children will be encouraged to seek out knowledge from sites other than the textbook, in their own experience, in the experience of people at home and in the community .....communicate the philosophy that learning and knowledge are to be sought out, authenticated and thereby construed. (NCF, 2005, page 39)

Experiences form the basis of participatory learning:

Participatory learning therefore is to be envisioned as a process whereby learners construct meaning through absorption, interaction, observation and reflection.

The curriculum framework also asserts that students must be able to dissent, debate and form individual opinions on situations, ideas, systems and practices by developing skills to think and reason independently.

These experiences can be as simple as:

visiting a farm to observe and understand the process of farming

germinating a seed

simulating volcano eruption.

(While Karkar Kumari was busy in presentation, Padhkar Kumar's thoughts were gravitating towards his friend.)

If I could experience a volcanic simulation, or perhaps get into the mind of a historic figure and do a role play, learning subjects like Geography and History would be so much fun. And if you add visits and excursions to my learning process too, then it is bye-bye rote memorization!!!

(Karkar Kumari carried on with her presentation.)

2.3 Initiatives taken by various states:

2.3.1 Uttar Pradesh:

"To improve children's English, Sarva Shiksha Abhiyan, UP, supported by UNICEF, has initiated the programme *Aao Angrezi Seekhen*[11]. The programme has been launched in the state on 17 July 2017. The Centre of Learning Resources (CLR), Pune, has developed the entire content of the programme. This is a 15 minutes bilingual interactive series designed in entertainment-education (e-e) format, with a central character called Sunita didi. She is the radio teacher who interacts with the children in the classroom, asks them questions and teaches them how to answer in English. It relies extensively on local language support for learning English and is structured as a dramatized series in which young Hindi-speaking children learn English from an older English speaker. The programme is innovative, interactive and child friendly. The radio lessons contain skits, songs, language games, general conversation etc. In addition, it requires the classroom teacher to revise the entire lesson by herself after the audio lesson is complete."[12]

[11] Hindi phrase, translated as, Let us learn English

[12] https://repository.seshagun.nic.in/wp-content/uploads/2018/10/wle-case-study.pdf

2.3.2 Tamil Nadu:

"State Council of Education Research and Training (SCERT) Tamil Nadu, through its Tamil Language cell has taken this innovative initiative of producing these DVDs which include all the poems in the Tamil Book from standards 1 to 5. Girls and boys from Government schools are trained to sing these poems, in a natural setting giving life to the theme of the song at the back drop. Each song comes alive on the screen with the joyful expression of young children, thereby providing an opportunity for fun filled learning. Over 35,000 copies of DVDs have been distributed to all the primary schools in Tamil Nadu."[13]

2.3.3 Chhattisgarh:

Chhattisgarh Govt. decided to improve the deteriorating conditions of Primary education after the declaration of NAS class III results and started focusing on Early Grade Numeracy & literacy skills. For improving literacy skills, it started working with Room to Read and in order to improve Math skills, it collaborated with Sampark Foundation. The foundation helped develop Maths and English kits for the schools.

Math Kit:

Math kit contains a box with colorful materials like Number line, play money, numbers, shapes, colors and many other TLMs. The pedagogy is split in two levels, Level 1 focuses on concepts covered in class 1 & 2 while Level 2 is aligned with the syllabus of class 3, 4 & 5. In each of these levels, the concepts are grouped in four broad areas: Numbers & Operations; Geometry; Measurements; as well as Patterns, Data handling and Problem Solving. Each class is provided with a Math kit with multiple teaching aids that cover all the Math concepts in class 1 to 5. A teacher's reference calendar describes the way a concept can be progressively introduced and mastered using TLM and written practice using square line notebooks. It also includes ideas for games, formative assessments and areas that need focus. An introductory hands-on training for teachers covering all the early grade math concepts introduces teachers to the philosophy, methodology and the use of TLM.

English kit:

English kit comes with a battery-operated audio device to play the role of the teacher and to create exciting Teaching Learning Materials (TLMs) around the lesson so that teaching becomes interesting and effective. The teacher is given a booklet that guides her through a well structure sequence of teaching 240 lessons (120 each of Math and English) with details of where to use Sampark Didi along with teacher lead activities.[14]

[13] https://repository.seshagun.nic.in/ssa-components/unique-initiatives-for-improving-learning-outcomes/

[14] https://repository.seshagun.nic.in/wp-content/uploads/2017/07/sampark-smart-class-improving-early-grade-math-english-at-primary-level.pdf

2.3.4 Nagaland

The State of Nagaland has introduced ACL (Activity and Competency Learning) programme in 690 schools as an educational system that incorporates all aspects of learner-centered education which promotes creative learning based on activities and competencies. Here, Continuous and Comprehensive Evaluation of children (CCE) is at the core of the system, incorporating the requirement of early literacy and mathematics; and it has been taken up as a very important innovative educational project in the State.[15]

Student 1: May I ask a question?

Karkar Kumari: Sure.

Student 1: I find all the work being done by states really interesting. Is there any one place where I can find these best practices of states for a better understanding?

Karkar Kumari: Since this part of the research was done by you, Padhkar Kumar, would you like to reply?

Padhkar Kumar: Yes, I would. The MHRD has developed a unique portal by the name of SHAGUN ('Sha' is derived from *Shala*, meaning school; and 'Gun' is derived from *Gunvatta* meaning quality). Here you will find the documentation of best practices of states in the form of videos, narratives, etc. If you are keen to know more, do visit https://repository.seshagun.nic.in

Student 1: And if I want to know more about how individual teachers are taking up this pedagogy in their schools, where do I look for?

Padhkar Kumar: That is a good question, because I too was curious about how the state's policies are transacted at classroom level. I found something amazing in my research. The MHRD gives away the National Teacher's Awards every year. In 2018, it started a new trend. It made one-minute videos on the work done by each of the 44 teachers who were given awards that year. You can see them on http://www.nationalawardtoteachers.com

You will find teachers who teach Mathematics by transforming the school playground into an aid for teaching and learning concepts of the subject, those who teach Chemistry through theatre, those who make mobile Apps for each concept of Maths to teach students, etc. Our teachers are indeed very creative!

Karkar Kumari: And for want of time I am now going over to the next part of my presentation, while urging you all to visit these portals. I will now talk about UNESCO's perspective and Padhkar will talk about CBSE initiatives.

[15] https://repository.seshagun.nic.in/wp-content/uploads/2017/07/activity-competency-learning-acl.pdf

2.4 TLSF – UNESCO perspective on Experiential Learning:

UNESCO launched the **Teaching and Learning for a Sustainable Future** as a programme for United Nations Decade of Education for Sustainable Development. Acknowledging the fact learning takes shape in the way experiences are processed by learners, TLSF programme entails a dedicated module on Experiential Learning as a key – approach to student-centered learning towards a sustainable future.[16]

2.5 CBSE Initiatives:

Padhkar Kumar:

CBSE has identified the transformation of the pedagogical processes of teaching-learning in schools as the crucial intervention to make the students future ready.

> **"In order to ensure the enhancement of the quality of education and to promote self-improvement, it has been decided by the Board to form groups of 4-6 neighborhood schools for collaborative growth. These would be *Hubs of Learning*."**
>
> **CBSE circular dated 9.3.19**

The transformation is to be implemented by incorporating active and experiential learning, besides strengthening other aspects of learning like arts and sports teaching, capacity building of educators and greater emphasis on value – education and life skills.

Experiential learning is the theme for teacher training in CBSE for Session 2019-20 and it is the front runner for making the educational system learner centric and the pedagogy creative and joyful.

HOW CBSE STRENGTHENED THE ERA OF TEACHING-LEARNING REFORMS:

> **Several reforms have been initiated after CBSE revamped its Affiliation Bye-Laws; these byelaws have now been linked with Academic excellence, Assessment Practices, Teacher Training, etc. thereby initiating the process of quality driven education, rather than infrastructure led education.**
>
> ALL CIRCULARS ISSUED HEREAFTER BY THE BOARD ARE IN ONE DIRECTION: MAKING CLASSROOMS EXPERIENTIAL AND FUTURE-READY.

[16] http://www.unesco.org/education/tlsf/mods/theme_d/mod20.html

For your convenience, I have given a chronological description of each circular. Each circular is interlinked, with the ultimate goal of QUALITY ENHANCEMENT AND FUTURE READINESS. INTER-RELATION OF THESE CIRCULARS IS HIGHLIGHTED IN BOLD. Let's embark on the journey...

October 18, 2018	D.O.no. CBSE/AFF- B.L./SECY/2018 **Revamped Affiliation Bye-Laws with focus on Outcome Based education.** **Foundation of all qualitative improvements**
January 10, 2019	CBSE/Dir(Acad)/Mathematics/2019 **Introduction of Two-Level Mathematics at Secondary Level**
January 18, 2019	F.1028/CBSE/Dir(Acad)/2019 Adopting Learning Outcome based Education **Focus on Education that imparts Competencies to Students**

March 6, 2019	Acad-11/2019 Strengthening Assessment and Evaluation Practices **Assessment Of, As and For Learning**
March 8, 2019	Integrating Art with Education Circular no. Acad-12/2019 **Focus on Experiential and Joyful Learning**
March 9, 2019	Acad-15/2019 Principals as Pedagogical Leaders **Principals to take responsibility of being Pedagogical Leaders of their schools and prepare class-wise and subject-wise innovative Annual Pedagogical Plans for the transaction of curriculum**
March 9, 2019	CBSE/Dir.(Training & Skill Edu)/2019 Laying down of Aims and a Theme of Training every year **THEME FOR 2019 IS EXPERIENTIAL LEARNING**
March 9, 2019	Circular no. 14/2019 Artificial Intelligence, early Childhood Care Education and Yoga introduced as skill subjects **Aim of introducing: Future Readiness**
March 9, 2019	Acad-16/2019 **Reserving one period per day for sports and outdoor activities becomes mandatory at all levels**
March 9, 2019	Circular No.-Aff-12 Formation of clusters of schools in to Hubs of Learning **Collaboration among Affiliated Schools for self-improvement and quality enhancement**

There are many more reforms awaited, like Integrating Sports in Education, Promotion of Joyful Mathematics and Science, focus on developing reading skills at an early age, etc.

With that I come to the end of our presentation. Are there any questions?

2.6 Thinkers' Point of View:

Teacher: Well, there is time to take up one question only, because we are going to do an activity thereafter.

Student 2: Is Experiential Learning a purely Western practice, or do we find its presence in India too?

Padhkar Kumar: I would like to answer this, as I can connect things now. You may have heard of the Gurukul system of imparting education in ancient India. That system was entirely based on experiential learning, though at that time this kind of nomenclature did not exist. The Guru would take up several activities while sitting outdoors and the activities would be directly connected to nature. It was the British who in the name of progress introduced a different kind of education that was not in alignment with the cultural ethos of India.

Our culture has always emphasized the value of learning from elders at home and in the society, remain connected to the environment, learn to do everything related to your upkeep yourself, etc. But in the name of western education, we have lost that edge that we had over learning by doing. Even then, several Indian thinkers have been propagating this methodology in their own way. Each one of them has given a creative twist to the idea of imparting holistic learning.

Allow me to name a few thinkers who have contributed to the field of Experiential Learning. I am sharing a few quotes by well-known Indian thinkers. These quotes themselves are indicative of the 'learning by doing' philosophy of Indian thinkers as far as education is concerned. You may like to read their works on the topic for more in-depth understanding.

2.6.1. Jiddu Krishnamurthy:

> ***"To understand life is to understand ourselves and thus both the beginning and end of education."***

2.6.2 Swami Vivekanand:

Swami Vivekanand reinforced the concept of learning through experiences of life.

He encouraged Theory of Constructivism which suggests that humans construct knowledge and meaning from their experiences.

He asserted that man-making is the most important component of education. It is a life-long process that leads to self-discovery, self-awareness, self- perfection and self-manifestation.

He insisted that education should result in developing mind of humans rather than stuffing it with content from books.

2.6.3 Rabindra Nath Tagore:

His educational philosophy was based on three cardinal principles: freedom, active communication with nature and creative self-expression. Tagore believed that education confined to four walls of the classroom becomes artificial and loses its value.

> **"We should know that the great task of the institution is to provide for the education of mind and all the senses through various activities."**
>
> > ***"You cannot cross the sea merely by standing and staring at the water."***

2.6.4 Mahatma Gandhi

"Literacy in itself is no education. Literacy is not the end of education or even the beginning. By education I mean an all-round drawing out of the best in the child and man-body, mind and spirit. True education must correspond to the surrounding circumstances or it is not a healthy growth."

Therefore, connecting your learning to your experiences is not only important for academic growth of the child, but also for the all-round physical, spiritual, and mental health of the child. On this firm note, we end our presentation.

Teacher: Thank you very much Padhkar Kumar and Karkar Kumari. Please sit down. Now all of you divide yourself into four groups, of 5 students each. Each group will reflect on the learnings today. Step back from what you heard today, and now think about how this presentation has impacted you and why do you think that it has influenced you or not influenced you. Discuss in groups and then write it in your journals. You have 20 minutes.

As students got busy preparing themselves for the activity down, Karkar Kumari asked a question to Padhkar Kumar:

Padhaku Ji
Quick quiz. What did the Proton say to the Electron?

How can a Proton speak?

Exactly!
Answer is "Don't be so negative!".
Think differently, my friend!

CHAPTER 3

Padhkar Kumar and Karkar Kumari: Understanding Foundations of Experiential Learning

(Another character enters the scene. The teacher has invited a guest speaker in the class today. She is keeping the name a secret from the students).

Teacher: Good morning class. Today I have a surprise for you. We have a guest speaker from the USA. He is an educational theorist and is renowned the world over for his seminal work on Experiential Learning. He is the founder and chairman of Experience Based Learning Systems, (EBLS), and an Emeritus Professor of Organizational Behavior in the Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio.[17]

Padhkar Kumar: Is it Mr. David Kolb?

Teacher: You seem to have done your research well. Yes, it is Mr. David Kolb.

Excitement runs through the classroom.

David Kolb enters and the children surround him, each wanting to shake hands with him. He feels overwhelmed by this response. The teacher asks the students to be seated. Students decide to quickly rearrange the furniture in the class so that they can sit in a *semi-circle* (**Equity-based seating arrangement decided by the students is a crucial aspect of Experiential learning**). The students eagerly await to hear David Kolb now.

David Kolb: My dear children! I am so happy to be in your midst. Your Teacher has requested me to speak to you in detail about the Experiential Learning theory. You shall also know the basic elements and the cycle of Experiential learning. Let's do it together.

Karkar Kumari: Sir, what are the salient features of Experiential Learning?

David Kolb: Experiential learning:

is based on the principle of 'learning by doing'.

focuses on developing skills in the students through real life experiences.

is the way of learning in which it is the learner who guides the learning process, experiences, observes, reflects and implements it.

doesn't believe in compartmentalizing each subject. All the subjects are interlinked, and it depends upon the learner what he takes away from his experience. Each learner will have a different learning experience. The learner plays a pivotal role in assessing himself.

[17] https://en.wikipedia.org/wiki/David_A._Kolb

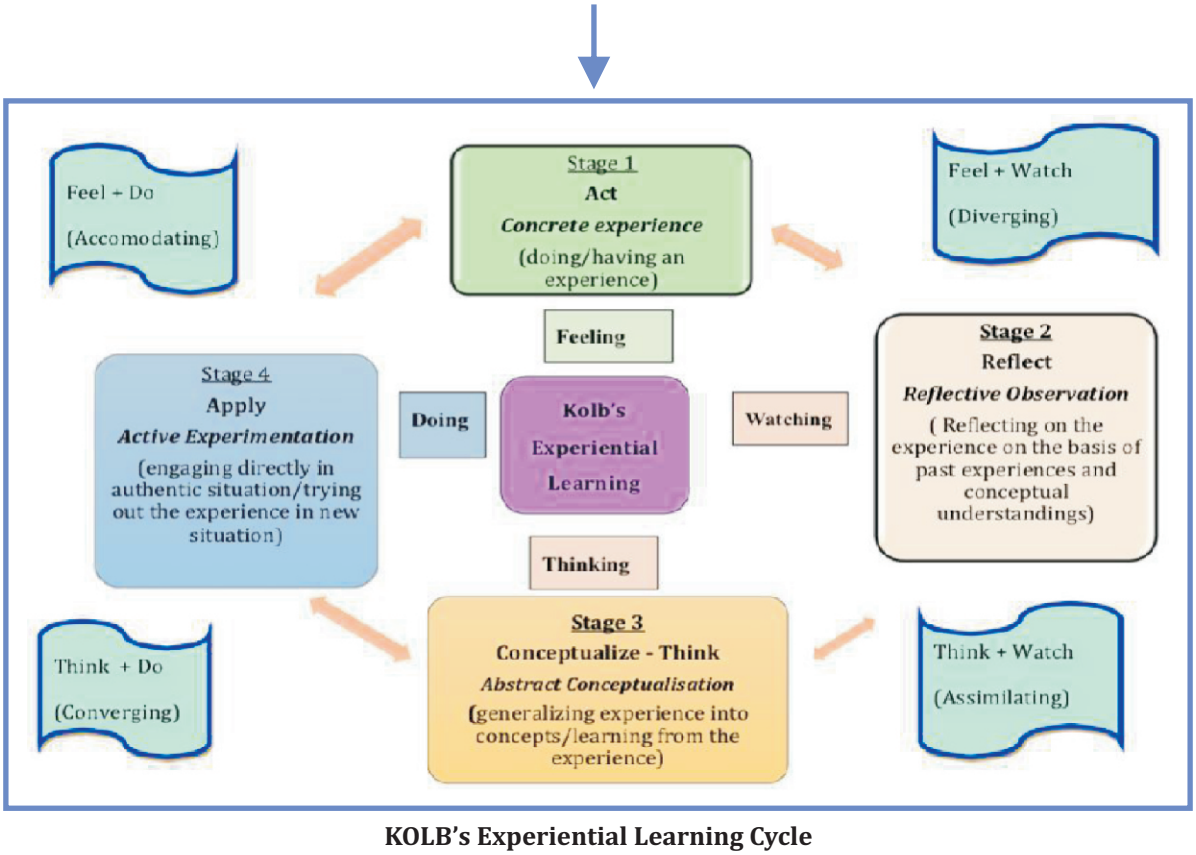
gives a multisensory experience of learning by using all senses, auditory, visual, tactile and kinesthetic.

Padhkar Kumar: Yesterday our teacher made us reflect upon the things that we had learnt and presented before the class. So, if we simply take up reflection of whatever is happening in the class, would that be considered as Experiential Learning?

David Kolb:No, that will not be considered as Experiential Learning. A complete learning cycle happens only when a learner goes through all the stages of learning that is cognition[18], perception, behaviour, experience and reflection.

Padhkar Kumar: Sir, please tell us about the cycle.

David Kolb: The cycle I propose is inspired by the works of Jean Piaget[19] and the father of experiential learning John Dewey[20]. Let me show you a diagram to make you better understand the **Experiential Learning Cycle**. Here it is.



KOLB's Experiential Learning Cycle

[18] According to Oxford Dictionary, cognition means the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses.

[19] A Swiss Psychologist (9.8.1896 to 16.9.1990), known for his work on child development and his theory of "genetic epistemology".

[20] An American Psychologist (20.10.1859 to 1.6.1952), was one of the first proponents of hands on learning or experiential education.

Stage 1 - Concrete Experience: The learner cannot learn merely by reading or observing. He needs to actively participate in the experience by feeling it with all the five senses. The idea is to immerse in the experience and learn.

Stage 2 -Reflective observation: This is the second stage where the learner reflects at the situation before forming any opinion. The learner must reflect upon the present by connecting it to his past experiences. Reflective observation focuses on observing and perceiving.

Stage 3 -Abstract Conceptualization: The learner creates theories to explain his experiences. In this stage the learner gathers and analyzes the information and draws conclusions. Sometimes it may challenge the pre-existing concept. This focuses on learning by thinking.

Stage 4 - Active Experimentation: This is the final stage where the learner applies what he has learnt while learning by doing.

The learner can enter a learning cycle at any stage, but must go through all the four stages to complete his learning cycle.

Teacher: I don't think I have ever realized that, all 5 senses can be utilized for the learning process. David, could you please elaborate on that a little bit more.

David Kolb: Sure. Let us take the senses one by one and see what they mean for Experiential Learning according to a website called "Learn through Experience"[21].

Sight

Humans are primarily sight-oriented. Everything, from the foods we eat to the clothes we wear, shows signs of visual influence. We also take cues from visual stimuli as we absorb new material. In fact, as Dr. Haig Kouyoumdjian states in a Psychology Today article, "...our brain is mainly an image processor, not a word processor." Teachers can use visuals in the classroom via infographics that use large images to reinforce key concepts, and colors that stimulate mental activity.

Hearing

Sound is all around us, and it can act as a distraction as often as an aid. Hearing helps people learn associations, whether it's the sound of birds on a tree or ice cracking in the middle of a

[21] All five senses and what they mean in an experiential learning scenario are taken from the website: http://learnthroughexperience.org/blog/power-of-context-learning-through-senses/

lake. Hearing teaches right from wrong, and safe from dangerous, and it is a crucial part of learning throughout life. In terms of active learning methods, the child will benefit most from engaging in relevant group discussions, reading out loud and experiencing a positive feedback environment. Studies have also shown that background music can help reinforce concepts, provided it is considered calming not distracting. To that end, non-commercial noise such as instrumental music, nature sounds and other vocalizations can help students focus their attention to the task at hand.

Taste

As with the other senses, taste plays a role in learning key associations. Taste can teach us about cultural and local cuisine just as it can teach about international cuisines. Like sound, it helps us learn safe versus poisonous foods and salty versus sweet foods. It can also help in the classroom when learning about chemistry, geography, mathematics, history and so on. In fact, one study at the University of California, Los Angeles shows that sampling foods with varying differences allows students to apply scientific explanations to account for the changes. After the testing period, students have been able to recall their experience and associate what they tasted with what they had learned.

Smell

The sense of smell is powerful, and some studies reveal how the slightest odour can trigger a memory from years before. In fact, a study published in Neuropsychologia in 2012 shows that scent activates more parts of the brain than sight alone, indicating the strong effect scent can have on learning and overall memory. Scent can bring up negative connotations, though, so teachers should take care to introduce only relevant scents when students are engaged in learning. Incorporating nature trips can be effective in learning, not only for word/term association but for calming effects as well.

Touch

The last category is highly useful for experiential learning because it involves direct contact. Touch is a powerful sense after all, and it can release a series of emotions and memories that aid in learning. Since roughly 30 to 40 percent of people are considered tactile learners, the ability to touch while learning could be vital to their success. From building models to exploring ropes and knots, hands-on learning provides context and allows your child to reflect and engage.

Karkar Kumari: Our research showed that Experiential Learning Cycle can be read and understood in conjunction with learning styles as proposed by you. Could you explain the learning styles?

David Kolb: Yes. These learning styles have come to be known as **Kolb's Learning Styles.**There are four distinct learning styles based on four stage Experiential Learning Cycle given earlier. Through these learning styles, we can elaborate that people have different learning styles which are formed on the basis of their social environment, educational experiences and their basic cognitive structure.

3.1 Diverging (feeling and watching – CE/RO)

Emphasizes the innovative and imaginative approach of doing things. Students with a better ability to generate ideas and engage in brainstorming, who enjoy gathering information, are often interested in people, are imaginative and emotional, arts-oriented, have excellent group-work skills and are open to concrete feedback.

3.2 Assimilating (watching and thinking – AC/RO)

This kind of learner pulls a number of different observations and thoughts into an integrated whole. This learning style is more common in information and science careers, with preference on readings, following logical approaches, being concise, and with the ability to explore and manipulate analytical models. People with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts.

3.3 Converging (doing and thinking – AC/AE)

Individuals with this learning style are often good at using technology, are interested in experimentation of new ideas and in practical application of theory. People with a converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks and are less concerned with people and interpersonal aspects.

3.4 Accommodating (doing and feeling – CE/AE)

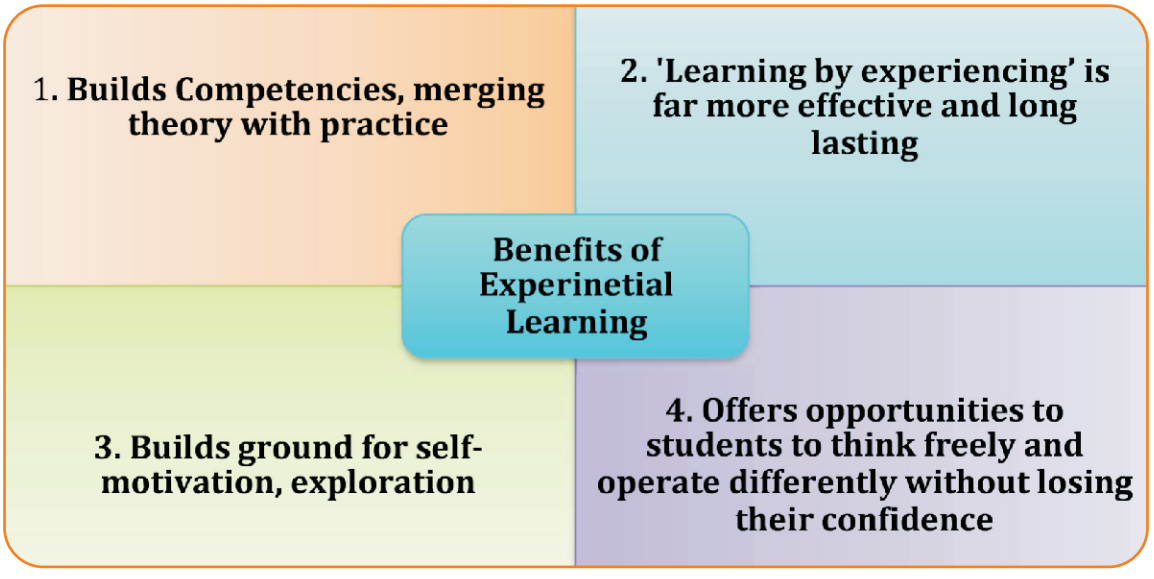
Students with this learning style use trial and error rather than thought and reflection. They often have a tendency to rely on others for information and are not interested in carrying out their own analysis, acting on a 'gut' instinct.

Padhkar Kumar: Sir, with your presentation, I have begun to understand why Experiential Learning is beneficial for us. As the situations are real-life, our teachers can know if we have understood the concept or not. Then they can also give us further remedial support.

Teacher: Why is it beneficial? Can anyone in the class now answer that?

Student 1: *Experiential learning engages students in the classroom in interactive activities that allow them to gain experience and provide them with opportunities to reflect, analyze and reconstruct concepts and new information.*

David Kolb: You are right. Please see this diagram that sums up this discussion:



Teacher: Now that we all have fair idea, let us do an exercise in the class.

Padhkar Kumar will present his experiences of learning while Karkar Kumariwill present her experiences of learning. For each point that they raise, other students can add their views. Let's see what happens!

David Kolb: This will be an experience in itself!

The discussions were held in a very systematic manner. First Padhkar Kumar would raise a point about the pedagogy he had been used to, next Karkar Kumari would respond to how the same aspect was different in the Experiential form of learning that she was exposed to, and finally one of the students from the class would sum up the differences. Here is a gist of the discussions in a tabular format:

Type 1. Padhkar Kumar's views on how he has been taught so far	Type 2 Karkar Kumari's views on her Experiential learning Classroom	Remarks of other students
Teacher teaches and I listen.	Active learning takes place with a real life connect and context.	Type 1 is very Teacher directed in a Teacher centric classroom. It is a Fixed and Rigid structure. In Type 2, the classroom is learner centric and the approach is flexible and differential.

Transactions are carried on mainly from the text followed by some activities like classwork, homework or tests.	Inductive approach helps the learner understand the text and concept better.	In Type 1, knowledge to be received is fixed by the teacher. In Type 2, the knowledge is actively constructed by the learner.
Students depend on the teachers for their learning. It aims at transferring knowledge simply by transferring information.	Students are responsible for their own learning. It aims to develop knowledge and skills through experience.	In Type 1, the learner is the receiver. In Type 2, the learner is participating in her own learning
Diagnosis at the end of the lesson leaves little scope for remedial. Summative assessments are given more importance.	Diagnosis and remedial is provided at each step. This provides a lot of scope for formative assessment to take place.	In Type 1, there is too much rigidity and often demotivates the learner. In Type 2, the learner learns at own pace and therefore has higher levels of confidence.
Assessments call for rote learning, mainly memorization and recall to replicate the content	A wide array of assessment strategies such as observation, anecdotes, peer-assessment, self-reflection etc. are used.	In Type 1, assessment are done by the teacher and are often perceived as threatening. In Type 2, assessments are done by the learner as self-assessment or by the peer group as peer assessment or as a collaborative process with the teacher and are not perceived or seen as threatening.

(Padhkar goes into deep thought....*Karkar's class is so joyful. For the first time I have the confidence to ask many questions, even form my own opinions and actually talk about them.*)

Mr. Kolb, can you give us specific examples of an experiential learning class, and the manner in which the stages are to be implemented?

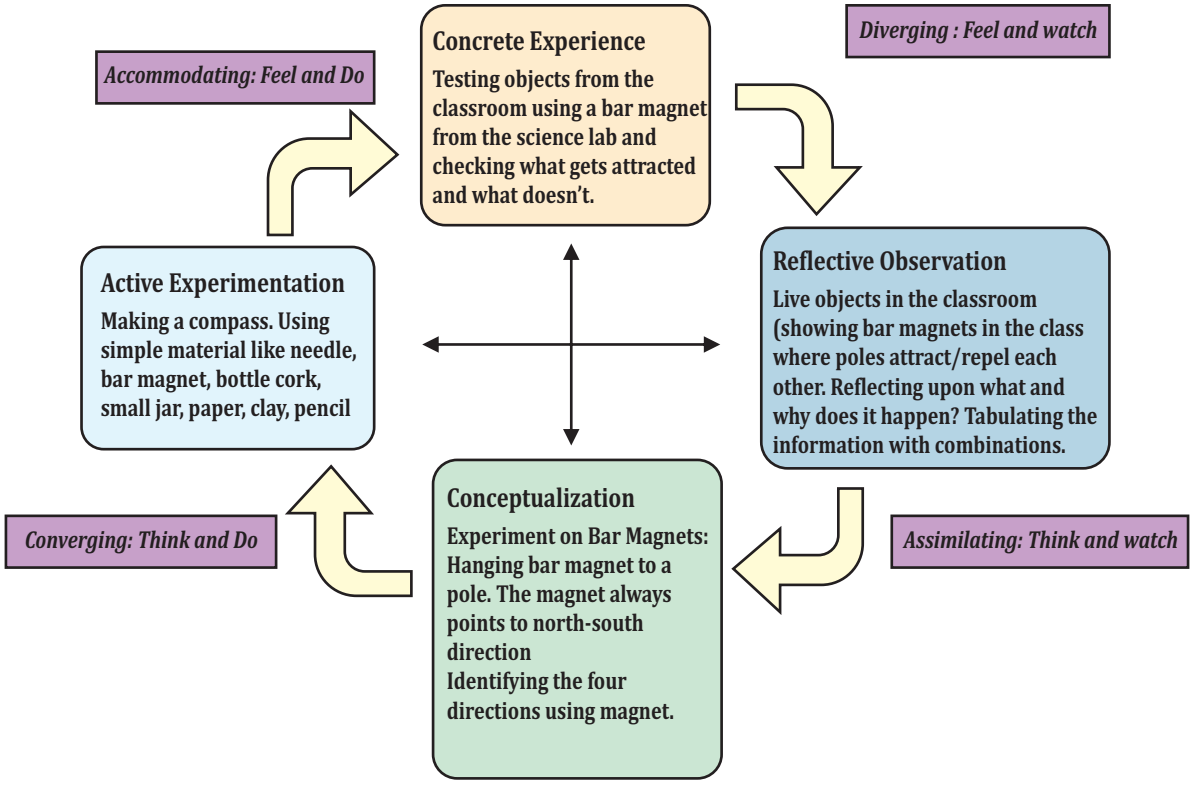
David Kolb: Sure. Here are exemplars depicting the stages of Experiential learning shown through teaching of certain concepts in grades 6 to 12. These have been developed by me. **They may not match your syllabus, but these will act as tools to help you get an understanding** about how the four stages of experiential learning can be planned by your teachers.

Grade	Subject	Concept
6	Physics (Science)	Fun with magnets
7	Civics (Social Science)	Understanding advertising
8	Maths	Square and square roots
9	Economics	Poverty as a challenge
10	Physics	Magnetic effects of electric current
11	Biology	Factors affecting enzyme activity.
12	English	The last lesson

I am leaving a copy of the above exemplars with all of you to study, understand and reflect upon. (Exemplars attached below).

BUT, AS THESE ARE EXEMPLARS FOR GRADES 6TH TO 12TH, PLEASE DO SHARE THESE EXEMPLARS WITH CLASSES OTHER THAN YOURS(SENIOR OR JUNIOR), KEEPING THE ONE FOR YOUR CLASS WITH YOU.

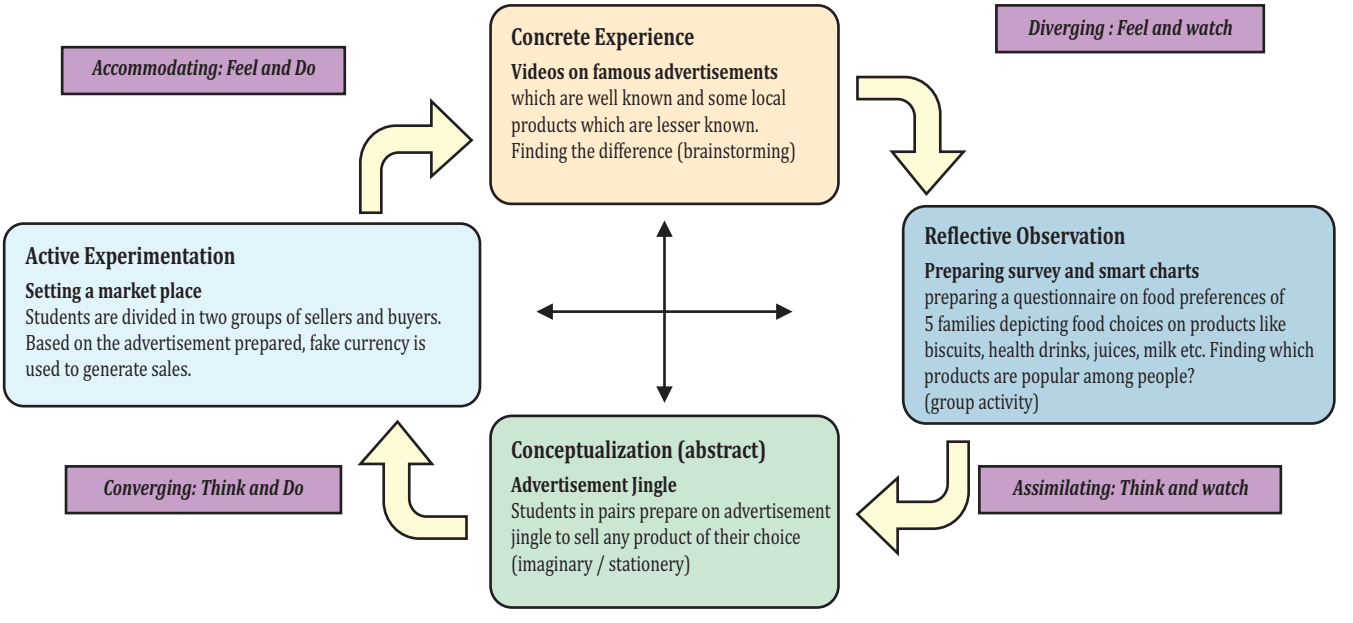
CLASS 6: FUN WITH MAGNETS:



CLASS 7: UNDERSTANDING ADVERTISING:

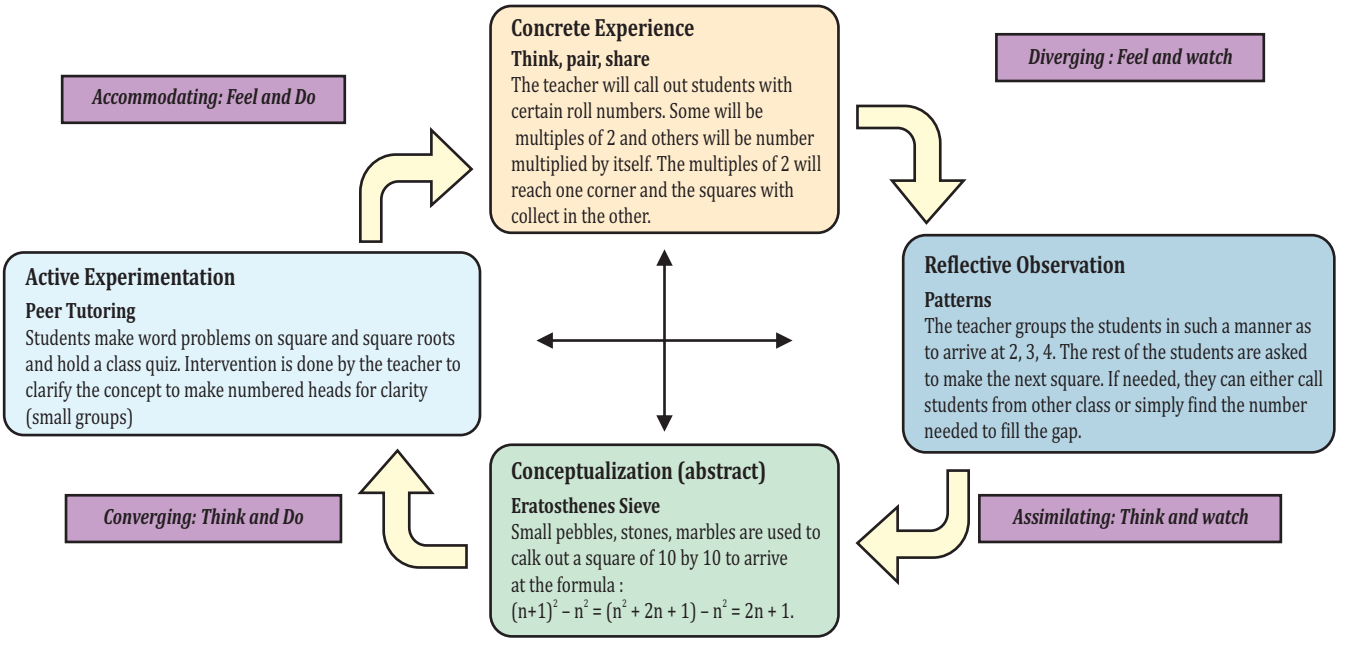
Concrete experience: Children in sub-groups can choose an advertisement from magazines or prepare videos themselves. They can then present the advert giving reasons why they chose it, which is viewed and heard by the other groups

Observation: They can present the outcome in form of graphs, tables.



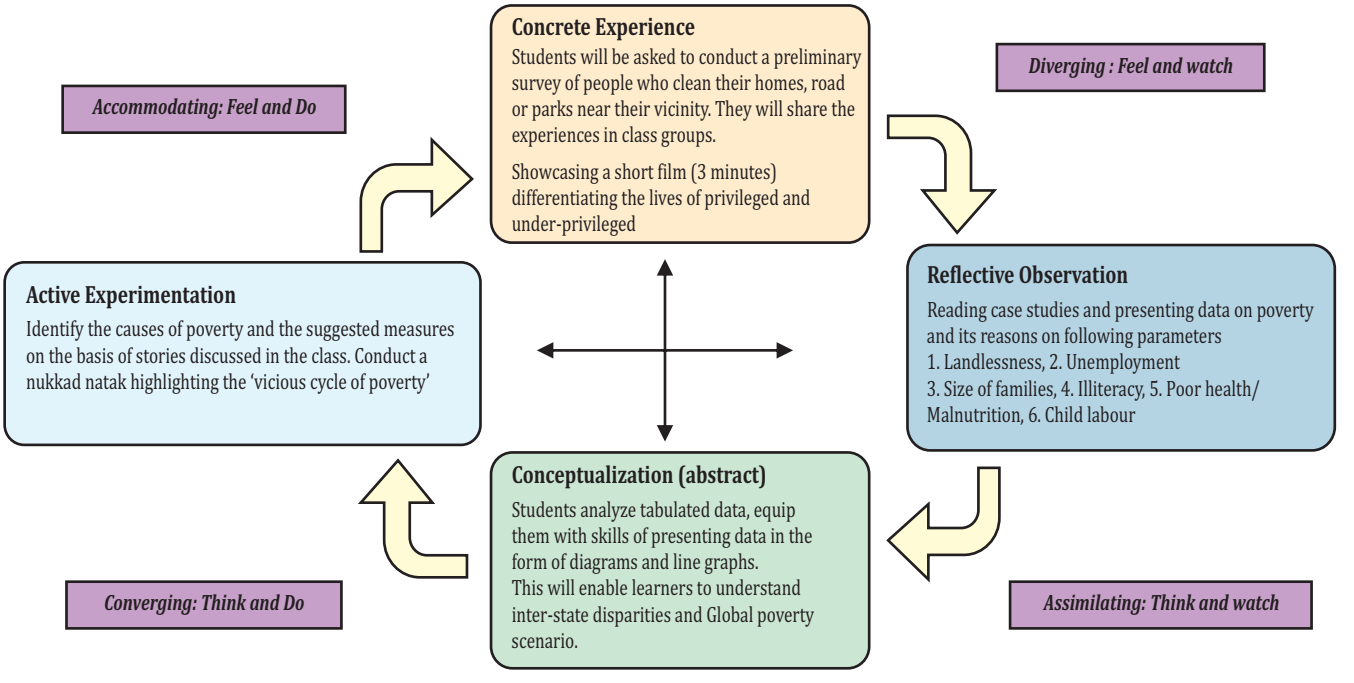
CLASS 8: SQUARE AND SQUARE ROOTS:

Concrete experience: Children can stand with their bodies making squares – 2 by 2, then 3 by 3, and so on, etc.

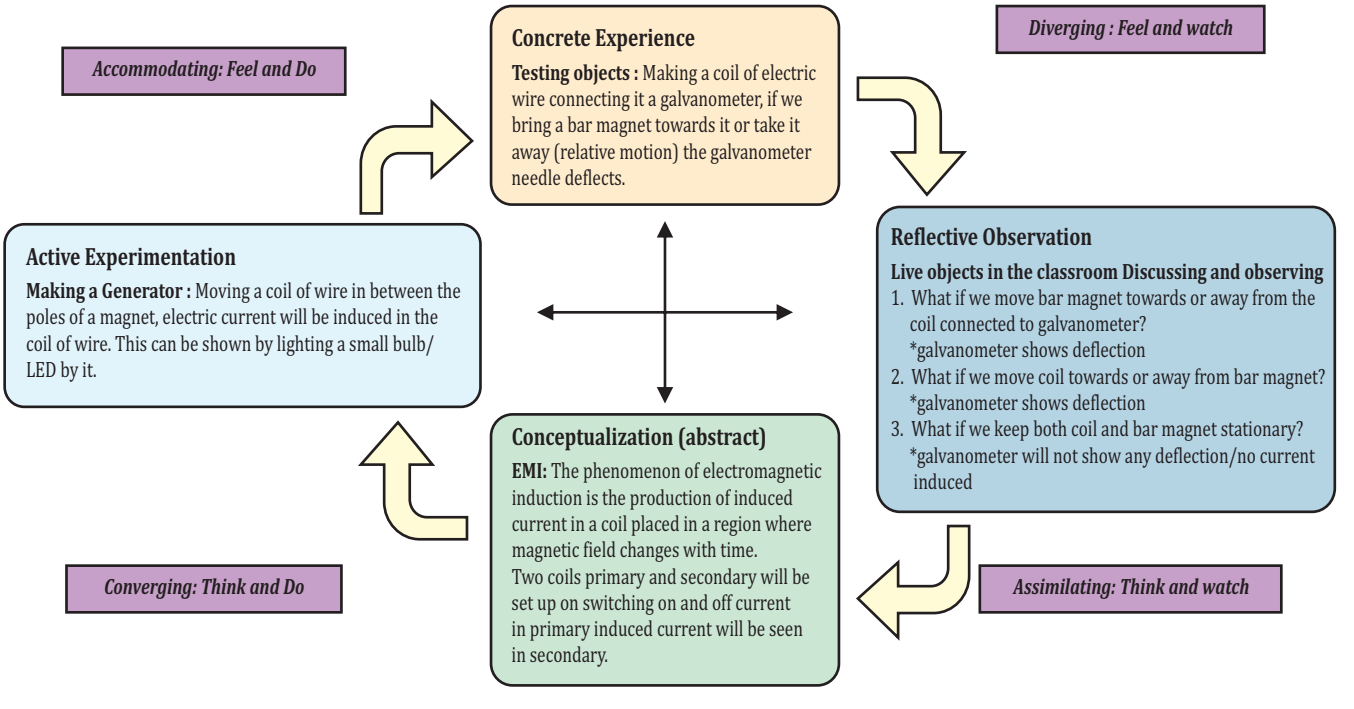


CLASS 9: POVERTY AS A CHALLENGE:

Additional concrete experience: Children in sub-groups create a freeze frame or take up roles to enact a scene where people are cleaning a home, a street or a park.

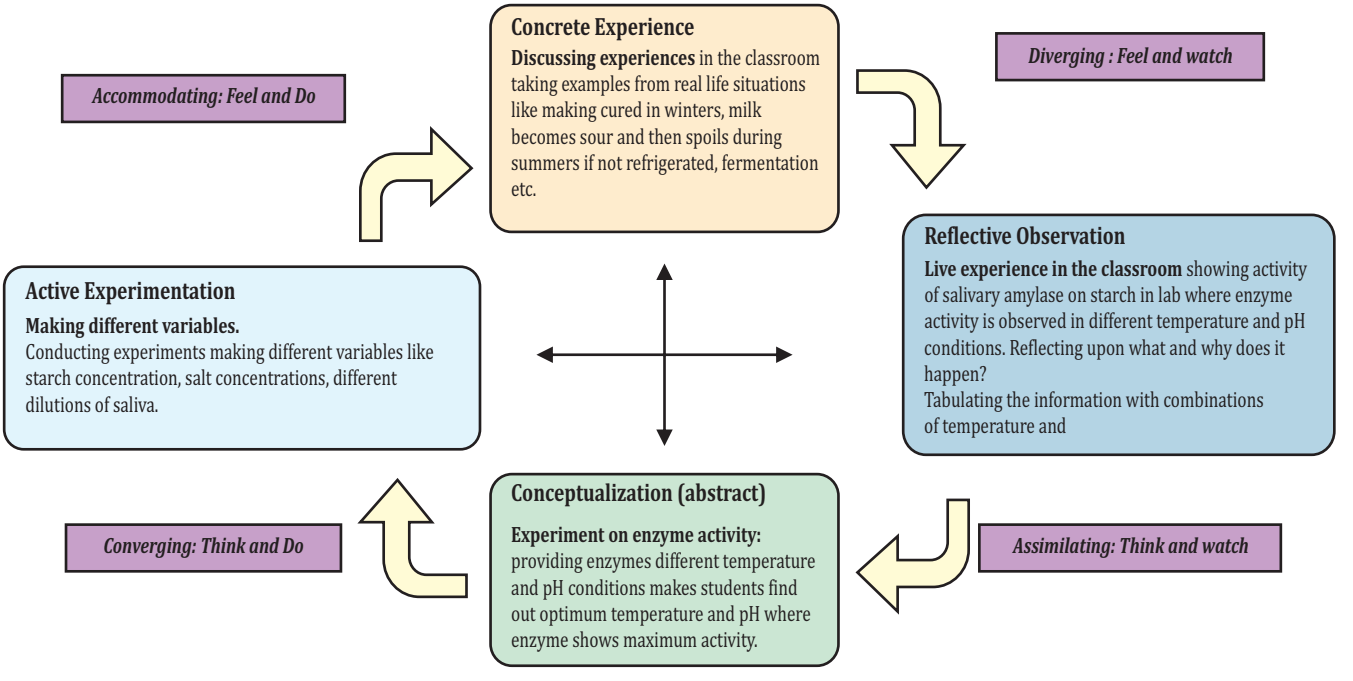


CLASS 10: MAGNETIC EFFECTS OF ELECTRIC CURRENT:

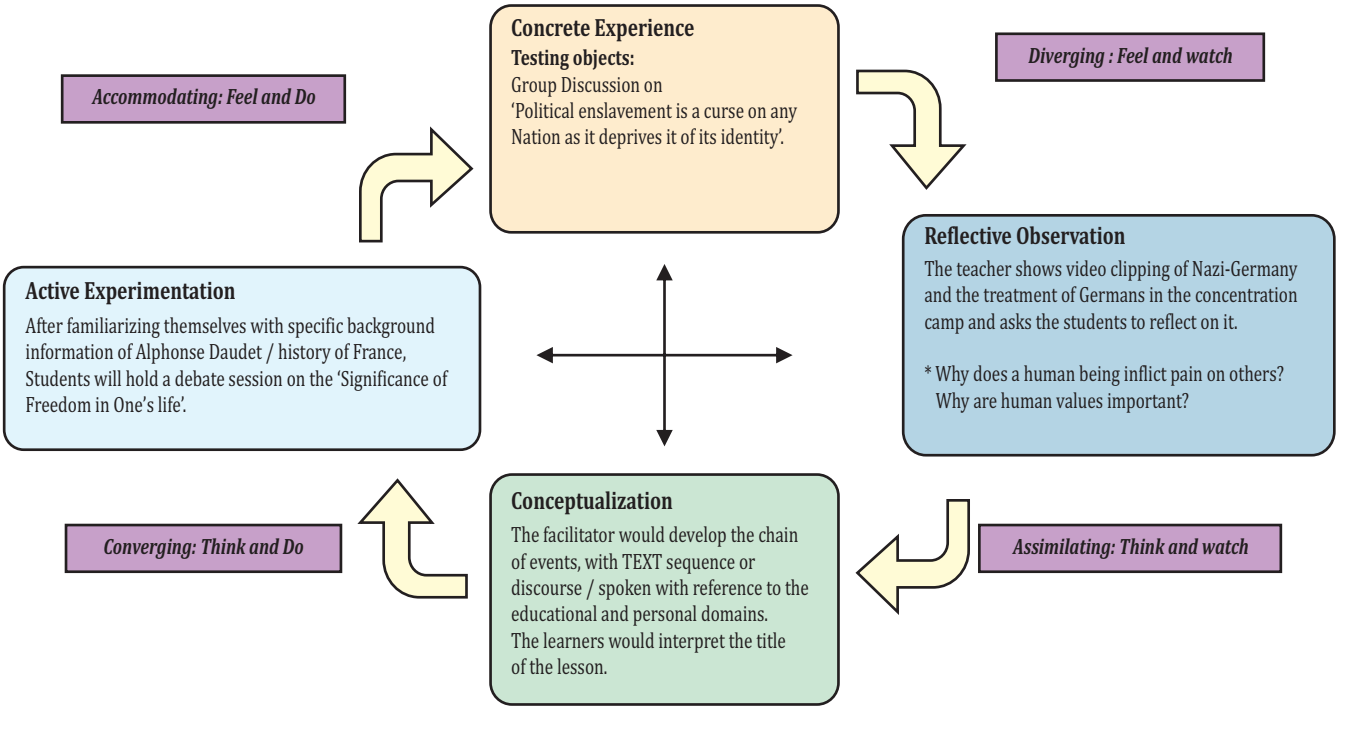


CLASS 11: FACTORS AFFECTING ENZYME ACTIVITY:

Additional concrete experience: Children bring a container of curd or fermented food from home.



CLASS 12: THE LAST LESSON



(David Kolb leaves and is given a warm send-off by students. The discussion continues in the class.)

Padhkar Kumar: This class has been life-altering for me. I want to know more. Karkar, please tell me about the strategies through which you learn in your classroom.

Karkar Kumari: This is only a suggestive list. It is really up to the imagination of the class guided by the teacher, how they would like to learn a particular topic.

Meanwhile, Karkar Kumari's teacher enters the room after seeing off David Kolb. She watches both children engrossed in meaningful discussion on Experiential Learning.

BASIC QUESTIONS FOR EL:

- Did you notice that?
- Why did that happen?
- Have you seen that happen in life?
- Why does that happen?
- How can you use that in your daily life?

Teacher to Padhkar Kumar: We can follow the following steps while planning an activity for Experiential Learning:

Planning an Experiential Lesson Plan – Essential Components

Step 1- Choosing Realistic Goals

Step 2- Pick up Exciting Topics or Learning Contexts

Step 3- Know Your Students' Needs and Talents

Step 4- Use A Range of Teaching Approaches and Methods

Step 5- Select Appealing Resources and experiences that are relevant and linked to the children's lives and context.

Step 6- Fair Assessment

Step 7- Evaluation

A well- planned lesson can be described in these words: **relevant to the child's life and context, exciting and effective**. In order to complete the syllabus, we often forget about the fact that the lesson should be fun and exciting for students to retain the knowledge and develop skills.

Step 1- Choosing Realistic Goals

It is very important for a teacher to know what specific skills and knowledge he/she wants the students to develop.

The idea is not to plan too much as it may be impossible to achieve.

Planning should be adequate for the young minds to digest and absorb new information in their own way.

Step 2- Pick Exciting Topics or Learning Contexts

The role of the teacher is to find something unique and fascinating about the topic to be taught. For this, he/she can ask the students their feedback on a topic he/she has chosen or ask them to propose as well.

Making meaningful connections between the topic and students' current interests is the best way to do so. For example, a specific historical character might have had some unusual hobbies, little secrets, pets, toys or favourite songs that can seem funny.

Step 3- Know Your Students' Needs and Talents

Knowing the above-mentioned point helps the teacher to choose learning goals, topics and teaching approaches adequately.

Keeping in mind the facts regarding what students are good at, what skills they require to develop, what fascinates them the most and what their preferred learning styles are.

Special requirements also should be considered like disabilities, when drafting a lesson plan.

Step 4- Use A Range of Teaching Approaches and Methods

Selecting different learning engagements can make lessons more dynamic and it will also facilitate the learning process.

Some of the most effective and preferred approaches in modern teaching are experiential/hands-on learning, multi-sensory learning, collaborative learning, peer teaching and project-based learning etc.

Step 5- Select Appealing Resources and experiences that are relevant and linked to the children's lives and context

The best resources are those that are found within the classroom space – such as students themselves, their 5 senses, stationery, board, etc. It is much simpler to devise role plays, quizzes, games, art integration, etc. within the classroom than planning to go out of the classroom to locate resources. These are the kind of resources that a child can connect to in real life. Bringing in resources that are not relevant to the child's life or context will not lead to learning.

Resources found within the school such as the green spaces, computer and maths labs, etc are also very important resources. Sometimes students can be asked to bring simple resources from their homes, such as a small container of milk or curd to study enzyme activity in chemistry.

Students at all levels are required to be provided with sufficient opportunities to actually have their hands on various interesting objects and resources and to facilitate the learning process.

Always choose good quality resources that come from reliable sources, and make sure they are safe for your students to use, touch, smell or work with.

Using authentic and multi-cultural resources will add extra educational value to your lessons.

Step 6- Fair Assessment

> *According to John Dewey*
>
> *"Sound experience involves continuity between learners and what is learned"*

Checking students' understanding at the end of the lesson may not be the best idea if the teacher hadn't observed them during the whole session and adjusted the teaching accordingly.

A reflective teacher uses observation skills during the entire session to make sure if his/her planning needs changes.

Step 7- Evaluation

Each lesson is a chance for the teacher to improve his/her teaching practice. Invite feedback from the students.

It is good to make a habit of analyzing lessons and finding out how students respond to certain activities, resources or methods used.

Padhkar Kumar: Teacher, don't you feel that the main difference between this approach and the traditional chalk and board approach is that this one is much more burdensome for the teacher? It requires so much advanced planning, and the teacher has to observe all the students and ensure that each one progresses in learning, even if at their own pace.

Teacher: Look, every teacher aims to develop certain skills in her students. Every good teacher is also concerned about the progress of her students. She realizes that unless she is able to generate interest in the topic being taught, she cannot hope to get across to the students. Every teacher who is so aware will always plan in advance. She will proceed with the help of a lesson plan. And, when the lesson plan is so flexible, the class so joyful, and the learning so deep, the sense of satisfaction that a teacher experiences is worth all the efforts.

QUERY SESSION:

Padhkar Kumar: There are still a few queries, Teacher.

Teacher: Go on!

Padhkar Kumar: Is it OK to always follow Kolb's Cycle for the Experiential Learning classrooms?

Teacher: Not necessarily! Yes, it is an easy way and there is no harm in using it. But, see, I prefer using our own cultural and social contexts while planning lessons for you.

Padhkar Kumar: Teacher, is there any consistent method or thread of conducting an activity?

Teacher: My dear, if you fix it, the entire purpose is lost!!!The beauty lies in its being so student-friendly that you can begin it any point of time. But of course, the teacher needs to plan it before, without actually making it controlled by her.

Padhkar Kumar: Can I do an activity alone?

Teacher: Yes, you can. But doing it in pair or a group will give you more diverse experiences. You will know how your partner/s approach a concept. Team learning is also good, you know!

Padhkar Kumar: Teacher, what about the resources for these activities? Will it not put financial burden on our parents, bringing material always from home?

Karkar Kumari: Teacher, I feel in our school itself as well as places around us, we have various resources that are readily available for our activities.

Teacher: My children, you are the best resource for doing an activity in school. In fact, this is a task for you all. Watch around you and list out a few resources that you can use for experiencing activities.

Teacher gives them 10 minutes and the students give the following list:

Readily Available Resource	Possible Uses for Activities for Hands-On Experience
Students	Role Plays, Games, Songs, Dances, Quiz, Art etc
School Playground	Games, Exhibition, Poster Competition etc
School Garden	Observing plants, species, soil, flowers, germination etc.
Old Clothes, discarded objects	Waste Management
Computers	Hardware, Software
School Buses	Safety Drills, Transport Rules
Dance Room	Costumes, Culture orientation
Music Room	Instruments, Culture Orientation
Fee Counter	Basic Mathematics, Communication Skills
Principal's Office	Role Play, Communication Skills,
Water Taps/ Coolers	Pollution tests, Water Conservation, Recycling/Reusing
Mom's Kitchen	Knowing Spices, Seeds, Food Processing etc
News Papers	Reading skills, analyzing skills, evaluating skills, communication Skills, advertising, quiz, role play based on news items etc.
Post Office, Local Administration Offices, Bus Stands etc. (with a teacher)	Mode of Communication, Government Systems, Life Skills

Padhkar Kumar: Teacher, is it possible for you to devise a few exemplar lesson plans based on Experiential Learning, for a few grades in our school?

Teacher: Sure. But what will you do with lesson plans for other grades? You are in grade 10.

Karkar Kumari: Actually, we have decided to take up a small project on our own. We would like to make a presentation to all the teachers of our school on this concept, we will give them time for further inquiry, reflection and analysis and then we will try to convince them to implement this in their classrooms. These exemplars will help them to get started off.

Teacher: That is indeed a novel idea and shows your passion for learning. But there is a disclaimer.

Padhkar Kumar: What do we mean by a disclaimer?

Karkar Kumari: A statement that denies something, especially responsibility[22].

Teacher: The Disclaimer is that these exemplars are not the only manner of implementing Experiential Learning for the given topics. These are only suggestive. The teachers and class are at liberty to devise their own interventions for bringing in learning by doing.

Padhkar Kumar: That goes without saying. That is indeed the essence of Experiential Learning!

Teacher: I shall surely share a few exemplars with you.

WE ARE NOW READY TO EXPERIENCE THE LEARNING!

[22] This is according to the Oxford Dictionary.

Here is a summary of the exemplars that I am going to present a little later in chapter 6:

Grade	Subject	Topic/Concept
4	EVS	Human migration
4	EVS	Journey of a river
4	English	Adjective
5	Science	Diseases
5	Mathematics	Fractions
6	English	Letter writing
7	English	The last leaf
7	Social Science	Markets around us
10	Science	Sustainable development

Padhkar Kumar: Why a little later ma'am? Why not now?

Teacher: Because before we go through the exemplars, would you not like to reflect on how a teacher can take up Experiential learning-based classroom transactions?

Karkar Kumari: I feel we would be more adept at that reflection, if you could guide us to read a few case scenarios.

Teacher: Sure. Here are five classroom scenarios that will help you in reflection.

CHAPTER 4

EXPERIENTIAL LEARNING CASE STUDIES

4.1 CASE I: EXPERIENCING COMMUNITY HELPERS

CLASS III-A: TEACHER IS RISHITA

Let us first go to Rishita ma'am's class III A. She is teaching a Social Science topic.

As she delivered her lesson, I observed that Rishita Madam was holding a chart with pictures of various occupations. She asked the learners, "What can you see in the chart?"

"There is a policeman, a doctor, a teacher, a plumber and a carpenter in this picture", learners responded.

Then she asked, "Do you know what these people are called?" There was complete silence in the class. She then told the students that these people are called **Community helpers.**

Shreya asked, "Ma'am, why are they called community helpers?"

Madam replied, "Because they help the community in many different ways."

Then she explained to the class some different helpers and the nature of their work. She brought some pictures of tools used by these helpers in the class and asked them to recognize the helper who uses it. She explained and discussed the topic with them in a very stimulating manner. Then she gave a worksheet to the students regarding the work done by the community helpers. All the learners were engaged in doing their work. She helped them with their doubts. She gave a very interesting home assignment to the class. She asked them to do a survey in their society and find out the following details:

Name	Occupation	No. of people dependent on them	Salary

Just then the bell rang, and she left the class saying that she wants the assignment to be done by the next day.

CLASS III-B: TEACHER IS NIKITA

Now let us go to Nikita Ma'am's Class - III B. I think she is also teaching the same concept.

Nikita Ma'am greeted the learners warmly. After the class settled down, she took the attendance of the students. Rohan was absent.

She asked Rohit, "Why is Rohan absent again?"

Rohit replied, "Rohan is absent because he is suffering from fever."

Nikita Ma'am asked, "If Rohan is suffering from fever then how will he be cured?"

Heena replied, "Ma'am, he will go to a doctor, take medicine and then he will be fine again."

Ma'am said, "So you mean that when we are ill, we should go to a doctor."

The whole class burst into laughter with the same thought playing in their mind, that if Ma'am is so intelligent that she teaches us, how is it that she doesn't know this basic fact?

NextNikita ma'am asked, "Where are you sitting?"

The whole class giggled and said in chorus, "Ma'am in the classroom."

Then she asked, "And, where is this classroom?"

All of them had begun to enjoy this. They said in chorus, "Ma'am, in the school."

She asked another question, "Who has made this school?

Naina replied, "The Principal."

By now the students were very confident and were enjoying the process.

Nikita Ma'am reframed her question, "I want to ask who all people have helped in building this school building?"

Heena said, "Mistri".

Ma'am corrected her and said that 'mistri' is called a mason in English.

Rohit said, "An Architect."

Sahil said, "A Carpenter."

Naina said, "A Plumber."

Rohit added, "A Painter and an Electrician."

She appreciated all of them. Meanwhile she drew a cloud on the blackboard and wrote the answers given by the students in the form of a web chart. The next question asked by her was, to name the people who help in the smooth functioning of the school?

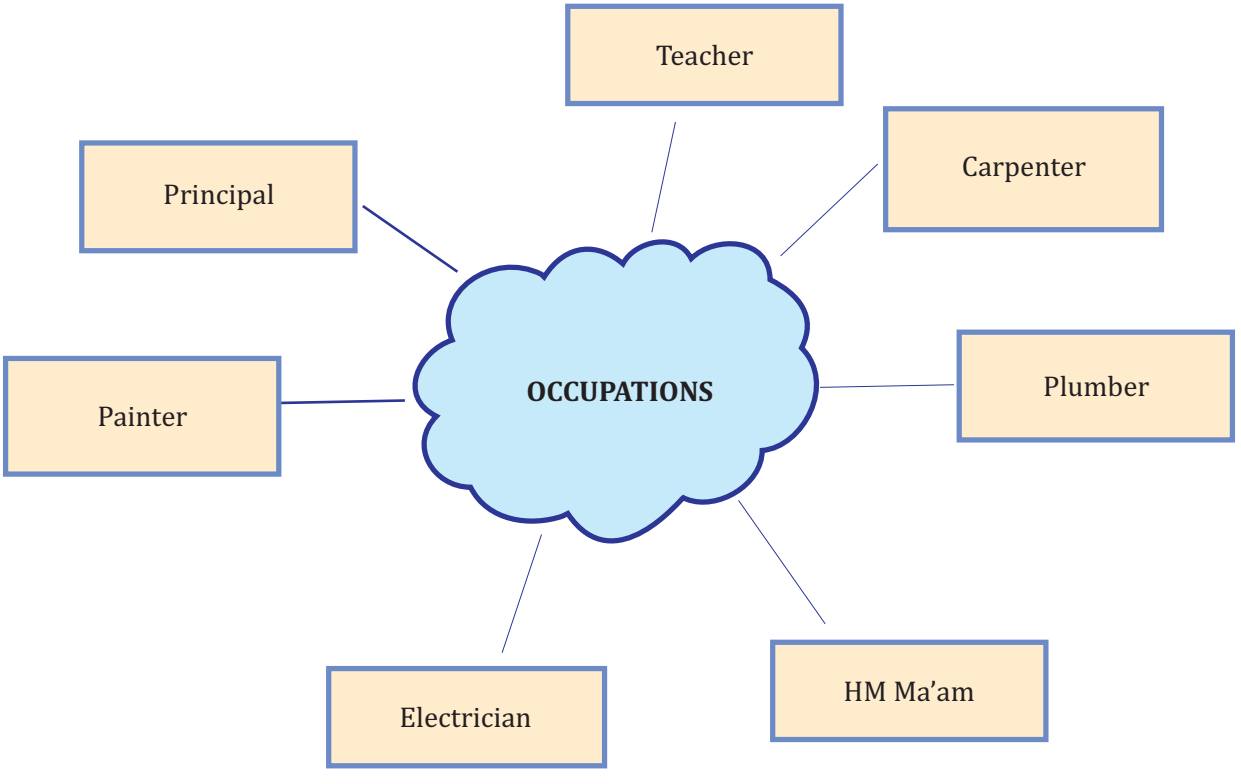
Rohit said, “the Principal.”

Sahil said, “Ma’am you, a teacher.”

She smiled and said “yes.”

Naina said, “Head Mistress Ma’am and Coordinator Ma’am.”

Nikita ma’am kept on adding the words to the web chart. A long list of names was ready on the blackboard.



Then she asked, “Do you know, what are these people called? There was silence in the class.

Then she asked the students, “What does a doctor do?”

All hands were raised to answer the question.

Shreya replied, “A doctor helps us to keep fit and healthy.”

Ma’am asked, “What does a policeman do?”

All of them were eager to answer.

Naina replied, “He helps to maintain the law and order in our society.”

Then she asked, “What does a teacher do?”

Rohit replied, “Ma’am, you teach us.”

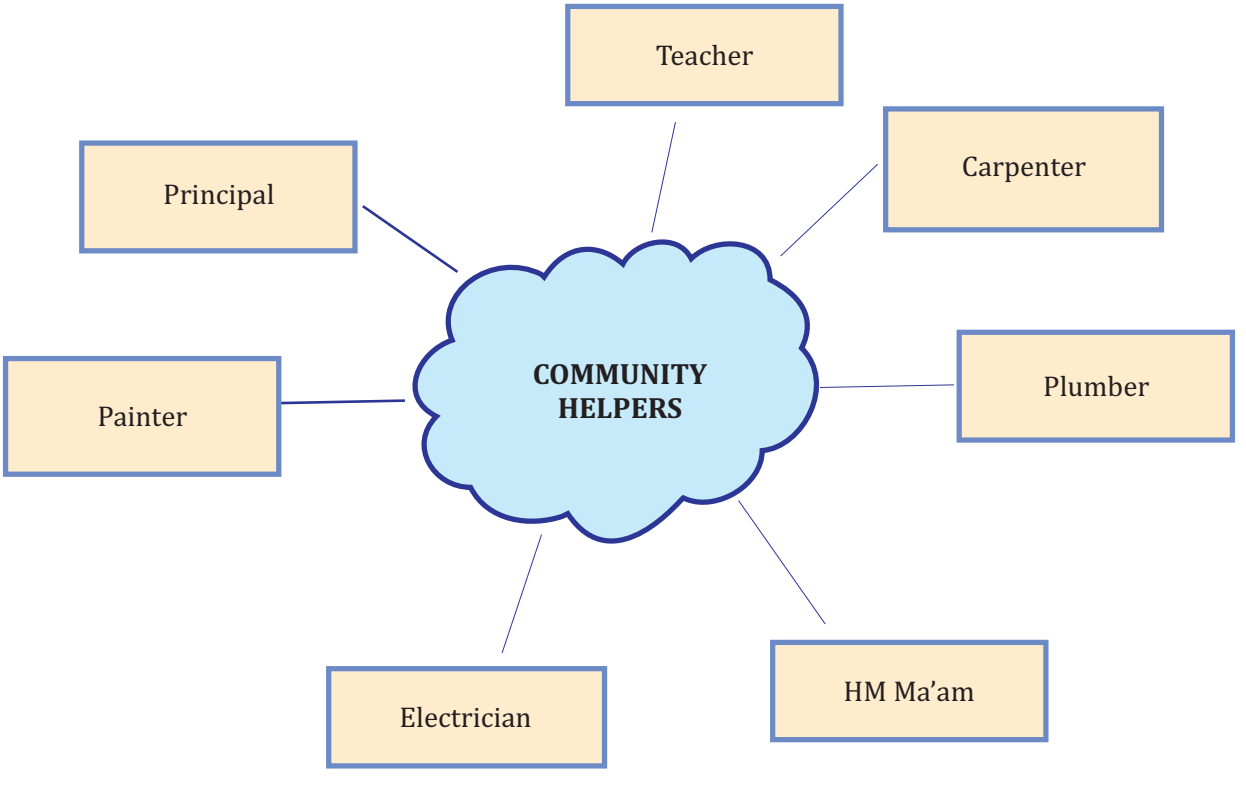
Shreya added, “Ma’am you help us overcome difficulties.”

Ma’am said, “Now, can you tell me what all these people do for us?

Naina replied, “I think they help us in different ways.”

Ma’am said, “Yes Naina, you are absolutely right. All these people help us and so we call them **community helpers.”**

She wrote the same in the cloud.



Then Nikita Ma’am asked them to list down the names of as many community helpers they could think of, in their notebooks. The students being inquisitive, kept on writing and prompting the teacher for confirmation with names of different community helpers like – security guard, tailor, postman etc.

The entire class was engaged in discussing and writing.

(Note: This is teacher centric as she asks a lot of questions. To add value to the experience, the teacher can ask the sub-groups to mime out professions as in a dumb-charades, or ask them to create a freeze frame of a scene that involves helpers.)

Then she told them that a field trip to the community has been organized by the school the next day. The students felt very excited on hearing this.

All of them asked, "Ma'am, what are we going to do there?"

She told them that they would be meeting some Community Helpers. She asked them to make a questionnaire of about ten questions to be asked from them.

Just then the bell rang….. and Nikita Ma'am left the class.

[Next Day – the students went for the field trip.]

I was so engrossed in watching the students learn, that I could not resist myself from visiting the class the next day. It was such a delight to hear wonderful responses from the students. All of them shared very unusual facts. The students had visited the local community and interacted with different community helpers and inquired about the kind of work they do. They interacted with a traffic policeman, a tailor, a street food vendor, an auto driver and many more.

Now Ma'am brought another exciting thing to the class, **'A mystery box'.** There were tools of different community helpers inside it. Each child had to pick one and reflect on it in front of the class. Indeed, it was a wonderful activity. The best way to teach students about community helpers is to allow them to actually witness them.

Then, she gave them a worksheet to do. It was regarding the work done by the community helpers. The students were able to do most part of the worksheet on their own. They had very few doubts to ask from the teacher.

We hope you enjoyed being in these two classes. We seek your inputs on these two classroom transactions.

Instructions:

Given below are 4 questions

Each question has four possible options

Indicate which of the following options is the most appropriate one according to you in the given scenario.

Please tick on the chosen option.

Q1. After analyzing the given classroom situations for effective teaching, put a tick in the correct column where the following things were happening.

S. No.	Situations	Rishita Ma'am's class	Nikita Ma'am's class
a	The learners were enjoying what was being taught		
b	The learners were encouraged to ask questions about what is being taught		
c	The learners were given an opportunity to think and answer the questions posed		
d	The learners were encouraged to think about what was being done.		

Q2. There are some basic skills a learner develops while learning social science. In whose class were the following skills developed? Please provide your valuable response in the space provided.

Observational Skill

Communication Skill

Interpersonal Skill

All of these

4.2 CASE II: EXPERIENCING THE IMPORTANCE OF DEMOCRACY

CLASS V-A: TEACHER IS MS. MEHRA

Ms. Mehra is an excellent teacher and is quite popular among the students. She always brings something more to her teaching than usual and has the knack to give extra information to the students, which they enjoy. She has planned to conduct the lesson on the importance of democracy and voting with the class.

She greets the students of Class V-A and turns on a Power Point presentation through which she shows slides depicting the location of various countries and asks the children if they knew that the different countries have different kinds of government.

Amrita replies, "I have heard my aunt saying that China has a Communist form of government."

To this Ms. Mehra asks, “Do you know what it means?”

Amrita says, “No teacher.”

Ms. Mehra says, “India has democratic form of government where people elect their own representatives”.

Then she asks the children to find out themselves what does a communist form of government mean. She tells the children to take out their textbooks and then she reads out a little story about democracy and its essential feature being voting. She also narrates the story of the French Revolution on her own and how the right to vote came into being.

Next she tells them that they will share their findings the next day on the functioning of various governments of different countries across the world and sets up a contrast and compare activity for the next day. She facilitates them by informing them of a few internet sites for their research. The children are very excited.

The next day, she divides the students into groups of four to discuss their findings. The children enjoy sharing their viewpoint and make Venn Diagrams, collages and posters related to the same. They find that some countries like India have a democratic form of government where people enjoy Fundamental Rights and also have some Fundamental Duties. Others, like China have Communist Government, whereas U.A.E has monarchy.

They conclude that in a democracy people enjoy more rights and have the right to choose their government and hence voting is important.

She asks the children to prepare a quiz based on their findings and conducts a student led quiz in the class. The students are able to recall their findings and the lesson comes to an end.

CLASS V-B: TEACHER IS MS. NEERA

Let’s move to the next class, that is Class V-B. Here Ms. Neera is also taking up the same topic. Her learning objective is also to tell the students the importance of democracy and the right to vote or choose a government.

Earlier, Ms. Neera had promised the children that she would soon choose a mascot for the class. It was indeed an exciting prospect and each child looked forward to it. There was a suppressed excitement when she entered the class.

Ms. Neera said “Good morning children. Do you read newspapers?”

Some children replied in the positive.

Then she asked, “Do you know that elections are approaching?”

Parimal said, “Yes Ma’am, the newspapers talk a lot about different parties and their promises.”

She asked, “Precisely. Why do they make promises and to whom?”

Aarti replied, “I think to the people of the country.”

Ms. Neera asked, “Why do the parties promise?”

Tanuja said, “I think they want us to vote for them.”

Ms. Neera said, “Precisely. Is voting so important?”

Rani eagerly replied, “My elder brother says, how does it matter? What’s the benefit of voting? He would rather not cast his vote. There’s a long queue and it is a sheer wastage of time.”

Mohan also added, “My uncle says that so many people cast their votes. If a few of us don’t, it doesn’t really matter. Voting is not such an important issue. Ma’am, why are we even discussing this in class.”

At this, the children laughed and started giving their views. Ms. Neera observed them for a while and smiled.Then she said, “Oh! It’s the day of choosing the class mascot. I completely forgot. With your help I am going to declare our class mascot that will represent you all for two months.You can use the mascot on your classwork, homework, assignments, letters, cards, etc. Are you excited?”

Ms. Neera randomly chose a Panda and a Kangaroo.

A gloom fell over the class as they felt it was really unfair.

The children were taken aback as everyone was looking forward to their own idea of a mascot being chosen by the teacher.

Kavita accused, “Pandas are not even found in India.”

Rajan quipped, “And unless I know a lot about kangaroos, why would I allow it to represent me.”

The children felt very unhappy.

Ms. Neera then asked, “What do you suggest then?

The children say in chorus, “Fair selection.”

Ms. Neeru suggested, “Alright, let’s play a game. Let each one of us decide on one mascot. I give you all 15 minutes to pick a mascot and justify your choice in five bullet points. Is that agreed? After that, we will move to the next step.”

This brought applause and agreement with cheers and smiles. At the end, she collected the papers and the class came to an end for the day.

The next day she told all the children, “I will give each one of you time to read out your choice of a mascot and the 5 reasons for your choice. So, I allow you to tell the class why your mascot is good, how it truly represents the class, and how it will continue to do so for two months.”

She then informed them that these statements that they would make would help them garner some points for themselves and this is what is called, ‘Campaigning’.

Mira said, “Oh Teacher! So, can I say that my mascot will represent the whole school one day?”

Ms. Neera said, “Is it a feasible option or can you work it out?”

Mira replied, “But how can I say if the rest of the school will agree!”

Ms. Neera answered, “Exactly! Make promises that can be fulfilled and are feasible. When we work in an organized and active manner and present our ideas to achieve a goal, it’s campaigning.”

Ravi asked, “What is our role when one student tell us their choice?”

She told, “While one reads his or her ideas or reasons for the choice, the others can give them marks. One mark for each idea you like. Not for the person, but for the idea. Let it be a fair game.”

Each child then presented their choice of mascot along with 5 reasons for choosing it, while the others gave marks to their classmate keeping in mind what the teacher had said.The choice of mascots ranged from an elephant, to peacock, to mango, to cycle, etc. All the while, Ms. Neera took help of two children Rakhi and Somi (who had volunteerd) to sum up the number of points each child got and wrote it on the blackboard.At the end of it all, she listed the names of the five top ranked mascots, and asked their proponents to repeat their reasons for choosing them. The top ranked mascots’ names were listed on the board. These mascots were of Rani, Madan, Kashi, Parimal and Imli.

Each chosen child repeated his/her ideas while the others listened very carefully.

Meanwhile, she asked the children, “Now, rank the mascots from 5 to 1, in order of preference on a chit and put your chit into the big box on the table.”

Once the children were ready with the chits and put them in the box, she said, “Let’s imagine this box to be a ballot box. Every child who puts the chits, gets an ink mark on the finger from me. This way, you can put your chit only once. So, your chit is similar to your vote”.

Parimal asked, “Teacher, what is a ballot box? Why should we put our chits into it?”

Ms Neera said, “Good question! It is like a collection point where everyone’s views and opinions can be collated. Also, it avoids duplicity and maintains secrecy. In this way, one’s opinion can be conveyed easily without any force or pressure.”

She then asked Rakhi and Somi to take the chits one at a time and she made a tally bar on the board to find which mascot has grossed the highest point.

At the end, the highest ranker, that is,a “flower”, was chosen as the mascot of the class. When Ms Neera asked the class what they liked the most about the mascot, most students said that they loved the byline, “we gently shape the world”.

Ms. Neera then added, “Others whose mascot was not chosen need not despair. The tenure of being the mascot is for a period of two months only. Others will get an equal opportunity to contest. During this period, the rest of the class must monitor if the reasons for choosing the mascot turns out to be fruitful. So, each one shall have a say in the next round to decide if this choice was good.”

This strategy was liked by the students as they felt that the choice of mascot was done in a fair and transparent manner.

Harshit then said, “Ma’am, I have understood why each one of us needs to cast our vote. Every vote counts.”

Rani added, “Yes teacher, each person’s opinion counts. Every vote is important.”

With this Ms. Neera concluded, “Children, when we choose our representative to lead us, we feel that our voice is heard. This is what happens in a democracy. Since, you all belong to this class, your voice and choice is important. This is how democracy functions.”

The children understood the concept, and Ms. Neera followed it up with a reading of the chapter on democracy and explanation too. She also pitched in some anecdotes and examples from real life.

The Children cheered in chorus, “We all will definitely ask our parents to Vote and will learn more about it.”

Ms Neera announced at the end of the class, “Tomorrow all of you will write the Constitution for your class”.

That brought in loud cheers from the children. Another exciting day awaited them.

4.3 CASE III: EXPERIENCING GERMINATION OF SEED

CLASS I: First week

Narrated by a Primary school teacher

Germination process is an important life science lesson for the children. I would like to share my personal experience of teaching the process of germination to my Class I children. To make the learning interesting, I prepared a colorful chart depicting the different parts of the plant and stages of seed germination. I also showed a real plant to the class to explain how the real the process is.

After a week, I assessed the students on this topic but to my dismay many students could not answer some of the basic questions from that topic. I was disappointed and realized that certain lessons can only be taught through hands-on experience and observation. So, I thought of changing the strategies of teaching the topic of Seed Germination.

Next week

I conducted germination activity in the class. Each student sowed few seeds in a disposable container filled with little soil. They added a little water too and placed their individual containers in the sunlit area of the class. Every day they watched the growth of the seeds. They were elated to see the plant grow each day. I, then asked them to repeat the activity at home.

Some students complained that the seeds did not sprout into saplings. Then, I asked them to explain to the class the process they followed for germination of seeds. They explained the process well, then a few students asked some questions to them:

1. Where did they keep the pot?
2. Were they giving enough water to the plant?
3. Was proper sunlight reaching the pot?

All the students shared their experience about seed germination amongst each other. The ones who successfully completed the process mentioned that they sowed the seeds in ample sunlight and air.

When I took the assessment of the class again after a week, I was very happy to see that every student was able to explain the complete process of germination confidently and that many life skills were being developed during this whole experimentation like observation, communication and peer interaction. I got the satisfaction and realized that experiencing is the best way of learning.

4.4 CASE IV: INTERCONNECTEDNESS OF BODY SYSTEMS

I will take you to the two sections of Grade IV where the teachers are taking up the concept of interconnectedness of human body systems.As they are very thoughtful, concerned and reflective teachers, I look forward to get some valuable inputs and feedback on these classroom practices.

CLASS IV-C: TEACHER IS MS. DIVYA

Let me first take you to Class IV C where Ms.Divya is teaching interconnectedness of body systems. (The students of Class IV-C are already aware of the organs and their functions as they have covered it in class III). The teacher is always prepared as she does her homework well. She announces that the class will begin with solving a jigsaw puzzle. She divides the class into groups. Each group is given a few 'incomplete pictures' to be put together to complete an organ system. Then she asks them to discuss and write/draw and label everything they know about the 'assembled' body system on an A4 sheet in the allotted 10 minutes. After 10 minutes she asks each group to present their work to the other groups.

After the completion of the presentations the teacher shows them apt videos of two organ systems viz-circulatory system and respiratory system to clearly show the working of the two systems.

She then asks Tipshi "Give another name for windpipe."

Tipshi answers "Trachea"

"Name the blood vessels which carry oxygenated blood?"

Rohu responds "Arteries"

The teacher is quite happy to see her learners are engaged in learning. She throws a question to the whole class. "Do you see any connectivity between the two systems we learnt today?"

After complete silence of few seconds in the class, some of the students raised their hands.

Vanshika- "Ma'am heart pumps blood. Blood carries oxygen which has entered the body through the respiratory system."

The teacher appreciates the response and elaborates it and further asks "So, which two systems can you see working together?"

Few students mechanically answer respiratory and circulatory system

Teacher applauds and leaves the class with a research work. She provides them with suitable links also for their research work. The students are asked to think of other systems which are interconnected to perform any task.

CLASS IV-E: TEACHER IS MS. MRIDU

Now let's go to Class IV E where Ms. Mridu has also planned to take up the concept of interconnectedness of body systems.(The children of Class IVE are also well aware of the various organs and their functions).

Ms. Mridu enters the class with positive energy. All the students greet her together.

Teacher: So, yesterday you all must have gone through the chapter "organs and their functions" on your own. Let's try to make sense of it. I am taking you all to the ground but there are some ground rules also. Please follow them."

There is lot of excitement in the class. Then she tells her students to take their notebook which they have maintained to write their observations and a pen. She further tells them that she will give them various tasks in the ground and they are required to write everything which they feel and observe in their body just after the task.

Teacher:"Are you all geared up for the task?

Students: "Yes Ma'am" (with a great deal of enthusiasm).

Teacher: "Your first task is to walk to the ground in a line."

Once they reach the ground from the second floor of their school building, she asks them to write their observation as observation 1 in just 2 minutes.

After task 1, she asks them to run to complete 2 rounds of the school ground without stopping even for a moment and then write their observations as observation 2 in just a couple of minutes.

After the completion of task 2, she asks each one of them to hop 50 times and write their observations as observations 3.

Then she takes them back to the class. She asks them to drink water and relax.

Teacher: "How are you all? Everything hale and hearty?"In the meantime, she sets up her Laptop connection with the smart board.

Teacher: "I will show some pictures to you. Watch them carefully and then get ready to answer my challenging questions."

Students excitedly accept her challenge. She shows them some interesting pictures and asks questions related to it. She shows a picture of a pump and asks Tobu to recognize it. He answers correctly.

Teacher:"Do you think we all have a pump in our body?"

Students laugh and say “NO Ma’am.”

Teacher: “What is the function of this pump?”

Tobu:”It carries underground water to our overhead tanks. And from the tanks we all use that water for household chores.”

Teacher: (Applauds Tobu):So, still you all think it’s not in our body, may be in some other form.

Riyaz suddenly says “It’s our heart.”

Suddenly students feel excited.

Teacher: “Yes, the organ - heart. What is its function?”

Students: It pumps blood and carries it to all parts of the body.

Teacher shows a picture of a filter.Students, now are very happy to find the connections.

All answer in chorus: “Kidney. It filters blood.”

Teacher shows a picture of CPU and students unanimously say brain. It is the powerhouse of our body.

Teacher: Now let us discuss your observations on the ground.

Next she draws the following table on the board.

Observation 1 (Going downstairs)	**Observation 2 (After 2 rounds of the ground)**	**Observation 3 (After continuous 50 hops)**

She asks Sehaj to keep on recording the observations on the board as the discussion progressed.She asks about observation 1 first.

Chintoo (student): “I felt a bit active.”

Few more students said, “yes Ma’am, even we also felt the same”.

Paggu (student): “My laziness went away and I started laughing”.

(During this Sehaj writes ‘Felt active’ and laziness went away in the column of observation 1.

Teacher then asks about observation 2.

Papli (student): “My heart beat increased”

Dulari (student):”I started panting “

Dabloo (student): “I opened my mouth wide to breathe as I was feeling breathless”

Few children together say “We were sweating a lot and wanted to drink cold water.”

(Sehaj writes panting, breathlessness, increased heart- beat, sweating, thirst in the column of observation 2)

Now it is the turn for children to talk about observation 3.

Runu (student): “I felt pain in my legs and wanted to come back to the class”

Pehlu (student): “I felt both thirsty and hungry”

Duggu (student): “I felt exhausted and wanted to sit and drink water.”

(Sehaj writes legs aching, exhausted, thirsty and hungry in the column of observation 3).

Now teacher asks Sehaj to go back to her seat and discusses few questions with the students. “Which systems primarily helps us to walk, run and hop?”

Children answer together “Skeletal System”.

Teacher writes Skeletal System on the board

Further she asks “Why do you think some of you felt active when you walked to the ground?

Sehaj answers “Our body starts working better so we feel active.”

Few students reply “Blood in our body started flowing fast as we were in motion.”

The teacher prompts, “Which system worked?”

Students answered, “circulatory system as it circulates blood in our body.”

“You all observed that in round 2 your heart beat increased. Why did it happen?”

Tashi answers: “By beating faster it told us that it was also tired and we must stop running.”

(Everybody bursts into laughter).

Teacher: “But do you think the organ which gets tired starts beating faster?”

(Students are silent)

Tashi raises hand and wants to speak something.

Tashi: “The heart did not get tired but it started working more so that we could run more.So, it started beating faster”.

The teacher appreciates Tashi for going in the right direction and asks children to think why heart started beating faster?

Teacher: “Link her answer with the function of blood now.”

Somu says that because the heart had to pump more blood in less time, so, it started working more and thus beating faster.

Teacher and children give a round of applause for him

Teacher: “Which system is responsible for pumping of blood in the heart?”

Everybody answers Circulatory System and there was a sudden spark of energy in the class.

Teacher: “Why did you all sweat after round 2 and felt thirsty also?”

Rohu said, “When we ran fast, we felt hot and we sweated a lot.”

Teacher: “How do you feel after sweating?”

Rohu: “I would like to take bath and then I may feel better.”

Teacher: “Right Rohu, anyone else wants to share his or her experience?”

Sonu: “My dadaji tells me that sweating makes our body cool from inside. It brings out extra heat from our body so that we feel better.”

Teacher: “Great Sonu! Yes, sweating maintains our body temperature by taking out extra heat generated in our body during workout.”

Sonu: “My mom tells me that if we take care of our body then body also takes care of us. Our body always helps us to feel better in every way.”

The teacher is thrilled and writes: “Our body is our best friend”

She asks Rohu to elaborate on this but he is unable to do it.

Ruheena: “When we run, our body is heated and to regulate our body temperature, we sweat and that brings down the body temperature.”

Teacher applauds her and asks,”what do you think? Which system are we talking about?”

Few children answered nervous system as its related to our brain.

So the teacher writes 'nervous system' on the board too.

Teacher: "Dabloo felt breathless and started breathing with mouth wide open.How many of you felt the same?"

Each student raises hand.

Teacher: "What is the reason of breathlessness?"

Dabloo: "We did not do it intentionally, it just happened. We felt as if we wanted more air in our body."

Riyaz: "Actually, we needed more oxygen to go in our lungs as we required more energy."

Teacher: "Very good Dabloo and Riyaz.During workout our body needs more energy, so we need more oxygen.Which body system is this?"

Students: "Respiratory System."

Now teacher writes 'Respiratory System' on the board along with Skeletal System, Nervous System, Circulatory System already written.Each of these systems run with the help of several organs, and are also known as Organ systems.

The board of Class IV-E looks like this.

Observation 1 (Going downstairs)	**Observation 2 (After 2 rounds of the ground)**	**Observation 3 (After continuous 50 hops)**
Felt active	Heart beat increased	Pain in the legs
Laziness gone	panting	thirsty
	sweating	Hungry(few of them)
	Breathing – mouth opened wide	Exhausted

Teacher: tomorrow we will conclude this chapter by doing another small activity.

The next day the teacher arrives to an eagerly awaiting class.

Teacher: Here is another small activity we will do now. I am dividing the class into 11 small groups. I will be giving one chit to each group containing the name of one important organ system in one human body. I want each group to enact out the organ system it represents only through movements, mime and sound, while trying to stand with the other groups in

such a manner that you form the organ system of one human body. You have 20 minutes to do your research by going through your books/internet.

The teacher distributes 11 slips with the following organ system names on it:

Skeletal system

Muscular system

Nervous system

Endocrine system

Circulatory system

Respiratory system

Digestive system

Integumentary system

Excretory system

Lymphatic system

Reproductive system

Initially there is lot of noise and chatter in the class. But within 20 minutes, the children group themselves into representing a human body. While the respiratory system group is breathing hard, the circulatory system group keeps running through all other groups. The skeletal system keeps straightening the contours of the groups, while the muscular system group shows how it is forming all the organs. It becomes a fun class and really interesting, and the children just do not want this activity to stop.

Teacher: Now what do you all conclude by going through this activity?

Chintu: Our body believes in team work.

Pannu: When we do any task, many systems work together to accomplish it.

Chintu again: And we even don't realize it!(smiles).

Somu: We will be healthy and be able to do work if our body systems work together in coordination.

Teacher (elated):Absolutely brilliant children! It shows the interconnectedness of our body systems. To perform any one task, different body systems contribute to make it happen.

In this way she engaged the class in learning.

Pause and Ponder

- Which class did you find more effective? Why?
- Name one aspect of Ms. Divya's class you find appropriate/inappropriate and why?
- Name one aspect of Ms. Mridu's class you find appropriate/inappropriate and why?
- What are the things which you want to grasp as a teacher (if any). Why/Why not?

Karkar, today we saw exciting videos on each body system. But I wonder that when I work my skeletal system and muscular system in my physical education class, why is it that my respiratory system leads to heavy breathing!! Does it have something to do with interconnectedness of body systems .....!!!

My dear friend, this only happens when we watch videos passively and not learn through them. That is why we did the activity. We experienced the interconnectedness of body systems when we went for a run and checked our pulse rate and observed our heart beating faster. So, we got an answer to your query while learning through experience.

4.5 CASE V: EXPERIENCING CONDUCTION IN PLANTS

The children of class IV A are excited today. It is Ms. Sodhi's birthday. She is the most loved teacher in the school. Children sing a birthday song as soon as she steps in. They give her hand-made birthday cards and flowers.

Ms. Sodhi is overwhelmed to see their love and respect. Suddenly she realizes that Geeta is sitting quietly with tears in her eyes. Ms. Sodhi approaches her and asks, "What happened my child, why do you have tears in your eyes?".

Geeta looks up and slowly takes out a bouquet of wilted flowers. "Ma'am I got these flowers and made a bouquet last evening, so that I may give it to you today. They all are wilted." She sobbed.

"It does not matter, beta. It's your love that matters more. This bouquet is equally dear to me." Ms. Sodhi takes the bouquet from her and puts it into an old water bottle and tells Geeta to add some water to it.

After the celebration gets over, Ms. Sodhi gets a few glasses and food colour from the school canteen. She takes out white flowers with long stems and places glasses on the windowsill and calls children closer.

She instructs Radha, "Put this white flower in an empty glass."

She gives a few more instructions.

"Add some water in the other glass and now put these flowers into it."

"Pour water in the third glass, add some food colour and put some flowers in it."

"Just wait, you have recently learnt about angles, I want you to cut the stem at 45 degree and then put these flowers in the glass with coloured water."

Then she tells all the learners "Tomorrow you will record the observations."

The next day students are excited to reach the class. They know that they are going to learn something new today. Each learner is eager to see the flowers. They notice that the flowers in the first glass had wilted, second glass had fresh flowers, and the colour of the flowers had changed in the third glass. Excitement was at its peak as children had so much to discuss and ask.

"Hey! look, this white flower has turned orange." Joohi chuckled.

"Hurrah! My bouquet looks so fresh," Geeta cheered.

Rahul giggled "These flowers have bloomed."

Ms.Sodhi asks Geeta "So Geeta, what do you think, kept the flowers fresh in the second glass?"

Geeta replies" There was water in the second glass."

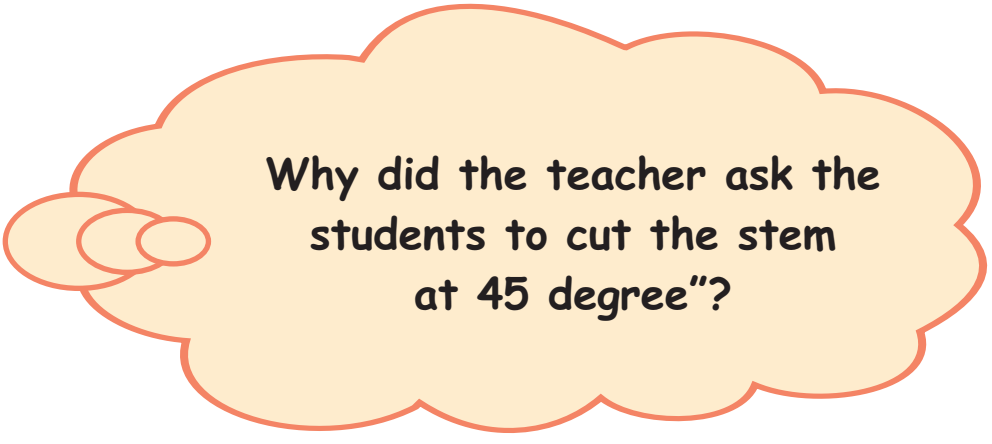
"What does that prove?" The teacher asks.

"Water is essential to keep the plants alive." Children reply promptly.

The teacher asks the learners "Why did the colour of the flowers change?"

Learners ponder for a while then answer, "It changed because we added colour to the water."

Think and answer:



The learners are inquisitive. They want to know more. "How did the colour reach the flowers?" They ask together.

The teacher smiles and says, "There are few tissues in all the plants which help in the process of transportation of water and minerals from roots to the stem."

Neeta asks, "What are these tissues called and how does water reach from the roots to the stem?"

Ms.Sodhi replies, "They are called xylem. Xylem is similar to a straw. Plants suck water and minerals from the roots through xylem as you suck juice from your Frooti."

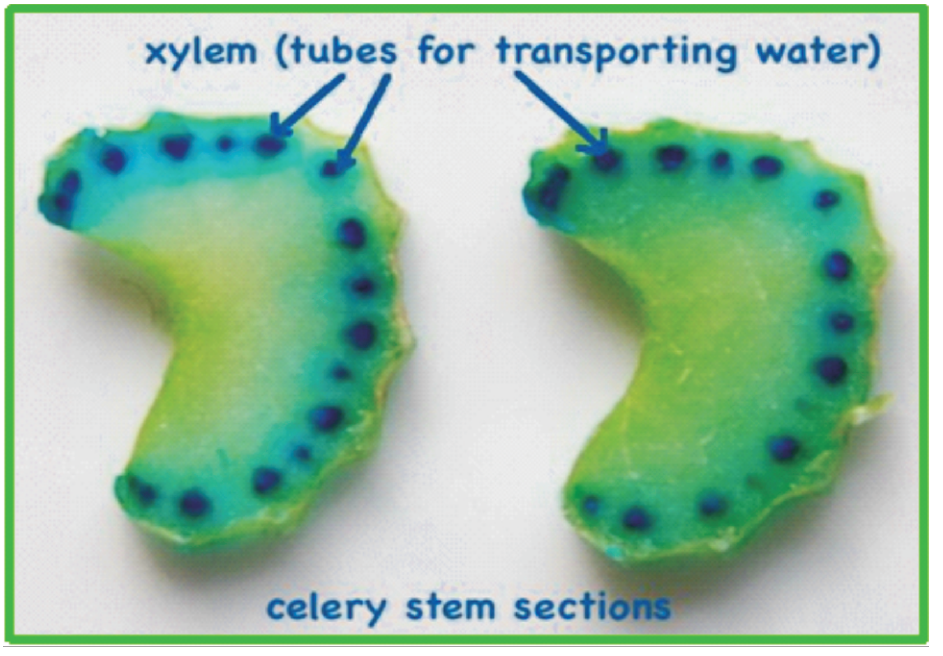
Learners are still inquisitive.

"Okay, let me make it clearer." Ms. Sodhi says.

"Rahul, how do you come to school?"

"Ma'am, I come by bus."

"Please, tell us the whole process of coming to school."



"Yes Ma'am. The bus picks me from my stop, then it goes to different stops, picks the children from there and finally we reach school. This is how the entire process is conducted."

Ms. Sodhi smiles "Right! The transportation of water in plants is conducted exactly in the same manner by reaching all parts of the plant and completing the entire process of conduction."

Going Further

The teacher asks the students to bring three glasses, different food colours and white flowers the next day. They would do the following activities:

Cut and split the stem into two different colours and observe the results.

Take a white flower with 8 cm long stem and another white flower with a 5 cm long stem, notice the time taken by each flower to change its colour.

Add 5 drops of red food colour to one glass and 10 drops of the same colour to another glass. Is there any difference in the colour taken by the flowers?

Activity 1 Observation	Activity 2 Observation	Activity 3 Observation
Reflection 1	Reflection 2	Reflection 3

The teacher brings a few wilted flowers to Class IV-E and tells the students that they will study transportation in plants. She throws a question to the class

"Why do the flowers wilt?"

Nobody answers.

She asks the children to open their Science books and read Chapter 7. Each child reads 5-6 lines and the teacher explains the text. She shows them charts and draws few diagrams on the board to explain conduction in plants. Then she gives discussion time to the children. The learners are encouraged to clear their doubts.

The teacher gives them a few questions after the discussion.

1. "Why do the flowers wilt?"
2. Name parts of the plants involved in transportation of water.
3. Draw a well labelled diagram of a plant

PAUSE AND PONDER

Do you think that children could understand conduction in plants?

What was missing in this transaction?

Progressing on the same lines, how can you make the second transaction better?

Which transaction do you think children enjoyed more?

CHAPTER 5

EXPERIENTIAL LEARNING – REFLECTIVE WRITING BY PADHKAR KUMAR AND KARKAR KUMARI ON HOW TO MAKE IT WORK FOR TEACHERS

Before beginning a lesson plan, teachers must be aware of the following phrases and their meanings for a better and clearer understanding of the lesson plan:

PHRASE	MEANING
Checking prior knowledge	*How do you check what learners already know?*
Sparking curiosity	*How will the lesson be introduced to create interest and stimulate learners' curiosity?*
Providing the experience	*What experiential learning strategies will be used to achieve the lesson objectives?*
Drawing inferences	*How and in what format will the learners record/document their observations/learnings from the experiential tasks?*
Conceptualization	*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?*
Connecting to real life	*How will the lesson be linked to real life incidents/situations/processes/systems to make learning meaningful?*
Extended learning	*How will the facilitator provide opportunities to reflect on the experience in terms of theirreal-life application?*
Assessment	*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?*
My Own Learning (Post-Lesson Reflection):	*What challenges /problems were faced by the facilitator while planning and implementing the lesson plan?*

The learning module should be purposeful/meaningful and related to the child's context.

Here is our understanding in brief of the whole process. We like the tabular format, not only because it is better optics and becomes a systematic presentation, but also because it enhances our understanding too.

STEPS	DESCRIPTION	IN BRIEF
1.	**Analyse** the needs of your students and their prior knowledge	Are they exposed to the given topic in real life? In any form? Do they have a mature understanding of the real-life experience? Can they link it to conceptual understanding? The prior knowledge can be gleaned through activities in several ways: through quizzes, tests, role plays, drawings, freeze frames, words and sentences. Please see exemplars in the next chapter.
2.	**Plan** and identify the experiential activity that you will take up for a given topic/concept. Plan out the primary and secondary experiences.	Make lesson plans. Plan a student-centric, hands on activity that must have some relevance to the life of the students. They must be able to relate to it. The best experience is when a student/group of students are able to create something at the end of the experiential activity. That leads to an *Aha* moment, and is joyful learning. Youngsters are prone to boredom if the task at hand is not challenging enough. The activity that you plan is therefore a test of your skills to engage the students in the learning process. You can always take help of various examples on the internet, or any e-resources you may have access to. Everything need not be originally created by you. Check if the activity meets the requirements of the learning objectives of the students and their cognitive development goals. Most importantly, be

STEPS	DESCRIPTION	IN BRIEF
		sure that the activity allows the learner to experience fully the concept for which it is meant. The primary experience is nothing but the activity that you have planned for the students to experience the concept. The secondary experience is deeper; it is what emerges from the primary experience in the form of reflection, further enquiry, application of information in real life, etc. both experiences are a necessary part of the EL methodology. The secondary experiences must be collected in the portfolio by the students.
3.	**Select** type of experiential learning strategy that you will adopt–classroom-based learning or field-based experience.	Classroom based learning can take multiple forms –group work, role play, presentations, games, case studies, demonstrations, etc. Field based experience – visits, interviews, interactions, practical, etc. It is also possible to have a combination of classroom activities, a field visit or any other form of external experience and/or a project work. The sky is the limit here.
4.	Plan in advance: Once you have mapped activities to the existing curriculum/ syllabi and are clear about the learning outcomes, combine these to form your **pedagogical plan** for the semester or for the year.	Planning in advance is always advantageous. It not only helps the teacher in time management, it often helps the subject teachers to get together for an inter-disciplinary module. Whatever the child reads in her books or does as a part of co-curricular or even extra-curricular activity must have a direct relation to the experiential activity that you undertake. If a student is not able to relate to your inter-disciplinary module, there will be no learning for him/her. You in turn must be clear about the expected learning outcomes form these experiences.

STEPS	DESCRIPTION	IN BRIEF
5.	**Prefer** an Art integrated activity if possible	**Arts Integrated Learning** is a creative and constructivist teaching-learning approach through which students demonstrate their understanding of a concept through various art forms. Arts integration signifies exploration of academic content (ideas, concepts, prior knowledge) and skill sets to be acquired by a student through the lens of various forms of Arts.
6.	**Time it**	Please refer to the CBSE guidelines on Art Integrated Education for more details. Have a time schedule in mind for undertaking the activity and for understanding the key concepts. Time management is of the essence in EL. The activity must be challenging, yet it must be such that it is completed within the time limit you set while keeping the pace of all learners in mind.
7.	**Explain** what your expectations are from the students to them	Set the ground rules about how the class will proceed. Also show them your assessment rubric or ask them to put it in their portfolio or tell them how this activity shall lead to another related project, etc.
8.	**Ensure** availability of resources required for the activity, if any.	Some experiences may require certain resources, particularly if the activity is Art based. Plan it out in advance. However, even many art-based experiential activities may not require any extra resources, such as activities based on music, dance, theater, role play, story-telling, etc.
9.	**Flexible** seating arrangements	This may appear simplistic, but it really is the cornerstone for getting students involved in the experience at hand. Classroom based experiences are particularly better imbibed through group work. It requires the desks and chairs to be moved around for the group to be comfortable.

STEPS	DESCRIPTION	IN BRIEF
		Try and form the groups objectively in consultation with the students and explain to them the need to work in cooperation and team spirit. Initiate them into the system of brainstorming, prioritizing and time management. Most often even learning in a typical classroom situation is imbibed better if the seating arrangement is circular, rather than in rows where the tag of front and back benchers gets entrenched. Students can even go outside in lobby areas or corridors or other open spaces in the school.
10.	The **classroom environment** is important	Facilitators should use the walls for the displays, put up colourful work, use the floor space when possible to sit on the floor in or outside the class and draw/paint or scribble on it with crayons or erasable markers.
11.	**Familiarize** students with group dynamics as a life skill	It is important to include energizers and ice-breakers to create trust amongst them. The micro-climate of the classroom is important too. Children perform better in relaxed environment. In a relaxed environment, students will understand better how a group works and how each person in a group can have a role, such as, the presenter, the designer, the timekeeper, the criticizer, etc.
12.	**Daily objects** must be used for learning	This interaction and use of daily objects such as class stationery, leaves, stones, toys etc., allow children to express their emotions as they can also be used as metaphors (Beard & Wilson, 2013) Piaget has emphasised the importance of using concrete objects and physical and sensory interaction with the environment as a basis of constructing one's understanding during childhood. (Piaget & Inhelder,

STEPS	DESCRIPTION	IN BRIEF
		1969). Use of objects is now validated in neuro-sciences as leading to better memory and recall.(Markant, Ruggeri, Gureckis, & Xu, 2016).
13.	Use of the **body and senses** enhance learning	Many educationists such as Montessori, Dewey and Kolb consider bodily action as important in knowledge construction. This has been extensively studied by embodied cognition researchers. Recent research in the field of neuro-sciences also shows the importance of using the body and the senses physical movements that enhance spatial memory (Delafield-Butt & Adie, 2016). However, these physical actions or bodily movements must be purposeful and meaningful (Mavilidi, Okely, Chandler, & Paas, 2016). Then they can lead to positive emotions.
14.	Use **positive emotions** for joyful learning	There is a great deal of empirical evidence in favour of using positive emotions such as joy and humour in education (Boler, 1999; Hardiman, 2003; Staus & Falk, 2017; Sylwester, 1994). This can lead to greater well-being for children (Czikszentmihalyi & Larson, 1984). Joyful classrooms are not only for the child but also for the teacher!
15.	**Allow** mistakes	Students must make mistakes. Allow them to. That itself is a learning experience. Do not tag them as "slow learners", problematic", "stupid", etc. Guide them gently, but allow them to arrive at solutions on their own or in the group.
16.	Experiential learning is incomplete without **reflection**	After the activity, your lesson plan must give sufficient time for reflection. Reflection can be individual, in pairs or groups.

STEPS	DESCRIPTION	IN BRIEF
		Reflection can be self-driven through further research, teacher-driven through quizzing or explaining of concepts, class-driven through curiosity questions, inter group based through presentations by each group followed by discussions, etc. again, the sky is the limit.
17.	**Levels** of reflection	There can be basic level or there can be a deeper level of reflection. At the basic level activities such as group discussions, class discussions, feedback, reflective writing, concept maps, peer evaluation, etc can be utilized. For a deeper reflective process, activities that can be used include: reflecting on a subject by relating it to concepts/ideas drawn from different disciplines, or by relating it from different viewpoints (different institutions, experts, age groups, etc), different emotions, etc., getting another group to criticize your understanding, etc.
18.	**Concept map** as a tool for reflection	A concept map is a graphic representation of the understanding of a concept by a learner. It begins by putting the main idea or concept in the center of the map in a box/circle, and then the related ideas keep branching out from there with the help of arrows. This is an excellent tool for reflection. When students/groups of students draw a concept map as a reflection on their experience, the teacher can easily see the various stages of understanding, the differences in thinking, etc reflected in these maps.
19.	**Peer evaluation** as a tool for reflection	Here students or groups of students evaluate each other by reflecting on the processes undergone and the understanding reached, and write or discuss

STEPS	DESCRIPTION	IN BRIEF
		their evaluation with a constructive approach rather than a critical one.
20.	**Teacher's role**	The teacher's role should be that of a facilitator and a resource person in this process of learning. The learner must take the lead to learn, while the teacher gently guides. The teacher is a participating observer who takes on the role of ensuring student empowerment. In fact, the most important role of a teacher in an EL class is that of a cheer leader.
21.	**Assessment** of the EL experience	Every learner in an EL class might take away a different set of learnings. This makes assessment a little complicated process. To prepare an assessment rubric for any EL activity, it is essential for the teacher to be clear about the why, what and how of the assessment at hand. The rubric must include among others the assessment of the process undertaken by the student for the activity, assessment of the experience, and assessment of the reflection done by the student. The process assessment can include assessing of the learner's knowledge and skills and also her ability to relate it to her real-life experiences. The assessment of experience can include observations by the teacher on how the experience transforms the learning process in the student. The assessment of reflection can focus on how the child hones the knowledge acquired by her and how she connects her conceptual understanding with

STEPS	DESCRIPTION	IN BRIEF
		related concepts in other disciplines. These are only suggestive methods. It is really up to the teacher to adapt/adopt/or create an assessment rubric for each activity separately.
22.	Importance of **portfolio** in EL	Portfolio is an important aspect of reflective writing. Reflective writing can simply be thoughts on the process and experience, or a list of for-the-motion and against-the-motion ideas. Sometimes students create quizzes for their class mates or even questionnaires for further survey through reflective writing. One excellent method of reflective writing is an analysis of a newspaper article related to the concept being taught through EL. Self-evaluation or a short assignment or a quick subjective test is also a form of reflective writing.

CHAPTER 6

EXEMPLAR LESSON PLANS

6.1 EXPERIENTIAL LEARNING LESSON PLAN: ENGLISH

CLASS: 4

TOPIC: ADJECTIVES

Learning outcomes:	Students will be able to: i. identify adjectives and what role they have in describing a noun ii. describe nouns with a wide range of adjectives iii. select adjectives to replace a phrase to describe a noun iv. write a paragraph describing any monument or place they visited in the past
Time Required	5 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	The learners are aware that a noun is a naming word for a place, person or thing. Some words can be used to describe a noun.The teacher begins by describing an object which is in the class and the class guesses the object.In sub-groups, children can play the game 'I spy'.Students carry the basic requirements, like pencil, scale, eraser, books, notebooks to the class. Apart from this the setting the classroom as well as the surroundings will be used to generate ideas and build on the lesson.
Pre- Activity Phase	The activity should be age appropriate. Teacher will: i. check the feasibility of the activity. Ii. Children use a range of adjectives learnt to write a poem about themselves on the topic, 'I am Unique' (planning for summative).

	Iii. The poems can be displayed. Each group reads out the poem to another group who has to guess which classmate it is. iV. Next, in pairs of 2, they write a quality for each letter of the first name for their partner. Ex - Tara: T for terrific, A for adorable, R for Righteous, A for amazing. Etc. Then they can put up all the sheets on display in their class or lobby. v. Take the students to the library and help them select age appropriate books on famous personalities. In pairs children share one book and read. vi. They decide some qualities of the personalities with the teacher's help and write those qualities on a paper. vii. The books on personalities or their pictures can be displayed. Each pair reads out the qualities to another pair who has to guess which personality it is.
Resources Required	Notebooks, classroom objects, library, and if making a collage of personalities then glue, magazines, scissors, etc.

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	In sub-groups of 3-4, each sub-group decides an expression (angry, sad, happy, upset etc) and together they stand with that expression on their face. Others guess that expression. Or divide the class into two groups. One group writes names (nouns) on a small chit of paper. The other group writes a describing word. They go out into the corridor or open space. At a signal, the nouns have to pair up with as many describing words as they can and both have to shout out the combination. They can then discuss the funny and interesting combinations that occurred.

Providing the experience(*What experiential learning strategies will be used to achieve the lesson objectives?)*	In sub-groups, children choose an object from the class and describe it to other sub-groups who guess the object.Bundling – In sub-groups children collect objects such as stationary, leaves, shoes, etc. They group similar objects and leave them on a table. Children describe the objects, the number and also find if the objects aregrouped on the basis of quality quantity number
Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	**The students can do any of these:** **Circle the adjectives from a lesson in their books and identify which noun it talks about** **design riddles using adjectives to play the guess, 'guess who I am?'** **introduce his/ her friend to the class using adjectives** **make a board game (snake and ladders/ crossword) on adjectives** **In sub-groups, they can make a collage of objects they see in old magazines. They exchange their collages amongst the sub-groups. Each sub-group has to write a list of descriptive words based on the collage.**

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	The teacher writes a few sentences on the blackboard carefully avoiding the use of adjectives. She uses a phrase to describe an object/place/ person instead. She gives a list of adjectives that can be used to replace the phrase. Or the class is divided into two groups where members put up questions to the other team by giving one adjective and asking the other team to replace it with a synonym.

Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	The students will create a paragraph/story about their role model describing the qualities they admire. Or they are asked to bring cut outs of any object from the local daily (preferable a scene) and describe it in their own words using a few sentences. Or in pairs or sub-groups - enact their favourite game/hobby in dumb-charades to others who guess. Or they will write letters to their friends describing a place or monument they visited and why they liked it.
Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	The students are encouraged to write a character sketch of the character of any well-read story (from their course book or a book from the school library) Or write about a story/film they like by describing it and what they like in it, how it makes them feel.

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

- ✓ The students in groups will design a chart showing one adjective and a series of objects that they can describe using that one adjective.
- ✓ Writing a poem using describing words on the topic, 'I am Unique'.....

Students develop a rubric to assess themselves and three more peers on the adjective boards they create. This is graded out of 5.

Writing a self-created poem develops the aesthetic sense in children and the teacher can record anecdotes based on the creativity and development of new vocabulary.

My Own Learning (Post-Lesson Reflection):*What challenges /problems the* facilitator faced while planning and implementing the lesson plan

The students initially come up with simple describing words but as the lesson progresses, the student learn to use adjectives that can be used instead. (better synonyms)

They find it a little difficult to identify all the adjectives used in the newspaper article/books and intervention is needed.

The ability to construct a poem about themselves builds confidence.

Creating board games and the ability to play it build interest .

6.2: EXPERIENTIAL LEARNING LESSON PLAN: EVS

CLASS: 4

TOPIC: HUMAN MIGRATION

Learning outcomes:	Students will be able to analyze and infer that human migration is a response to challenges, risks and opportunities. **By the end of the topic, the learners would be able to** explain different types of migration ✓ deduce the possible reasons of migration ✓ describe the effects of migration on people and places ✓ Impact of migration on the host country.
Time Required	5 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	Students will be asked to think and answer the following: What changes have you observed as you moved from class III to class IV? Why is a change required at times? What might be the reasons for the change? How do the changes affect us and our surroundings? Why do people move from one state to another permanently?
Pre- Activity Phase	Facilitator will arrange for few resource persons(who are migrants) for an interactive session with children or can request some grand-parents to come in and tell the story of where they had been before. Facilitator will do research on few successful Indian migrants. Although embassies are not present in all cities, teachers can ask students to find about any embassy.

Resources Required	NCERT book to refer: Nandita In Mumbai. Changing families Interview sessions / skype sessions with the migrants Rubrics for assessment

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	In sub-groups, children can go out and do a survey of a few teachers/ staff and find out about their origins or if their family members belonged elsewhere. Facilitator to help in making the survey questions. The data can be shared in class by either putting a mark on the different parts of the country or world-map to show different origins. The facilitator would ask students: i. Ask children to give a few favourite holiday spots/monuments or vacation places. They can write out on A4 recycled sheets of paper. Outside in the lobby, place these sheets in different places. Ask them to run to the spot they would like to visit. Then again, run to a spot (remain where they are) if they were to stay there permanently. ii. Back in the class, discuss why they made these choices?
Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	An interview with the migrants in the family or neighbourhood would bring forth the various types of migration (urban to rural/rural to urban etc.)The students will prepare a web chart mentioning the various types of migration viz. urban to rural, rural to urban, one country to another, urban to urban. The students will give presentation in groups, each group effectively putting across the various types of migration and the factors prompting migration of each type. (eg- While a rural to urban migration might happen for better job opportunities, an urban to urban migration happens in search of a better lifestyle.

Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	The students' facilitator will assist students in preparing the survey questions for their family members.

A. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	The students will design a web-chart mentioning the various reasons for migration.They will classify and mention the types of migration. Students participate in a group discussion with questions or statements that are aimed at provoking in-depth discussion. For example, what are some of the countries where people migrate? **Role- playing migrant** *and* ***analysing*** *various possible reasons for doing so. They need to apply their landform/geographical feature knowledge to this place.(From Village to city-Students have to assume themselves to be someone who is migrating from village to a city). They can bring in different languages in the role play.* What are the difficulties a migrant faces?
Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	Learners will be able to use concept related vocabulary (immigration, immigrant, emigrant, emigration, host and donor countries) in their daily life. Make a chart based on a survey at home of where the extended family is. Ask them to analyze pros and cons of moving to a place permanently.

Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of theirreal- life application ?)***	Children can look at some success stories of migrants who worked inthe other country such as Mother Teresa, Satya Nadella, etc.

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

Students will be assessed on the basis ofcomparison chart, web chart and survey questionnaires that they will prepare .

On the basis of their participation in the group discussion according to the rubrics prepared by the facilitator.

On the basis of the role play based on the rubrics.

My Own Learning (Post-Lesson Reflection):*What challenges /problems the* facilitator faced while planning and implementing the lesson plan

6.3 EXPERIENTIAL LEARNING LESSON PLAN: EVS

CLASS: 4

TOPIC: JOURNEY OF A RIVER

Learning outcomes:	Students will be able to: comprehend how important water is for living beings explain the causes of water pollution and its impact on marine life express and list views on ways to minimize water pollution and conserve it write articles/letters/ journals for the school magazine, newsletters to highlight and sensitize people around
Time Required	7 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know***	Students are aware that water plays a major role in human life. 1. Students will be divided into sub-groupsand they make a freeze frame on different uses of water in their lives. The others guess the type of water usage. 2. The facilitator can give the children the following topics on a small piece of paper that the children enact. Other groups watch and guess the situation. How does water reach into the taps? Tap water finishes while taking a bath No water to cook food Break in supply of municipal water for two days Shower bath or bucket bath (preference/ reason) Comparison between hose pipe wash and sponge wash to wash a car

Pre- Activity Phase	The activity should be age appropriate. Teacher will: check the feasibility of the activity. take the students to a visit to the school water points to check for water wastage brainstorm for ways to conserve water at individual level visit to National Science Centre for attending a session on water conservation and rain water harvesting. (checking for availability with the museum staff for tickets, taking permission from school administration) do Role play/ nukkad natak in the local community for creating awareness on water wastage(planning for summative)
Resources Required	Notebooks, pencil, newspapers to read about water shortage and related problems

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	Videos showing glaciers 25 years ago and now Sparking a debate between the clarity of water in mountains and cities (to differentiate) Reading the chapter to know the journey of river and the way it is getting polluted
Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	Self-survey on personal consumption of water: which kinds of consumption are there (drinking, bathing, washing clothes), how much are they consuming individually? Interviewing grandparents, forming questionnaires on the ways in which usage and consumption of water has changed in the last two decades. Browse site www.waterwise.co.za to know about the water crisis at Cape town (global perspective)Then find out about the Chennai water crisis. Make posters/ slogans for water conservation.

Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	The students Make a questionnaire in groups of six related to usage of water. Which kind of water filters lead to more wastage of water? (ex: the RO filter) Conduct a survey for the recordings of their observation by visiting 5 neighbours and make a smart chart(bar graph/table/pie chart) Analyze the chart and design a pamphlet to distribute and sensitize people on judicious use of water

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	Conduct a session for the service staff of the school by holding a discussion and taking their viewpoints so that there is a minimal wastage of water. Ask them what they can do as students?
Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	Students will perform a nukkad natak in different blocks/wings of the school to sensitize other children as well as to bring a change in the society. The way in which students bring about a change in their life will be recorded and reflected upon. They will share the change with their peers in the class.
Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	The students will be encouraged by the teacher to reuse the water used for washing vegetables, fruits, clothes etc. in different ways. This work can be extended in sensitizing their relatives. A quiz will be designed by the students and carried out in the class.

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

- ✓ Students will be given a check list on a grade scale of 5 for self-assessment. They will assess themselves individually and as a group after the completion of the tasks(nukkad natak, pamphlet designing, making questionnaires)
- ✓ Students will also be assessed on the basis of their recordings and findings based on the rubrics.
- ✓ Students will be assigned a worksheet to summarize their learning on water pollution and conservation

My Own Learning (Post-Lesson Reflection): *What challenges /problems the* facilitator faced while planning and implementing the lesson plan

The classroom transaction went well as students could easily relate to water usage, pollution and conservation.

They were initiated into reading of newspaper as it brought them close to real life.

They enjoyed their visit to NSC and making questionnaire and conducting a survey.

6.4: EXPERIENTIAL LEARNING LESSON PLAN:EVS

CLASS: 5

TOPIC:Diseases

(Teacher can say that the students will learn about Hygiene and Health. It is better to focus on positive framing.)

Learning outcomes:	Students will be able to: analyze that adequate hygiene and sanitation keep the diseases at bay infer that cleanliness is indispensable for human health demonstrate an understanding towards kinds of diseases, their causes and prevention sensitize the community to keep the surroundings clean to prevent diseases
Time Required	5 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	In sub-groups, ask children to prepare a role play on one reason for getting a disease and one good habit for maintaining hygiene. A discussion can follow.
Pre- Activity Phase	Videos and PPTs related to mosquito borne diseases will be shown to the students The children will then be divided into groups and they will discuss that why do the mosquito repellants fail? What do mosquitoes need to survive? Why do they need water? What are the breeding grounds for mosquitoes? Which season is favourable for mosquito breeding? How is the human life affected because of mosquito breeding, etc. This discussion will provide them the basic information about how harmful mosquitoes are and what can be done to avoid them.
Resources Required	Newspaper articles, notepad, pencils, modules, PPTs

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	Are there countries where there is no malaria? Do all mosquitoes carry malaria?
Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	Learners will be asked to take a round of their society or the colony specifically looking for uncovered trash cans. sewage areas, drains etc. The students will be asked to record their observations.
Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	• The learners will be divided into small groups to observe, record, form opinion and reflect upon the stagnant water, unclean air coolers, littered corners in their surroundings. • The learners will record their findings and write various ways in which they can sensitize the people to keep the surroundings clean to prevent such diseases. • Learners will prepare jingles and slogans about hygiene and sanitation to spread the awareness.

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	• The students will have inter-class cleanliness competition. They will have to keep their classes clean and tidy for a week to win the competition. For this they can create a rubric for tidy classrooms. They can go around the school and award stars to classes that follow the rubric and maintain tidiness. • Children will make Posters and write small messages on hygiene to be pinned in the corridors and classrooms.

Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	The records and observations will be discussed in the class where the facilitator will help them to understand how accumulated water becomes breeding ground for the mosquitoes, making those areas prone to mosquito borne diseases. Newspaper articles, pamphlets etc. will be shared with the learners to explain the need to clean the water tanks and water coolers, clear heaps of garbage, avoid open defecation, cover dustbins etc. Designing a nukkad natak to sensitize people in the local community or they can design posters and put them up.
Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	An awareness campaign will be carried out in and around the school to sensitize people asking them to wear full length light coloured clothes, use mosquito nets, cover the doors and windows with mosquito mesh, clear the stagnant water, regular sprays etc.

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

The learners will write a pledge to keep the surroundings clean.

They will suggest effective measures which can be taken for the prevention of these diseases.

They will design pamphlets on the necessity of maintaining hygiene and sanitation.

They will be given a written assignment in the form of worksheet to recapitulate their learnings.

My Own Learning (Post-Lesson Reflection): *What challenges /problems the* facilitator faced while planning and implementing the lesson plan

The facilitator will be able to reflect on his/her teaching skills by designing assisting tools like checklist (with appropriate rubrics) and student's feedback form. By critically analyzing the feedback the facilitator will be able to work on his/her areas of improvement.

6.5 EXPERIENTIAL LEARNING LESSON PLAN: MATHEMATICS

CLASS: 5

TOPIC: FRACTIONS

Learning outcomes:	Students will be able to: conceptualize fractions and apply it in their real life. Perform different types of operations on fractions Comprehend and solve word stories related to real life situations. Plan and execute the value - based project given on fractions
Time Required	5 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	As students are aware of fractions, their types, and know the operations also, they will be divided in groups of 5-6 students each. They will be asked first count the number of children in their class, then the number of boys and number of girls. They can then write the fractions for the following: Fraction of boys in their group Fraction of girls in their group Fraction of girls in the class Fraction of boys in the class Fraction of children born in a particular month. Confusing.
Pre- Activity Phase	The activity should be age appropriate. Teacher will check the feasibility of the activity.
Resources Required	Participation of the class

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	Children can collect stationery items (pencils, pens, erasers) from their bags and in sub-groups they can distribute equal number of items for each member in the sub-group. They can physically count the objects. A discussion can ensue when there are no whole numbers what can be done. (from division we can go to fractions).
Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	The class can be divided into different sub-groups of 4, 5 or 6 children. Each group can be given 2 or 3 sheets of recycled paper. (The number of sheets must be less than the number of participants in the group) Each child must get equal part of the sheets of paper. For that they can cut each sheet in equal parts of required number. (Note: Facilitators must allow children to think and create their own processes rather than give a formula).
Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	They can represent by drawing in their notebooks. For example, they can observe the number of water bottles and draw them. They can write how many are red, or blue in terms of fractions.

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	They can write out the fractions

Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real-life application ?)***	An activity through Origami/wastepaper based on fractions can be done.

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

- ✓ Students will be given a check list on a grade scale of 5 for self-assessment. They will assess themselves individually and as a group after the completion of the tasks.(distribution of stationery items)
- ✓ Students will also beassessed on the basis of their recordings and findings based on the rubrics.
- ✓ Students will be assigned a worksheet to summarize their learning on fractions.

Assess your students' understanding of fractions by having them complete the Fractions Quiz

My Own Learning (Post-Lesson Reflection): *What challenges /problems the* facilitator faced while planning and implementing the lesson plan

6.6 EXPERIENTIAL LEARNING LESSON PLAN: ENGLISH

CLASS: 6

TOPIC: LETTER WRITING (INFORMAL)

Learning outcomes:	The students will be able to – learn the skill of letter writing – invitation, thankyou letters, etc. know about the Postal system, its working and importance. know the role of letters in present day digitalized life. learn to write a letter in the correct format and be able to differentiate between the formal and informal format.
Time Required	4 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	Starter activity: Ask children in sub-groups to come forward and enact the life cycle of a letter (from the time it is written by the sender to the receiver). The facilitator should not say whether it is an email or a postal letter. Let the children decide what they want to depict. We are looking at their prior knowledge. There can be a discussion after this.
Pre- Activity Phase	The teacher should visit the post office and make all the arrangements properly. inform the Principal in advance about the date, time and the strength of students going to the post office to avoid last-minute chaos.
Resources Required	Field trip to the post office Smart board PPT and videos on journey of a letter Stationery

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	Each child writes his or her name on a chit of paper that is collected in a bowl and mixed. Each child now writes a positive affirmation for example: You are amazing! The bowl is passed around, or the teacher can now distribute the name chits to the whole class. Children have to attach their positive affirmation note with the random name they have got and deliver their hand written message to the person whose name they have on the chit. Describe the difference between a handwritten letter and an email. The students will be asked to **interview** or have a **conversation** with their grandparents / parents and talk about the role of letters in their lives and times and their feelings about it.
Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	Ask children to bring different kinds of letters from home. They can sort the letters according to the formats. Children now write a letter of gratitude to their parents or grand-parents. The facilitator can help them with the format and the words. Field Trip to a post office They go to the post office and post this letter They interviewing the post officers
Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	**1.** For the field trip to the post office the students will observe: The role of Post Office in a community Services offered by a Post Office Procedure of transit of letters Significance of PIN Code and Post Box number

	How the role of Post Office has changed over the years How do letters reach the remote areas, with no postal address Importance of Money Orders in the present times ❖ The students will make notes of all the information gathered in their notebook and preserve it.

C. Lesson steps: Conclusive phase

Conceptualization (***How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	The facilitator will ask children to draw the format of an informal and formal letter in their notebooks or recycled paper. They can discuss the differences between the two The facilitator can ask children to suggest words/ phrases that can be formal or informal which they can note.
Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	They record their own feelings: What did they feel when they posted a letter? How do they (or others) feel on receiving a message or a letter? Which mode do they prefer? E-mail or a hand-written note?
Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	The students can also be shown a letter seeking information under the Right to Information Act(RTI) and how to write one can be discussed. They can identify a problem that their school or community is facing and collectively in groups write the letter to the concerned authority (for example the municipal body for garbage clearance or stagnant water outside the school premises or any other information). This can be posted when they go to the post office. They will be surprised and happy when they receive a response from the Government. There is no age bar to write an RTI letter.

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

Ask the students to write an informal letter.

While analyzing the student's work, look for the correct format (salutation, body of letter, closing) and language.

My Own Learning (Post-Lesson Reflection):*What challenges /problems the* facilitator faced while planning and implementing the lesson plan

6.7 EXPERIENTIAL LEARNING LESSON PLAN: ENGLISH

CLASS: 7

TOPIC: THE LAST LEAF

Learning outcomes:	The students will be able to: i) read and comprehend the text with precision. ii) demonstrate insight into the motivation of key characters in the story. ii) identify the values (kindness / sacrifice / hope) highlighted in the story. iii) highlight the detrimental effects of 'depression' and how can they be countered. iv) present their inference from the text in groups.
Time Required	6 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	Ask the children to write in groups of 3-4: When you are not well, what helps you feel better? Which kind of foods do you like to eat? What kind of colours to like around for to make your mood better? Which words make you feel strong and happy?
Pre- Activity Phase	(This story is about will power so it is better to focus on the positive message and feelings. The idea of a counselor can be maintained for a higher class).
Resources Required	ICT, internet connection, newspaper clippings, audio recordings.

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	Children can look up photos of 3D optical illusions painted onto walls and sidewalks. This is related to the theme of the story.

Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	a) Children read the story in groups. b) They can choose a scene that they can illustrate with a sketch. This can be a collaborative exercise. They can also paint the leaf according to their imagination. c) They can create a soundscape by reading a passage aloud and giving background sounds (of the wind/storm blowing etc.) d) They are free to choose to retell/narrate/enact a small scene of the story or the meeting between the painter and the girl.
Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential***	a) What is the difference between the three artists' approach to life? b) What kind of language or words do they use? c) Colour the positive words with a bright colour and the sad words or expressions with a sombre colour.

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	What is the meaning of sacrifice? Why does the old artist paint that leaf? How is it his masterpiece? Ask children to reflect on this and discuss.
Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	What is the role of will power? Ask children to think or research a few examples where people succeeded against all odds thanks to their will power. Ask children to learn to breathe with relaxation. Play a relaxing music and ask them to breathe quietly and deeply and with each breath feel stronger and more powerful. Do this for 5-7 minutes and tell them they can practice this whenever they feel anxious or tired.

Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	Make a list of positive words or actions (such as smiling, shaking hands joyously, patting on the back, etc.) so that your classmates/schoolmates feel encouraged. Go out into the school and greet another student or a service staff and give an encouraging and positive message or action.
Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*	
a) Children can participate in a focus group discussion.	
My Own Learning (Post-Lesson Reflection):*What challenges /problems the* facilitator faced while planning and implementing the lesson plan	
a) Arranging the age appropriate resources was challenging.	

6.8 EXPERIENTIAL LEARNING LESSON PLAN: SOCIAL SCIENCE

CLASS: 7

TOPIC: MARKETS AROUND US

Learning outcomes:	Students will be able to:- 1. understand the factors that determine their choice of market type for buying certain goods. 2. appreciate the necessity for the different types of markets, depending upon the need and **economic status** of an individual/family. 3. evaluate the factors that contribute to the enhanced cost of certain items of the same kind and quality in different market types.
Time Required	5 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	In sub-groups, ask children to decide on a market scene and present it as a freeze frame (*they freeze in a position*: remember the game called *statue.*). Alternately, they can also enact a scene with sounds and movements and depict a market. Different group members can be carrying out different roles. The rest of the groups can guess which roles are being played and what the scene is.
Pre- Activity Phase	
Resources Required	NCERT Civics Text Book Chapter 8

B. Implementation of lesson plan - Stage 1 Preliminary phase

Sparking curiosity **(*How the lesson will be introduced to create interest and stimulate learners' curiosity?)***	Students will carry out a survey in class in sub-groups. They will ask the other sub-group members where they go for shopping and what they generally purchase: whether stationary, clothes, household products etc. They can then write down a few of the items as part of their survey.

	They will then do a quantitative and qualitative survey. The quantitative survey will have them do comparative cost analysis of different products whereas qualitative survey will let them brainstorm their experiences in terms of service, product quality, customer satisfaction, comfort and convenience in relation to different types of markets In qualitative survey, feedback will be taken from consumers (belonging to varied socio-economic background and age group) regarding their shopping preferences and reasons for their preference.
Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	Teacher will help a group of students to set up a mock market (with small utility and stationery items brought from home) and encourage others to shop and to negotiate prices and use their bargaining skills. Students will enact and attend customers based on their visits to local markets and the way shopkeepers attend them so as to give a realistic feel to the whole experience. OR Another way of doing this is that the students can take over the school stationery/tuck shop for a day, and experience the whole process.
Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	Based on the survey, the groups will prepare a table to draw inference on the variation in prices and then will be asked to conclude various reasons that attribute to this price variation in different types of markets. Factors like: a) Transportation cost b) Electricity cost c) Rent d) Salary paid, if any e) Purchase price f) Storage costs, etc.

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	Based on data and findings of both the surveys, students with facilitator's intervention, will make inferences about how some factors like a person's economic status, age and the cost of the product to be purchased determine the type of market he/she will visit/visits for shopping. The conclusion will then take the shape of understanding that different types of market are integral to our society in order to cater to the different socio-economic groups living in a city.
Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	➢ The facilitator will moderate a class discussion on **Will malls/markets give way to online shopping? Why/ Why not?'** The outcomes of discussion would help students understand what preferences and attitudes guide their shopping behavior and how shopping patterns are changing due to new technology interventions
Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	Students will be asked to write a journal if they were to sell their self-made product which market type will they prefer and why? Their responses in the journal will be derived through their understanding of the lesson and analysis of shopping trends and behavior in their context.
Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*	
The responses provided by learners in their journals will indicate their level of understanding of the lesson and will help the facilitator to ensure that lesson objectives have been achieved.	
My Own Learning (Post-Lesson Reflection):*What challenges /problems the* facilitator faced while planning and implementing the lesson plan	

6.9 EXPERIENTIAL LEARNING LESSON PLAN: SOCIAL SCIENCE

CLASS: 9

TOPIC: ELECTORAL POLITICS

Learning outcomes:	Students will be able to: i. create awareness about the importance of Elections in a Democracy ii. understand the process or stages of election. iii. know about the philosophy behind elections. iv. develop a healthy competitive spirit amongst the students e.g. – when students are forming different parties/groups and campaigning for it. v. explain how elections enhance the dignity of people. vi. understand the constitutional provision for the election vii. understand that curriculum helps to make them better citizens
Time Required	Pre – Preparation activity – 40 min – 1 Period Forming groups, choosing candidates, writing a manifesto, campaigning etc- four days Election - 40 min – 1 Period Result - 40 min – 1 Period

A. Setting the stage for learning

Pre- Activity Phase	The topic of electoral politics will be introduced. The facilitator will provide an example of a voter ID card. Children must have paper and sketch pens. Students will make a **Mock Voter ID card** with their names and other details. They can draw their own picture for the photo. They can then exchange and share their IDs.
Resources Required	Boxes as Ballot boxes, Ballot paper, Placards, Students I-card will be treated as voter ID, Students list will be treated as Voters, Pamphlets, Stamp, Stamp Pad, Table, Card Board to cover the election area, Permanent markers as Voting ink, Chalk, Smart Board.

B. Implementation of lesson plan - Stage 1 Preliminary phase

Providing the experience **(*What experiential learning strategies will be used to achieve the lesson objectives?)***	They will prepare to do **role plays** in The Mock Election. They will be asked to form four groups / parties. Each group must elect a member as party leader. Then they will chalk down and draw a manifesto and a campaigning strategy. One student will be chosen as an Election Commissioner. Commissioner has to give dates for filing a nomination, Election, Counting of votes & Result. Each group after filing nomination will campaign for their candidate in the school premises. On the date of election, teachers will take charge of polling booth. Proper voting counters will be set up with secret ballot box and ballot papers. Next step of counting votes will be in the presence of the party representatives. Finally, the result will be declared.
Connecting to real life	After experiencing and learning the process of election in detail, the students will be able to: Get Hands on experience and understand the details of the system. Enhance their communication skills, ability to persuade, collaborate and develop team work and leadership skills. Learn to analyse and evaluate the different manifestoes and take an informed decision. Understand the role of a citizen in election/ democracy. Realize how election helps in choosing their leader Realize how election can enhance the dignity of a citizen.

Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	Students to be asked to write an Election Manifesto.
Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*	
The responses provided by learners in their journals will indicate their level of understanding of the lesson and will help the facilitator to ensure that lesson objectives have been achieved.	
My Own Learning (Post-Lesson Reflection):*What challenges /problems the* facilitator faced while planning and implementing the lesson plan	

6.10 EXPERIENTIAL LEARNING LESSON PLAN:

CLASS: 10

TOPIC: SUSTAINABLE DEVELOPMENT

Learning outcomes:	Students will be able to understand the need of the sustainable management of resources sensitize people in the local community regarding the sustainable management of resources.
Time Required	5 days

A. Setting the stage for learning

Check for prior knowledge **(*How do you check what learners already know?)***	Class will be divided into groups of 5-6 students. Learners will be asked to discuss and write: 1) Differences between renewable and non-renewable resources. 2) Limited nature of few resources.
Pre- Activity Phase	The activity should be age appropriate. Teacher will: i. check the feasibility of the activity. ii. visit the 'Waste management plant' prior to the visit of students so as to make all the arrangements properly. iii. inform Principal in advance about the date, time and the number of students going for the visit to avoid last minute chaos. iv. Ensure to take the reflection sheet from students after the visit.
Resources Required	ICT, internet connection,facility for visit to waste management plant, teaching aid, NCERT BOOK and some sheets of paper for learners to record their observations.

B. Implementation of lesson plan - Stage 1 Preliminary phase

<table>
<tr>
<td>Sparking curiosity
(How the lesson will be introduced to create interest and stimulate learners' curiosity?)</td>
<td>1. Students can observe their own habits and note the kind of waste they are generating by consuming in a week. They can make notes in their journal.
2. Facilitator asks the students to make a list of resources which they use at their own home and how they can use it in sustainable manner and compare their list with other students in groups.
3. The above activity will be followed by 'what if 'questions:
a) what if there is no electricity for 5 days in your city.
b) what if you have to spend a day without water.
c) what if there is no fuel in your vehicles.</td>
</tr>
<tr>
<td>Providing the experience
(What experiential learning strategies will be used to achieve the lesson objectives?)</td>
<td>Students can go around their school campus and note how much of waste is generated in different locations (ex: office, canteen etc) They can note what is thrown and what can be reused.
The learners are divided into groups of four to observe, record, form opinion and reflect upon a trip.
A trip to the nearby Waste Management plant is organized where students are asked to make list of materials and their probable uses and how they can effectively use 5R's to Reduce, Recycle, Reuse, Recover, Repurpose the resources present in that area in a tabular format.
A detailed finding of the different organizations working on the national and international level for the conservation of environment and natural resources and what all activities are conducted by them to promote the same:
<table>
<tr><th></th><th>Resources collected</th><th>How to utilize it effectively</th></tr>
<tr><td>Reduce</td><td></td><td></td></tr>
<tr><td>Recycle</td><td></td><td></td></tr>
<tr><td>Reuse</td><td></td><td></td></tr>
<tr><td>Recover</td><td></td><td></td></tr>
<tr><td>Repurpose</td><td></td><td></td></tr>
</table>
</td>
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Drawing inferences **(*How and in what format learners will record/document their observations/learnings from the experiential tasks?)***	1. The learners record their findings and compare it with their respective group partner. 2. The learners are then asked to think more creatively of ways in which the use of these materials /waste materials can be reduced,recycled, reused, recovered and repurposed. 3. All the groups will present their finding for the learning of the whole class.

C. Lesson steps: Conclusive phase

Conceptualization **(*How will the facilitator assimilate key aspects of learning from the inferences drawn by learners?)***	The records and observations are discussed in the class where the facilitator helps them to understand how these 5R's can be implemented in our daily life. The students are also shown videos about the traditional practices which are followed in our daily life for the conservation of resources.
Connecting to real life ***(How the lesson will be extended further, how it will be linked to real life incidents/situations/processes/systems to make learning meaningful?)***	The students will reflect upon their findings and will prepare a report on what kind of changes they have implemented in their lifestyle for effective implementation of 5R's in their life so that they can become more environment friendly.
Extended learning ***(How will the facilitator provide opportunities to reflect on the experience in terms of their real- life application ?)***	1. Developing a skit on the implementation of 5R's in our daily life to sensitize people in the local community 2. Visit to the national Science Centre or any other locale to know about sustainable management of resources

Assessment (*How will the facilitator check and ensure that learners have constructed knowledge and learning objectives have been achieved?)*

The students will shoot a small movie on the sustainable management of resources and its importance in our life. They will design pamphlets with self-made slogans so as to create an awareness. A campaign/rally will be organized in the school premises where they share their ideas as to what individual contribution can be made to save the resources.

CHAPTER 7

FREQUENTLY ASKED QUESTIONS

S. No.	Question	Answer
1	***How does experiential learning support constructivist pedagogy?***	Experiential learning supports constructivist pedagogy as learners are actively involved in the learning process through experience and derive meaning based on their experience.
2	***Is it necessary to follow step by step stages of Kolb's cycle for experiential learning to take place in a classroom?***	The learners can enter the Experiential Learning cycle at any stage and follow it through its logical sequence. However, effective learning occurs when all stages are executed by the learner.
3	***Do learners have a voice and choice when they learn through experience? If yes, how?***	Yes, learners when learn through experiences, direct their learning, conceptualize learning, derive meaning and test the learning on new situations in their own ways and thus have a voice and choice. Also, facilitators can plan learning experiences in such a way that learners do not feel constrained and can exercise their choice to a suitable extent.
4	***How does Experiential learning make learning meaningful?***	As Experiential Learning enables and empowers learners to connect learning on the basis of their prior knowledge, reflect on it, and then conceptualize it before applying to new situations, it makes learning meaningful. Also, learning is meaningful and authentic when learners engage in real-world experiences through multisensory approaches rather than passively absorbing text from text- books.
5	***Is it possible to provide learning through experience to students with locally available resources?***	Yes, educators can plan learning experiences by creatively engaging students with resources that are available locally.

S. No.	Question	Answer
6	***How does experiential learning address classroom diversity?***	As experiential learning encourages independent reflection and observation, it allows the classroom to cater to diversified learning styles of learners. Also, in case of classrooms with learners from different background and cultural contexts, the educator can tailor the learning experiences to address the diversity effectively.
7	***How does experiential learning promote active learning?***	As learners are directly involved in the learning and are not merely passive recipients of learning, active learning takes place.
8	***How is Learning not imposed but implied when done through experience?***	When learners learn by actively involving and engaging with real world experience, learning is bound to happen, though the degree and level of learning may depend on learners' learning style and intensity of engagement. Since learners themselves direct their learning experiences and make meaningful connections based on their prior knowledge and past experiences, learning is not imposed.
9	***Is theoretical concept formation not required when students learn through experience. If it is required, how does concept formation take place during experiential learning?***	Students form concepts on the basis of their reflection and learning from the experience. They redefine and review their past learning in the light of new experience.
10	***How is learning by doing just a part of experiential learning? (How is experiential learning different from learning by doing?)***	Experiential learning is a broader term as the learner is actively engaged in the process by immersing in the experience. The learner absorbs, applies and then reflects upon the knowledge, gained through his experience.

S. No.	Question	Answer
11	***How is experiential learning beneficial for children?***	Experiential learning gives an opportunity to the learners to take ownership and pride in the concrete result after the hands-on tasks. As a result, the learning process accelerates, and the acquisition of knowledge becomes interesting and enjoyable, thereby, comprehending and retaining the knowledge lifelong.
12	***Which age group does it cater to?***	Learners at any level benefit from experiential learning as it takes the student away from conventional lecture method and provides an opportunity to let them experience everything on their own making the learning process worthwhile.
13	***How can we incorporate it into CBSE curriculum?***	Each concept should actively engage the learner. Rather than following conservative teaching where child acts as a passive learner, the facilitator should encourage the student to explore and come to his own conclusion.
14	***Is it possible to teach all the subjects through experiential thinking?***	Everything is comprehended and learnt better through experience than through rote learning. Experiential learning enables the learners to immerse into an experience, apply their knowledge and skills into the real world and then reflect on their experience.
15	***Is there a specific strategy or a set of steps to experiential learning?***	There are various educationists those who have done valuable researches in experiential learning, one of them being David Kolb. Kolb's model focuses on four stages of learning cycle i.e. experience, reflection, conceptualization and active experimentation. A learner can enter this cycle from any stage but the cycle must be completed. There are other methods too, advocated by several thinkers. It does not matter what method is followed, as long as the child learns by doing.

S. No.	Question	Answer
16	***How is experiential learning more interesting or beneficial than other teaching methodologies?***	Experiential learning engages the interest of the learner and also applies his/her skills to acquire knowledge. In traditional teaching methodology, the learner may not be able to relate himself to the skill or understand the importance of learning that skill.
17	***How will experiential learning effect the competencies?***	Each learner has his/her own way of learning which in turn depends upon various factors like his/her learning environment, social set up, availability of resources etc. This enables his/her to develop different competencies like citizenship, cooperation, critical thinking etc. depending upon her preferred choice of learning.
18	***How is 'experiencing' different from experiential learning?***	The term 'Experiencing' refers to learning by doing which may or may not involve reflection. 'Experiential learning' however is more specific, planned and involves learning by self-reflection. Hence it makes the learner responsible for ones' own learning.
19	***In what way can a facilitator plan her class so as to check that the activity that is to be conducted caters to 'experiential learning' and is not just a classroom activity?***.	'Experiential learning' requires lot of planning on the part of the facilitator. She/he has to check how to make the learning engagements connect to real-life situations and are meaningful to the learner. For this the facilitator must have the background information too. What works for one classroom setting may/may not work in another. So, local context and resources must be connected to the lesson so that the experience can be imbibed and the learner is not disengaged. Otherwise, any activity may turn out to be simply a teacher-led classroom activity.

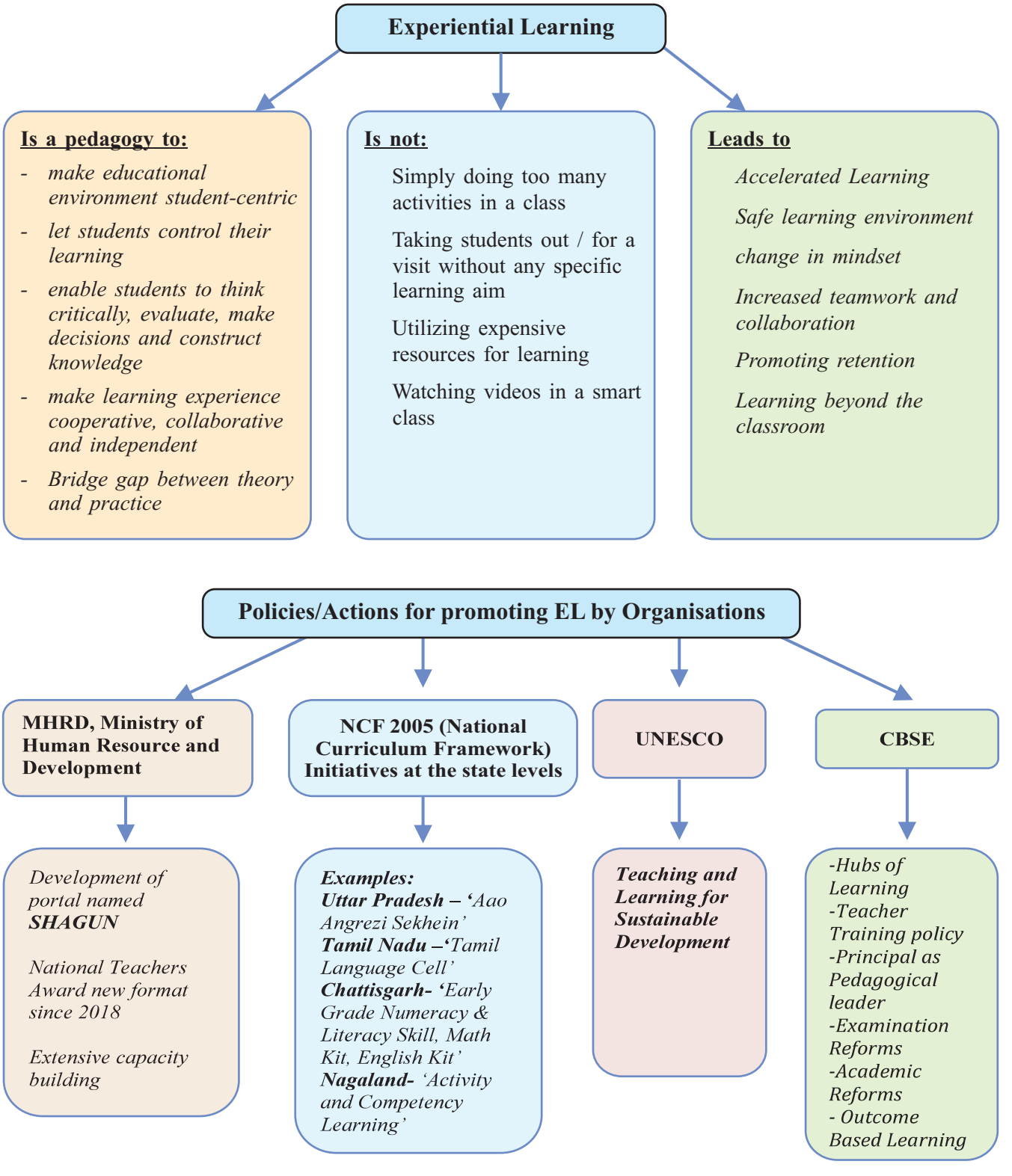
S. No.	Question	Answer
20	***Does creating an experiential learning plan and implementing it help the learner and the facilitator at the same time?***	Yes, since experiential learning is engaging and caters to the learners' real-life experiences, it helps the learners relate and understand the topic at hand and makes learning interesting. It is using and applying knowledge in a constructive manner.
21	***Can experiential learning provide a pathway for remedial? How?***	Experiential learning enables the teacher to know if he/she needs to modify he/her strategies. With the stages of experiential learning, it helps him/her to identify the loopholes in the process and use it to the best of a student's knowledge. Students get a greater sense of accomplishment.
22	***Which all activities can be included to provide experiential learning?***	The list of activities is endless. Activities such as - role play, think-pair-share, peer tutoring, round robin, nature's trail, art in the local community, gallery walk, making projects, shared-experiences, talk-shows, designing a newspaper, brochure, magazine, calendar or journal, letter-writing - just to name a few may be used in a multiple ways to provide experiential learning. Of course, it must be connected to the subject and must be age appropriate.
23	***Does it make the classroom transaction time longer?***.	It is for the facilitator to decide which part of the lesson she plans to provide experiential learning. If planned well and amalgamated with the lesson, it is neither time consuming nor is it cumbersome.
24	***Can experiential learning be provided across subjects? Is it possible to link subjects?***	Yes, it can be. It can be planned right from the primary to the senior secondary level. Only the prior knowledge, its level and the age appropriateness of similar activities will differ from class to class. For example, for a letter writing exercise at the primary level, the students can exchange letters with their peers or pen friends, whereas the same can be provided at the senior level by writing letters to the government

S. No.	Question	Answer
		authorities under the Right to Information Act or to newspaper editor keeping in mind the local issues or even designing a newspaper for the school. Also, to link subjects, the teacher can design a real-life situation in the class. Example, a market scene when teaching importance of advertisement, can help the students use subjects like languages, Social Science, Statistics etc. together.
25	***Why is it necessary to connect the subjects to the real-life context when we can easily read case studies or learn from others' experiences?***	Challenges that we face today may not be relevant in the future. Connecting the learning to the real-life context allows learners to use knowledge and apply it to solve problems at hand. Learning through self-experience and situations that arise in the real life make it more relevant and helps learners share their experiences, ideas and interest which will surely differ from one person to another.
26	***How to introduce a topic through 'experiences'?***	Role plays, videos, shared-experiences, peer interviews, using live objects of day to day use etc. are some of the ways to introduce topics across levels. Mystery boxes, picture-puzzles, guess who/what, 'what if' questions can be used more aptly at the primary level.
27	***Does it mean that text books have no significance in carrying a classroom transaction?***.	The significance and the relevance of the textbooks can never be overruled. However, there is always a need for innovation and re-invention with the context and the challenges that we face due to rapid changes in and around us. To bridge this gap, experiential learning comes handy as it connects the knowledge/content to the leaner's real-world making it more applicable and easier to imbibe.

S. No.	Question	Answer
28	***Is Experiential learning same as hands- on activity?***	No, hands -on activity is definitely not experiential learning. Just because the activity/task is hands -on does not mean it is mind on. Many projects, field trips, situation do not yield lasting outcomes because too little or negligible time is given to assimilate and conceptualize the experience.
29	***What are the possible ways of assessing experiential learning?***	Rubrics, Anecdotes, peer assessment, self-assessment and self -reflection etc. are some of the ways of assessment. The checklist or rubric however must be shared with the learner and it is even better to design an assessment method involving the learner.
30	***What is the benefit of using local resources for experiential learning?***	The essence of experiential learning is taking the learners through a journey with the available resources or resources that surround us in everyday life. It enables lifelong learning as they are well acquainted with these resources. The awareness of the environment and the resources boosts the confidence of the learners and they get engaged meaningfully. The assimilation and conceptualization are much better and they are able to apply it effectively as they find relevance of the concept in real life.

CHAPTER 8

EXPERIENTIAL LEARNING IN A NUTSHELL BY PADHKAR KUMAR (CONCEPT MAP)

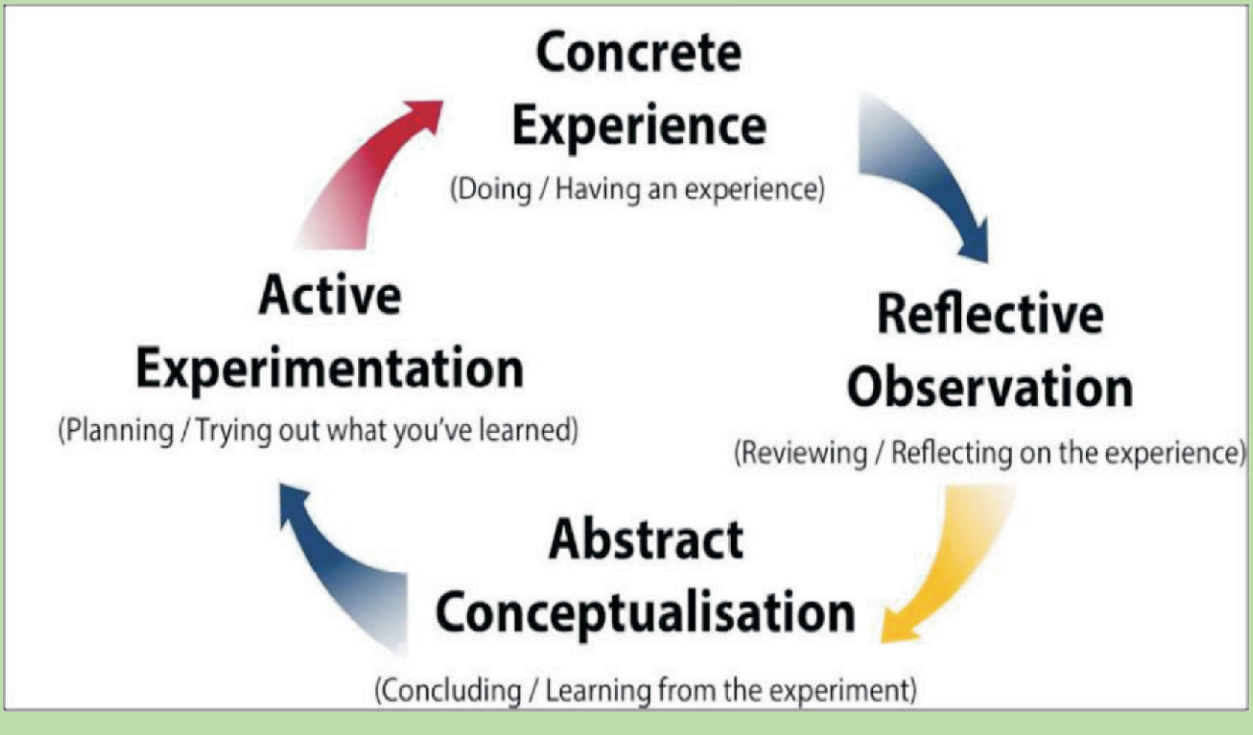


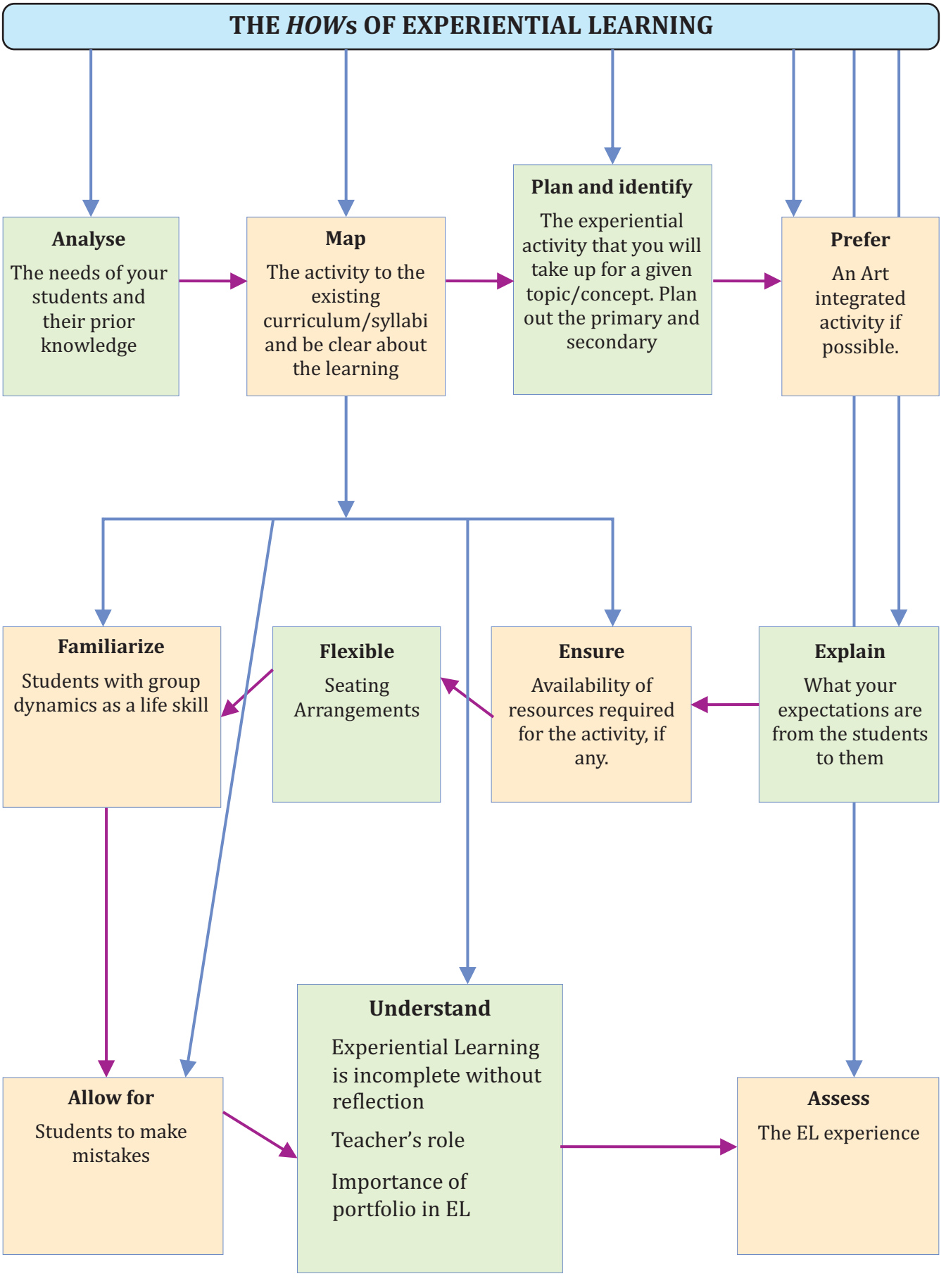
Experiential Learning

Includes:

- Joyful Learning
- Art-Integrated Learning
- Activity-Based Learning
- Fun, Games and Studies
- Sports Integrated Learning
- Inquiry Based Learning
- Collaborative Learning
- Assessment as Learning

CYCLE




THE *HOW*s OF EXPERIENTIAL LEARNING
Analyse
The needs of your students and their prior knowledge
Map
The activity to the existing curriculum/syllabi and be clear about the learning
Plan and identify
The experiential activity that you will take up for a given topic/concept. Plan out the primary and secondary
Prefer
An Art integrated activity if possible.
Familiarize
Students with group dynamics as a life skill
Flexible
Seating Arrangements
Ensure
Availability of resources required for the activity, if any.
Explain
What your expectations are from the students to them
Allow for
Students to make mistakes
Understand
Experiential Learning is incomplete without reflection
Teacher's role
Importance of portfolio in EL
Assess
The EL experience

We have just seen on the previous few pages how Padhkar Kumar has graphically organized the entire concept of Experiential Learning.

More and more students have joined Padhkar Kumar and Karkar Kumari.

Roshni and Uday are two such students. They would carry forward the story of our promising and future-ready students in our next Handbook -*Handbook for Students.*

The story would continue with....

Uday

Roshni

EPILOGUE

The present system of education is all wrong. The mind is crammed with facts before it knows how to think. We may read books, hear lectures, and talk miles, but experience is the one teacher, the one eye-opener. It is best as it is. We learn, through smiles and tears we learn. No one is really taught by another; each one has to teach himself. The external teacher offers only suggestions which rouses the internal teacher to work to understand things. Educate our people, so that they may be able to solve their own problems. Until that is done, all these ideal reforms will remain ideas only.

–Swami Vivekananda

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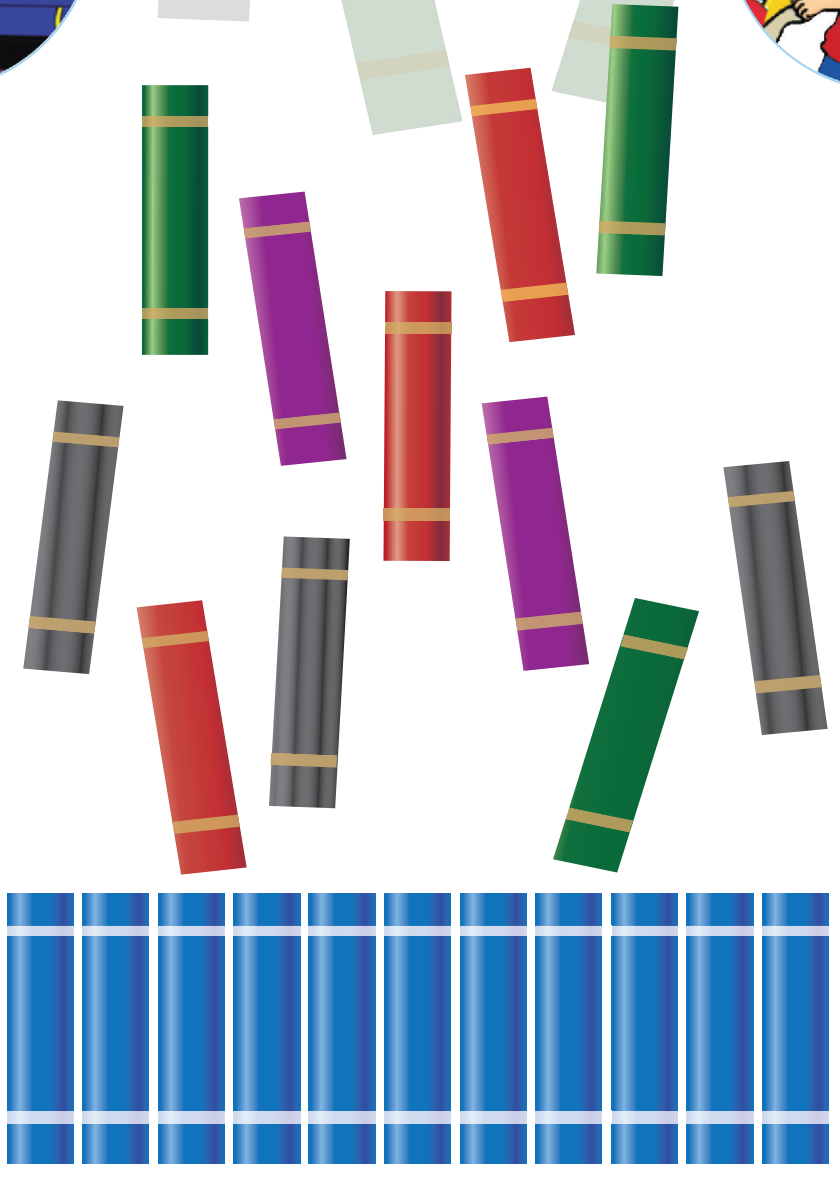

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