

# Facilitation Advancement Bootcamp EXPERIENTIAL LEARNING PEDAGOGY





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# INTRODUCTION

# The Need of Technical Education-Nationwide

India has a sizable population, and the government has been working hard to raise the level of literacy and economic levels of the masses to an optimum level. In a common scenario majority of youth choose higher education i.e., degree programs after completing their technical Diploma courses to land themselves with a promising career.

However, due to low family income many of the students discontinue their further education. Diplomas provided under Polytechnic education focus on making students employable, immediately after completion of the program through multiple apprenticeship opportunities made available by many PSU's and leading organizations. The current demand of skilled workers is on surge hence it is the "Need of the Hour" to develop the human resources in technical domains which helps fills the gap of the surging industry demand.

As a result, the employment provided after the Polytechnic education contributes to raising family incomes thereby raising the GDP of India.

# History of the Department of Technical Education in Uttar Pradesh

The board that offers technical education to students in Uttar Pradesh is called the Board of Technical Education (UPBTE or BTEUP). The State Board of Technical Education and Training was established in May 1958, and the name was modified to "Board of Technical Education" in 1962. The board provides over 60 courses in various fields ranging from one year to four years.

The Board of Technical Education (UPBTE or BTEUP) provides technical education to students in Uttar Pradesh. The board offers around 60 courses of one-year, two-year, three-year, and fouryear duration in different disciplines. There are over 30 trades offered in group A, such as Computer Science, IT, Mechanical, Electrical, Electronics, Automobile, and Civil. The board's functions are to declare the exam schedule, organize annual exams, and declare their results. Other functions include affiliating institutions and prescribing their building and equipment standards. More than 80 colleges affiliated with BTEUP offer courses in group A. Other groups offer textiles, home science, agriculture courses, and others. As of Jan 2019, there were over 800 institutes affiliated with UE, many of them being government polytechnics.

### Background of revamping polytechnics with Medha

Medha has worked closely with the Directorate of Technical Education, Uttar Pradesh, since 2019. We partnered with the department for the first time through Uttar Pradesh State Training and Placement Cell (UPSTPC). Under the UPSTPC project, Medha reached out to 147 Government Polytechnics across seventy-five districts of Uttar Pradesh to deliver employability skills workshops to the students and seek placement opportunities for them. During the project's tenure from 2019 to 2021, Medha and the department identified that to improve overall systems and enhance learning & placement outcomes of polytechnic institutions, it is essential to identify the gap areas and prepare a roadmap to bridge them. In January 2022, Medha signed an MoU for five years with the

Directorate of Technical Education and became "Knowledge Partners" for the holistic development of the Polytechnic ecosystem of 166 Government and Aided colleges across seventy-five districts of Uttar Pradesh.

The objectives of this "Knowledge Partner" MoU are as follows:

- Industry (Improving interface for placements, promoting internships, apprenticeships, industry exposure, and keeping polytechnics at par with industry)
- Infrastructure (benchmark AICTE and state institutional ranking framework
- Instruction (improve teaching-learning techniques, curriculum, assessment, 21st-century skills, entrepreneurship development, and support programs)
- Improving enrollments, specifically women, and making polytechnic aspiration for women
- Promoting an outcome-based approach through a strong data-backed monitoring and evaluation framework.

Medha conducted a diagnostic study on these 147 polytechnics and proposed some areas of intervention. The Department of Technical Education created the Unnayan Committee, which consisted of members from within the polytechnic system who further helped the department consolidate the gaps and propose feasible solutions to bridge them. The Unnayan committee did extensive research by visiting different states like Gujarat, Maharashtra, and Tamil Nadu to gather the best practices in the polytechnics. The department also formed an Expert Committee consisting of specialists from various fields who also gave recommendations on all the identified areas of intervention. Medha assisted the department in compiling the Unnayan Committee Report and drafted the State Action Plan for developing polytechnics.

The focus of this partnership is to work on the areas of intervention closely with the department and assist the department in implementing the recommendations.

# ABOUT MEDHA

Medha helps students to achieve rewarding careers of their choice. Our combination of 21st-Century skills training, career counseling, and alumni support propels young people on career paths of their choice. Since 2011, we have improved workplace engagement, income growth, and female labor force participation for thousands of students across hundreds of educational institutions. And we are currently partnering with multiple state governments to bring our programming and approach to millions more.

Over the past two years, Medha Learning Foundation have worked with over 300+ educators of various universities, government institutions and corporate to deliver 21st century facilitation skills programs across Kurukshetra University, Govt ITI UP, Skill Development & Industrial Training (SDIT) Haryana & Govt. Polytechnic Uttarakhand as well as with corporate like Cognizant and Ambuja Cement Foundation.

DTE and Medha now are working together to deliver Facilitation Techniques at Universities & affiliated Degree Colleges across UP, Haryana and Bihar. It is designed to equip educators to integrate learner centric pedagogy and technologies to keep pace with the constantly evolving learners and learning spaces.

We are supported by leading corporations and global foundations such as Accenture, JP Morgan, and Edel Give Foundation; and have received numerous awards and recognition for our work, including the Echoing Green Fellowship, the Dasra Girl Power Award, and were recently named a finalist for the Elevate Prize.

### **NEP requirements**

The NEP 2020 also requires faculty to use this methodology in class. As per its guidelines in NEP policy 2020, continuous professional development for College and University teachers will continue through existing institutional arrangements and ongoing initiatives. These will be strengthened and expanded to meet the needs of enriched teaching-learning processes for quality education

# **21st Century Skills and NCF**

The need of Life Skills is also stated in the National Curriculum Framework (2005) The importance of the integration of Life Skills can be seen in the following excerpts from the National Curriculum Framework (2005)

- Development of life skills such as critical thinking skills, interpersonal communication skills, negotiation/refusal skills, decision making/problem solving skills and coping, and self- management skills is/are also very critical for dealing with the demands and challenges of everyday life.
- The process of acquiring a sense of self is linked to physiological changes and learning to negotiate the social and psychological demands of being young adults. Responsible handling of issues like independence, intimacy, and peer group dependence are concerns that need to be recognized and appropriate support be given to cope with them.
- It is important to recognize that adolescents need social and emotional support that may require reinforcement of norms of positive behaviour, development of life skills essential to cope with the risky situations that they encounter in their lives, manage peer pressure and deal with gender stereotypes.
- Health & Physical Education has the potential to motivate learners to acquire generic skills like agility, balance coordination and life skills, especially critical and creative thinking, communication, problem solving, decision making, management of emotions and stress.

# ABOUT THE PROGRAM

The Facilitation Advancement Bootcamp (FAB) is based on and is intended to train faculties on Experiential Pedagogy, which is one of the many ways of Active Learning and Visible Thinking, (Part of Project Zero, Harvard University).

# Theory of Constructivism and Need of Experiential Pedagogy

This program aims to train teachers on Experiential pedagogical methods which strongly advocate Active Learning. To understand Active Learning, we must first look at a theory called constructivism. Constructivism strongly emphasizes the idea that students build or construct their own understanding.

The notion of learning as a process of "creating meaning" is advanced by constructivists. To reach deeper understanding levels, learners expand their prior knowledge and understanding. As a result, students can better analyze, assess, and synthesize concepts—achieving the higher-order skills listed in Bloom's Taxonomy. The teaching strategy known as "active learning" encourages pupils to actively participate and learn by "doing."

Thus, this Program has four major components; each module is based on each of these parts, which entirely covers the experiential pedagogy technique, a strong arm of Active Learning. The modules are designed keeping in mind the CARA (Context Setting, Activity, Reflection, Application) framework which ensures we use writing, speaking, and drawing out for long-term memory and learning, thereby ensuring that learning occurs "by doing."

C- Context Setting, Introduction

A-Activity in Groups or Individually,

R- Reflection through the WSN model (What we knew, so what we can do, Now, what to do)

A-Application, Presentation, Assessment

It follows Bloom's Taxonomy approach, which helps the teachers **understand the objectives of classroom teaching**. It guides them to change the questions' complexity and helps students achieve higher levels of hierarchy. Further, it helps to develop critical thinking among teachers.



# **Benefits of Experiential Pedagogy**

- Students can connect with real word examples as they are used in class for all topics.
- Students can understand that one problem can have multiple solutions, and thus, they can use their creativity as guided by the expert.
- It has proven to be a better technique as compared to theoretical learning and helps to accelerate learning.
- Students can integrate theory and practice through continuous example usage. It also helps in remembering concepts and ideas for a more extended period.
- Experiential Pedagogy promotes teamwork and collaboration. Thus, students can build on their communication skills.

# Objective

By this workshop's end, Faculties can practice experiential pedagogy and use facilitation tools.



Enable teachers to practice experiential pedagogy and student engagement techniques to make classroom delivery engaging.



Enable teachers to do constructive feedback, manage time, and be able to solve problems using the given approach.

### How to use this manual

The trainers are expected to read the introduction very thoroughly. Every session that has been covered in the workshop has been discussed in a handbook provided to participants for a better understanding of the topic. Facilitators should keep in mind the following Experiential learning principles:

- Experiential learning occurs when carefully chosen experiences are supported by reflection, critical analysis, and synthesis. Therefore, experiences are structured to require the student to take initiative, make decisions, and be accountable for results.
- Throughout the experiential learning process, the student is actively engaged in posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative and constructing meaning.
- Students are engaged intellectually, emotionally, socially, soulfully, and/or physically. This involvement produces a perception that the learning task is authentic.
- The results of the learning are personal and form the basis for future experience and learning.
- Relationships are developed and nurtured: student to self, student to others and student to the world at large.
- The instructor and student may experience success, failure, adventure, risktaking and uncertainty, because the outcomes of the experience cannot totally be predicted. o Opportunities are nurtured for students and instructors to explore and examine their own values.
- The teacher's primary roles include setting suitable experiences, posing problems, setting boundaries, supporting students, ensuring physical and emotional safety, and facilitating the learning process.
- The teacher recognizes and encourages spontaneous opportunities for learning
- Teachers strive to be aware of their biases, judgments, and preconceptions, and how these influence the student.
- The design of the learning experience includes the possibility of learning from natural consequences, mistakes, and successes.

The content has been divided into two parts:

These are imperative sessions

that need to be done.

- Sessions for better classroom environment
- Sessions for Self-Learning of Facilitators

### Each lesson plan has been categorized into two types



These are sessions that the trainer can skip in case they are stuck for time. Ideally, all sessions must be covered.

# **Facilitation of Learning Experiences**

Ten basic principles will enhance the learning experience:



Facilitated learning is learnercentered, not facilitator-centered.



The facilitator is in the learning experience with the learners, not just an observer.



Adult learners have specific needs that facilitators must fulfil for learning to occur.



Facilitators create opportunities for learners to share their experiences and expertise.



Facilitators encourage and support balanced participation in the learning group.



Facilitators create a comfortable and supportive environment where learners can take risks.

The facilitator's goal is to make learning happen.







Facilitators protect and affirm ideas.



Facilitators remove obstacles from the learning process.

### **Glossary of words**



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# WORKSHOP PLAN

### DAY 1

10:00am to	Welcome and Expectation
10: 30am	Setting (30 mins)
10:30am to	Design Action and
11: 30am	Implementation (1 hr)
11:30am to	21st Century Skills
1: 30pm	(2 hrs)
	Experiential Pedagogy (1 hr 30 mins)
4:00pm to	Experiential Theory - 1
5:00pm	Objective Setting (1 hr)

### **DAY 2**

10:00am to	Experiential Theory - 2
11: 00am	Context Setting (1 hr)
11:00am to 1: 00pm	Experiential Theory - 3 Student Engagement & Visual Thinking (2 hrs)
2:00pm to	Experiential Theory - 4
2: 30pm	Reflection (30 mins)
2:30pm to	Complete Experitntial
3:30pm	Lesson Planning (1 hr)
3:30pm to	Effective Communication
5:00pm	& Active Listening (2 hr)

# DAY 3

10:00am to	Role of a Facilitator
11:00am	(1 hr)
11:00am to	Feedback Mechanism
12:00pm	& DIY (1 hr)
12:00pm to	Problem Solving Techniques
1: 00pm	Area of influence (1 hrs)
2:00pm to	Problem Solving Techniques
3:00pm	5 Why Method (1 hr)
3:00pm to	Post Training Survey &
5:00pm	Feedback (2 hr)

Facilitation Skills

Self Learning Skills

# WELCOME AND EXPECTATION SETTING



#### Day 1

#### Session 1



Time: 30 mins

Material used for Session: Whiteboard, Marker, Attendance Sheet, Welcome PPT

**Objective:** To introduce all the faculties and facilitators to each other and do the expectation mapping

**Context Setting:** Welcome to all the Faculties. Please introduce yourself, Medha, and explain the importance of this program (take notes from the earlier sections like introduction and About Medha). Ask all Faculties to introduce their names and fill out the attendance sheet. Please use the following format for Attendance

Name	College	District	Department	Designation	Gender	Age	Whatsapp	Email	Day 1	Day 2	Day 3

Ask faculties to tell them what they expect from the facilitation. List it on the whiteboard. Then, tell them what you will be covering and scratch out what is not going to be covered in the workshop. Set the ground rules for:

- 1. Time Adherence- Timelines must be followed strictly.
- 2. Certification Criteria- Min 75% attendance and completion of Medha's self-assessment
- 3. Participation- Everyone must participate.
- 4. Asking questions- No question is a silly question!

Show Welcome PPT

# Day 1 DESIGN ACTION / IMPLEMENTATION PLAN AND ITS IMPORTANCE

#### Session 2



Time: 1 hr

**Material used for Session:** Laptop, projector, pen drives for transferring data in the central system, PPT of Step-by-Step implementation flow.

**Objective:** By the end of the session, facilitators will be able to understand the process and journey of project ISTEUP (Initiative for Strengthening Technical Education in Uttar Pradesh)

Context Setting: Ask the faculties the following:

- 1. If they were to design a training program, how would they do?
- 2. Will just training be enough?
- 3. What else will you do to ensure that your participants follow training instructions?

#### Main Activity:

Start the PPT and say that Medha sees the journey like this:

Explain the slide at every step as given. Park all questions for once the PPT is over.

#### **Reflection:**

- 1. What positive outcomes would you see if we implemented this plan?
- 2. What bottlenecks are you apprehending at this point?(Pick a couple of relevant
- challenges and discuss workable solutions)
- 3. Do you foresee a Peer Learning Community developing?
- 4. What will be its advantages?
- 5. How can we ensure that this PLC is actively engaged?

# HOW TO IMPROVE YOUR STUDENT LEARNING ENVIRONMENT?

### SAY THE FOLLOWING TO THE PARTICIPANTS:

Research says that effective learning occurs when a conscious effort is put into creating a conducive classroom environment that enhances communication and critical thinking skills in students. We conducted a survey to understand students' desires, and it's clear that they highly value a stimulating classroom environment. In the upcoming part of the training, we will explore techniques to create such an environment precisely."



# Day 1 21<sup>ST</sup> CENTURY SKILLS

#### Session 3



#### Material used for Session:

For Activity 1: 15 complete sets of newspaper for each team (according to the number of groups to be formed, 8-10 kg is needed), one pair of scissors, one broad packing tape for each team, one football, a whiteboard, and a marker, PPT

For Activity 2: Blindfold, Cotton, Scissors, obstruction (any resource available at site like crumpled pieces of paper, chairs, tables etc)

**Objective:** By the end of this activity. Faculties will be able to list what skills of the 21st century were used in this activity.

Context Setting: Ask Faculties the following questions for context setting:

- What skills are required in today's world for students?
- How will students benefit?
- Where do they learn these skills?
- How do we teach these skills?

(List them down on the whiteboard)

There are 2 activities a trainer may choose from, depending on the resources available

#### Activity 1:

Divide the group into equal teams. Give one set of materials to teach and instruct them to make a paper bridge using these materials. The time to prepare the bridge will be 30 minutes. They must make the bridge so strong that it can bear maximum weight and should be enough high that the given football can be rolled from under it. Start the activity and make observations. At the end of the timeline, check all bridges. The strongest and tallest is declared the winner



#### Activity 2

Divide the group into equal teams. Give one set of materials to each team to play the Sheep and the Shepherd. Instruct that each team will have one Shepherd and the rest will be sheep with blindfolds. The Shepherd must drive the blindfolded sheep from a demarcated point A to point B whilst only calling out sounds/syllables. No words must be spoken. Therefore, it is essential that they strategize on codes to use before they start. All teams will be given separate time to plan this. The opposing teams can place obstruction from available resources on the playing field. Any team member who touches the obstruction will be out. The team which crosses in the least time and with maximum members still active will win.

#### Discussion questions of the activity

- 1. What strategy made the team win?
- 2. What ignited the win or defeat?
- 3. What could have been better?

4. What are the evident skills that you learned & what are the non-obvious ones? (Make a note on the whiteboard)

5. Out of the said skills, how many skills can be categorized (Hint: Learning skills, Life Skills, Literacy Skills.

6. Tell them the class they take can be successful only when all the 4C's are utilized to teach. The students should Communicate and Collaborate with each other, and they should have been able to use Critical Thinking and Creativity during the class. This will ensure long term memory within the classroom learning. If this happens only then has learning actually happened.

7. The facuilty should therefore design their lesson plan such that these skills are used.

#### Show them the PPT for day 1, 21st Century Skill

#### Reflection

- 1. What are skills that were learned in the activity
- 2. Do you think these skills are required for students?
- 3. If so, why and where will it help?
- 4. How can students contribute to their college, community, and society after learning these skills?
- 5. Are these the 21st century skills?
- 6. Why is it important for students to learn these skills?
- 7. How can you inculcate these skills in students?

# 21<sup>ST</sup> CENTURY SKILLS - TRAINER REFERENCE

# What is it and why do we need it?

Due to changes in the labour market today, it is crucial for people to acquire various skills to survive in this rapidly changing and developing time; job seekers nowadays need different qualities and abilities than they did in the past. How can we equip our children with these talents, then? The solution is assist them in developing 21st-century abilities. Concisely, 21st-century skills refer to various characteristics that support today's learners in thriving in the dynamic labour market and preparing them for the future. The emphasis on memory and rote learning, once typical education standard practices, will only adequately prepare today's students.

Over the last twenty-five years, several institutions and international organizations have proposed frameworks and outlined competencies to address twenty-first-century challenges.

- The Delors Report (1996)
- Wagner (2010) and the Change Leadership Group3
- The Asia-Pacific Economic Cooperation (APEC)
- Partnership for 21st Century Skills (P21)
- WHO
- OCED

# The Three 21<sup>st</sup> Century Skill Categories

Each 21<sup>st</sup> Century skill is broken into one of three categories:



#### Learning skills

Learning skills (the four C's) teach students about the mental processes required to adapt and continuously improve in a modern work environment.

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### Literacy skills

Literacy skills (IMT) focus on how students can discern facts and note the publishing outlets and technology behind them. There's a strong focus on determining trustworthy sources and factual information to separate facts from the misinformation that floods the Internet.



### Life skills

Life skills (FLIPS) look at the intangible elements of a student's everyday life. These intangibles focus on both personal and professional qualities.

Altogether, these categories cover all the 12 21<sup>st</sup> Century skills that contribute to a student's career in the future.

Let's take a closer look at the first category which is relevant for facilitation skills.

# 21<sup>st</sup> CENTURY SKILLS

21<sup>st</sup> Century skills are 12 abilities that today's students need to succeed in their careers during the Information Age.

#### The twelve 21<sup>st</sup> Century skills are:



Social skills

Let us look at the first category relevant to facilitation skills.

Learning Skills Category (The Four C's)

The most common 21st Century talents are, without a doubt, the four Cs. These abilities are also known as learning abilities. These abilities are more widely known among educators because they are essential for all occupations. Their value varies depending on a person's job goals.

#### The learning skill (Cs) are the most popular 21st-century skills.

More educators know about these skills because they are universal needs for any career and vary in importance depending on an individual's career aspirations.

# Learning Skills (The Four C's)

The four C's are by far the most popular 21<sup>st</sup> Century skills. These skills are also called learning skills.

The educators should know about these skills because they're universal needs for any career. These skills also vary in terms of importance, depending on an individual's career aspirations.

#### The 4 C's of 21<sup>st</sup> Century Skills are:



The most crucial skill for someone in the health sciences to possess is critical thinking.

Critical thinking is crucial to improvement in commercial environments. The process eliminates issues and replaces them with productive endeavours. When pupils cannot access a faculty, it enables them to solve problems independently.



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# Day 1 EXPERIENTIAL PEDAGOGY

#### Session 4



Time: 1 hr 30 mins

Material used for Session: Chapter on Environmental Protection (link): Whiteboard, Marker, WhatsApp group of Faculties, one chart paper per team, sketch pens, PPT

**Objective:** By the end of this activity, the participants will be able to tell the benefits of using experiential pedagogy.

**Context Setting:** Please share the link to Faculties in the WhatsApp group and ask them to read it individually and learn about it. The facilitator instructs that once the reading is completed, they must share with the facilitator and the larger group the most important way to protect the environment and why they think so.

After 10 minutes, the facilitator checks with the group how much more time they would need to complete the reading. After collecting a few responses, the facilitator further probes about:

- How they feel about the learning task
- Is this learning method tedious or exciting, straightforward, or complex?
- •As learners, what were you experiencing?
- If you can imagine that your students were given this learning task, what would they experience?
- If you were to conduct the same session in your class, how would you do it?

The facilitator solicits answers and builds up the need to experience the learning differently.

Now, let us do the same learning task differently and experience it.

#### Main Activity:

Divide the participants into smaller, equal groups. The chapter link is shared with all the groups. The facilitator instructs further to divide the reading into sub-topics within their respective groups. Each member reads the assigned topic, and upon completing the reading, they will share what they understood within their group. Upon completing the sharing, they then discuss and decide the most important environmental protection approach within the group. Once this is done, they will make a presentation using a PowerPoint or chart paper to the larger group. The facilitator must decide how much time each group gets for the presentation.

After all groups have presented, the facilitator opens the following points for discussion.

#### Points of Discussion of the Activity:

How did they feel about this way of learning?

- 1) Did you find it exciting or boring?
- 2) Did it help you to learn?
- 3) If we compare it to the other way of learning, how was the second approach different?
- 4) Which approach is expected to lead to better learning outcomes?

5) Which approach helped you experience better engagement? (If the facilitator gets answers like "first approach," it is OK. They should not get defensive. Explain that we cannot dispose of individual learning. This approach caters to both individual and social learning. It makes learning spaces more inclusive)

6) Do they think students will benefit more if they are taught like this?

The facilitator will summarize the discussion using PowerPoint. Connecting and linking to the participant responses will be useful during the debrief discussion.

#### **Closing discussion:**

The facilitator opens the conversation with the participants on whether this pedagogical model can be applied to different subjects and trades (or any specific topic

Note to facilitators: If some participants have a different opinion, it is OK. Just respect and accept it without defending the approach. Urge them to think about any valuable aspects from the overall experience that they think might be useful to take to their classroom. Facilitators can share that in the upcoming sessions; a few more strategies will be shared for their consideration.

#### **Reflection:**

Now list the answers on the other side of the whiteboard, giving the heading "Second Approach."

1) What was the experience?

- 2) How did you feel?
- 3) As far as you have heard, what did you understand?

4) What were some of the elements in the second approach that were different from the first approach?

5) What happened because of that?

#### **Facilitator Note:**

Now open the PowerPoint and explain the components of the pedagogy as they are written in the slides. It is strongly suggested that the facilitator connects the principles of experiential learning to the participants' discussion reflection and the activity participants experienced. For Example, ask if they experienced these components or principles of experiential learning in action today or yesterday. After getting the responses from participants, the facilitator may add that a debriefing is a revision of the entire day, and Reflection is the outcomes asked to inform of their understanding made.

#### **Closure and Extended Learning:**

1) Do they think experiential pedagogy can be applied to their trades?

- 2) How would this technique help them in classroom-based learning?
- 3) What are other ideas coming to your mind?

4) After learning this technique, how can you help students contribute to their college and community?

5) How this technique can help the students and college society

# EXPERIENTIAL LEARNING

# What is it?

Kolb's experiential learning theory (ELT) is a learning theory developed by David A. Kolb, who published his model in 1984. He was inspired by the work of Kurt Lewin, who was a gestalt psychologist in Berlin. ELT is a method where a person's skills and job requirements can be assessed in the same language that its commensurability can be measured.



### Why do we need it?

By engaging in hands-on experiences and reflection, students can connect theories learned in the classroom to real-world situations. When students participate in experiential learning opportunities, they better understand the course material and its application. It also ensures better retention.



### **Experiential Lesson Planning**

Integration of Training Components with Experiential Cycle



**Context setting:** This forms the first part of the cycle and in other words it is the way to introduce a topic and build on the previous knowledge or experience of the participants.

Activity: This is the part where a concrete experience is given. This can be in the form of a story, Anecdote, Game, or an Activity. Here, the interest is created further, and Faculties make observations. In this part, the second phase occurs, "Reviewing the experience"

**Reflection:** Here the Faculties build their concepts by answering questions and gradually apply it to real life concepts and experiences and plan how they want to take this learning in real life. In this phase, as per the cycle, the third phase of concluding from the experience occurs and the student is ready to go on to the application stage or the 4th phase of planning next steps .

### **List of Experiential Methods**



# EXPERIENTIAL PEDAGOGY



# **OBJECTIVE SETTING**


## Day 1

## Session 5



Time: 1 hr

### Material used for Session: PPT

**Objective:** By the end of the session, participants will be able to understand and apply practical Objective setting in Lesson Planning.

Context Setting: Ask the participants the following:

- Why does anyone go shopping if it is necessary? (Derive to the conclusion that there is a NEED to buy the product. Explain that you can address only when you know what need there is. You cannot address a need when you don't know what it is !!!
- What is the most important thing to know if you must go shopping? (You need to know what is to be bought.)
- Why do we need to know this? (Ans: for planning budget, location, time, etc.)
- We need to know the outcome before starting any task, right?
- Everything we do, like planning budget, location, time, etc., will be based on the outcome, right?
- We create an objective to determine the lesson's outcome. We need to determine what we

expect the student to know or be able to do by the end of the session.

### Main Activity:

Open Bloom's Taxonomy from the PPT and show various levels of knowledge, skills, and attitudes.

Briefly explain each level:

- Remembering: Retrieving knowledge from memory.
- Understanding: Interpreting and explaining concepts.
- Applying: Using knowledge in practical situations.
- Analysing: Breaking down information and identifying patterns.
- Evaluating: Making judgments based on criteria.
- Creating: Synthesizing and generating innovative ideas.

Discuss how these levels build upon each other.

Tell them that, supposing they want the student to be able to list a particular table, then the objective of the session will fall in the first category of "Remember." Likewise, they go up the pyramid. Explain all stages. Remind them that each textbook unit usually has an objective clearly stated at the beginning.

They must refer to it. When they create a lesson plan per section, they can subdivide it as per the main objectives. The "main activities" and "reflection" will depend on this objective. For example, if the aim falls to the "remember" stage, then the activity that they should decide should be such that it entails remembering. In this case, a group discussion where all learn and share their knowledge can be a good activity.

Examples and Practice (25 minutes)

1) Provide sample topics related to polytechnic education (e.g., "Designing a Solar Water Heater").

2) Ask participants to create learning objectives for these topics using Bloom's Taxonomy.

- 3) Guide them through the process:
- 4) Remembering: Recall facts about solar
- 5) Understanding: Explain how solar water heaters work
- 6) Applying: Design a simple solar water heater.

Now, ask the participants to take one topic from their syllabus and create an objective for the session's outcome. Ask for a few volunteers and discuss the correction if required. Tell them that an ideal objective should be written like "By the end of the session, students will be able to ...... (verb from Bloom's Taxonomy) ......

### Reflection

Ask the following questions to the participants:

- 1. What is the most important takeaway for you in this session?
- 2. How will this impact your lesson planning?
- 3. Why having a clear objective is important before executing a session/seminar etc?
- 4. Is the objective tied with the outcome of the event?

# **OBJECTIVE SETTING**

## What is it and why is it important?

Creating clear, measurable learning objectives is crucial for effective education. Using Bloom's Taxonomy, educators can design objectives that range from basic knowledge recall to advanced critical thinking. This guide will show how to craft objectives with Bloom's Taxonomy to align with learning outcomes and enhance student engagement.

## **Understanding Bloom's Taxonomy**

Bloom's Taxonomy is a hierarchical framework that categorizes cognitive skills into six levels arranged in ascending order of complexity:



Each level represents increasingly sophisticated mental processes, guiding educators in formulating objectives that promote progressive learning and development.

## **Creating Objectives Using Bloom's Taxonomy**



## REMEMBERING

**Objective:** Students will recall facts, concepts, or procedures.

**Example:** Identify key events leading to the American Civil War.

## UNDERSTANDING

**Objective:** Students will demonstrate comprehension of ideas or concepts.

**Example:** Explain the principles of supply and demand



## APPLYING

**Objective:** Students will apply knowledge or skills in new contexts.

**Example:** Solve real-world mathematical problems.



## ANALYSING

**Objective:** Students will examine and break down information into parts.

**Example:** Compare and contrast different literary genres.



## **EVALUATING**

**Objective:** Students will make judgments based on criteria and standards.

**Example:** Critique the effectiveness of a persuasive argument in a debate.



**Objective:** Students will generate innovative ideas or products.

**Example:** Design an original experiment to test a scientific hypothesis.

## **Experiential Pedagogy: Theory 1**

# CONTEXT SETTING



## Day 2

## Session 1

Time: 30 mins

#### Material used for Session: White Board, Marker

**Objective:** By the end of the session, the faculty will be able to understand context settings and list examples.

### Context Setting: Ask these questions from the participants

- How do you introduce a topic?
- What is the need to introduce a topic?
- What are the different methods to introduce a topic?
- What are the types of Context Settings? List the points on the board. Hint: Storytelling/ anecdote/uses or requirement of a product

## Activity/Game

Tell the Faculties it is "Bhoomika bandhana."

The idea is to create curiosity. Remember that while creating interest, we should start from something students know, i.e., concrete visualization to abstract thoughts or something they do not know. The faculty wants them to think about it. Using the probing technique helps a lot.

E.g. the chapter topic is Aerodynamics- Movement of Air

Ask questions like: Isn't it hot today?

What can I do to make the room more pleasant? Hint: Switch on the fan or increase the speed of the fan

How does the room become cooler by switching on the fan? Hint: Air circulates, and warm air is replaced by cooler air as the fan moves the air in a circular movement.

What makes the air move? Let them wonder and then say, "Ok, let's find out in this chapter."

### Main Activity:

DIY (20 minutes of the hour)

Ask Faculties to pick any topic of their trade and make them create a context setting for each in the notepad. Ask them to volunteer and present their work.

### **Reflection:**

1. How long do you think it should be? Hint: it should be for a maximum of 10 minutes.

- 2. Why is it important? Hint: it creates interest
- 3. Is it better to include this?
- 4. Would you like to use it?
- 5. How would you decide which style to use?



## What is it?

Context setting, or "bhoomika bandhana," as we refer to it, is the deliberate act of introducing a topic or concept in a way that captivates learners' attention and primes their minds for exploration. It involves answering fundamental questions such as how, why, and what, while seamlessly transitioning from the known to the unknown. The essence lies in creating a bridge between familiar ground and uncharted territories, sparking curiosity, and laying the groundwork for meaningful learning experiences.

## Why do we need it?

The significance of context setting cannot be overstated. It serves multiple crucial purposes:

## **CREATING INTEREST**

Context setting piques learners' curiosity, making them eager to delve deeper into the subject matter.

## FOSTERING UNDERSTANDING

By providing a framework for comprehension, context setting facilitates the assimilation of added information.

## PROMOTING ENGAGEMENT

Engaging narratives and thought-provoking questions captivate learners' attention, fostering active participation and retention.

## ESTABLISHING RELEVANCE

Context setting helps learners connect new concepts to their existing knowledge and real-world experiences, highlighting the relevance of the topic.

## **Crafting Context Setting for Experiential Sessions**

Creating effective context setting for experiential sessions requires careful planning and consideration of learners' needs and interests. Here is a step-by-step guide.



## **STARTING WITH FAMILIAR**

Begin by tapping into what your audience already knows. For instance, if you are "marveled at the beauty of a sunset?" Have you ever touched a wall in the middle of harsh summer?



## POSE INTRIGUING QUESTIONS

Once you have captured their attention, gently guide them towards the unknown. Ask questions that pique curiosity and invite exploration. For example "Have you touched a metal sheet in that same heat?



## UNVEIL THE MYSTERY GRADUALLY

Now, it is time to peel back the layers of curiosity. Share simple explanations or anecdotes that shed light on the topic. You could explain how the temperature of an object is dependant on the content it is made of.



## **ENGAGING THE SENSES**

Encourage visual thinking by painting vivid mental pictures. Describe scenes or scenarios that evoke curiosity and imagination.



## **REAL-WORLD CONNECTIONS**

Relate the topic to everyday experiences to make it relatable and relevant. For instance, if you are teaching about the principles of heat, you might use examples from touching of a "mud-handi "when it is on fire vs a metal skillet when it is on a burner.

## **Experiential Theory - 2** EFFECTIVE STUDENT ENGAGEMENT



## Day 2

## Session 2



Time: 2 hrs

## Material used for Session:

PPT for student engagement, whiteboard, Marker, Visual thinking Matrix, Project Zero link: PZ's Thinking Routines Toolbox | Project Zero (harvard.edu)

#### **Objective:**

By the end of the session, faculties will be able to

- List the eight steps of Student Engagement, understand what it is and its importance,
- and list diverse types of student engagement techniques.
- They will also be aware of Visual Thinking routines and their use.

### **Context Setting:**

Ask and list how Faculties engage their students, what challenges they face, and what advantages they will have if they use experiential lesson plans.

- What is Effective student Engagement?
- Why do we need it?
- What are the underlying essentials you must follow while executing a method of engagement?
- What are different engagement strategies/methods we can use in class?

## Main Activity:

Ask faculty to do two engagement activities on the same topic they used for the context setting. Ask for input from everyone. Although we all know about these techniques collaboratively, talking about them helps learning become more concrete. Use PPT to explain the eight steps of Student engagement and connect. Next, show them the slide in PPT of diverse types of Student Engagement Activities and then tell them about a new kind that will be discussed.

Now, discuss any news highlights, such as the Harshad Mehta Scam, which everyone may or may not know.

You can use more examples, such as Chanda Kochar's ICICI bank Scam, Chandrayan's launch, or the Ukrainewar, whichever one they are comfortable with.

• Ask them if they have heard about it and what they THINK THEY KNOW about it. It is OK if they have not. Even if they have not, make them draw their ideas on paper.

• Each participant should tell what they have drawn and why they think so or what makes them say that.

• After this, ask them what they are puzzled or wondering about this topic. List down all the things they want to know.

• Now, they should tell how they will explore the answers to their questions. List down all answers. Then, make them go through them and read about them. Then, share what they learned.

• After their research, ask them if they found the answers they sought.

#### **Questions to Discuss**

- How was this experience of learning about something new or partially new?
- Would you like to share anything unique, new, or different about this way of learning?
- If you revisit the activity, can you list the key steps? (The facilitator lists the responses from the participants on the whiteboard. Look for answers corresponding to See, Wonder, and Explore, and write them on one side of the board. Others can be placed on the other side).

• How did each step contribute to learning about that topic?

### **Facilitator Note:**

While debriefing, highlight the aspects of this process by sharing the following (how this helps in):

- Personalized learning (because they explored their curiosity)
- Collaborative Learning: Learning from each other fosters a social learning culture.
- The joy of self-learning/self-discovery: The greatest happiness in learning occurs when we fulfil our exploration journey.
- Ownership of learning: By involving the learners in their exploration journey and empowering them with self-exploration tools, the learner takes ownership of the learning process.

• Foster meaningful connection: Connection with oneself, the topic, and each other create a synergy that/ leads to accelerated learning (more, faster, diversified) coverage).

### All of the above leads to better learner engagement.

Tell them that in this technique, we see something we think we know, wonder about what we want to know, and then explore it. Like this technique, PZ Thinking Routines researches and collates many other methods. Now, tell them we can use the same technique for our classroom teaching with the help of PZ tools. Introduce Visual Thinking and thinking routines to them.

## Activity 2:

Take them to PZ's Thinking Routines Toolbox | Project Zero (harvard.edu). Show how to use it by clicking all the tabs. Give them 15 minutes to explore this tool. Tell them that out of the experience, we will advise them use the following routines:

- Chalk Talk
- Think Wonder Explore
- Compass Point
- Think Puzzle Explore

Explain each with the example stated below.

Now divide them into groups. Ask them to identify any topic in their subject and select an appropriate routine from the first block of the given matrix. The participant should also consider the rationale for choosing a routine. The participants are required to create an engagement plan using the selected routine. Give them 20 minutes for the task.

#### **Reflection:**

Pick one or two volunteers and ask which thinking routine they selected and why.

1) What will be different when you use thinking routines for your class learning?

2) What was the outcome of this process? Hint: It made thinking visible, and thus learning was effectively visible

3) Why is thinking critical, and why is making thinking visible even more critical in today's day and age?

4) Why is developing a thinking culture in our classrooms important today? Drive the conversation towards developing skills that can provide contextual solutions. Just by knowing simple skills, we cannot match the accuracy of AIs and machines.

#### Facilitator notes to think about or drive the discussions:

1) Learning is a consequence of thinking.

2) Good thinking is not only a matter of skills but also of dispositions. Open-mindedness, curiosity, attention to evidence, scepticism, and imagination are essential.

3) The development of thinking is a social endeavour.

4) Fostering thinking requires making it visible. Thinking happens mostly in our heads, invisible to and ourselves. Influential thinkers make their thinking visible, externalizing their thoughts through speaking, writing, drawing, or other methods. They can then direct and improve those thoughts. Visible thinking also emphasizes documenting thinking for later reflection.

5) Colleges must have cultures of thinking for faculties and students.

## **Effective Student Engagement**

## WHAT IS IT?

Educators may use a wide variety of strategies to promote positive emotions in students that will facilitate the learning process, minimize negative behaviours, or keep students from dropping out.

## WHY DO WE NEED IT?

Engaged students exert intense effort and concentration in the implementation of learning tasks. They show positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest.



## **Visual Thinking Routines**

## WHAT IS IT, AND WHY DO WE NEED IT?

When learners speak, write, or draw their ideas, they deepen their cognition. Project Zero's Visible Thinking approach shows how. It is a methodology of teaching which enhances the learners' ability to



According to it, students learn better and more efficiently when they can see what they think and want to know and when they research about it. In short, when they make their thinking visible. (Please scan the QR for the article)

It is based on the following principles:

- Learning is a consequence of thinking.
- Good thinking is not only a matter of skills but also a matter of dispositions.
- The development of thinking is a social endeavor.
- Fostering thinking requires making thinking visible.
- Classroom culture sets the tone for learning and shapes what is learned.
- Schools must be cultures of thinking for Faculties.

## **Thinking Routines**

Tools for Making Thinking Visible Project Zero researchers developed more than 30 thinking routines in collaboration with K–12 Faculties.

Routine	Key thinking moves	Notes
Routines for Introducing & Exploring Ideas		
See-Think-Wonder	Describing, interpreting, and wondering	Good with ambiguous visual stimuli
Zoom In	Describing, inferring, and interpreting	Variation of STW involving using only portions of an image
Think-Puzzle-Explore	Activating prior knowledge, wondering, planning	Good at the beginning of a unit to direct inquiry
Chalk Talk	Uncovering prior knowledge and ideas, questioning	Open-ended discussion on paper. Ensure all voices are heard
321 Bridge	Activating prior knowledge and ideas, connecting	Works well when students have prior knowledge
Compass Points	Decision making and planning, uncovering reactions	Solicits the group's idea and reactions to a proposal or plan
Explanation Game	Observing details and building explanations	Variation of STW that focuses on explaining to build an understanding

Routine	Key thinking moves	Notes
Routines for Synthesizing & Organising Ideas		
Headlines	Summarizing, capturing the heart	Quick summaries of the big ideas or what stands out
Color, Symbol, Image	Capturing the heart through metaphors	Nonverbal routine that forces visual connections
Generate-Sort-Connect	Uncovering and organizing prior knowledge	Highlights the thinking steps of making an effective concept map
The 4C's	Connection making, identifying key concept	A text-based routine that helps identifying key points from complex text
Micro Lab	Focusing attention, analyzing, and reflecting	Can be combined with other routines and used to prompt reflection
l used to think	Reflecting and meta-cognition	Used to help learners on how their thinking has shifted

Routine	Key thinking moves	Notes
Routines for Digging Deeper into Ideas		
What makes you say that?	Reasoning with evidence	A question that teachers can weave into discussion to push students to advice
Circle of Viewpoints	Perspective taking	Identification of perspectives around an issue
Step Inside	Perspective taking	Stepping into a position and talking to gain a deeper understanding
Red light, Yellow light	Monitoring, identifying of bias, raising questions	Used to identify possible errors in reasoning, over-reaching
Claim Support Question	Identifying generalizations and theories	Can be used with a basic structure for scientific or mathematical thinking
Tug of War	Perspective taking, reasoning, identifying complexities	Identifying and building both sides of an argument or tension

## **Examples of Visual Thinking**

We would like to extend our gratitude to these teachers of several Ploytechnic in Uttar Pradesh who diligently understood and crafted these brilliant Visual Thinking Routines for their trades and allowed us to use them in our handbook

This is just for teachers of related departments to understand how to base a chapter on visual thinking.

## **1. COMPUTER SCIENCE**

**Computer storage** (contributed by Mrs. Leena Choudhary, lecturer Government Polytechnic Kursi Road Barabanki)

#### Context setting through the Think Puzzle Explore technique

Ask participants to recall their first day on Campus. Ask them how they made memories of it, both in their minds and outside. Look for answers in my mind and phones or photos. If they say they did not store any such memory, then ask how they would keep it if they wanted to. Look for answers via phone, or laptop. Then connect just like we have our mind as our storage place for memories in our body, the computer too has a storage place.





Scan to read more

## **2. MECHANICAL ENGINEERING**

**Application of Thermodynamics** (contributed by Mr. Gyan Prakash, lecturer Government Polytechnic Kursi Road Barabanki)

Context setting through See Think Wonder Routine





#### WONDER

What does this make them wonder? What questions does it make them ask? Be careful that students do not ask if their previous thinking is 'right,' but they expand their wondering to broader issues. List the question on board. Now, take them to the textbook and start finding answers.

## **3. CIVIL ENGINEERING**

**Foundation laying** (contributed by Mrs. Ankit Gupta, lecturer Government Polytechnic Hewett Road Lucknow)

Context building through Compass Points Routine

To set up the activity, you will need large pieces of paper on each of the four walls, one for each compass point. Students will stick their writing to it later. Give the students an image of a building standing on concrete and a building standing on riverbank sand.



## **EXPERIENTIAL THEORY-3:**

# REFLECTION



## Day 2

## Session 3



Time: 30 mins

Material used for Session: : Whiteboard, marker, PPT for Reflections

**Objective:** By the end of the session, Faculties will be able to form reflection questions.

**Context Setting:** Ask the Faculties to consider the trainer's steps in each session. List answers on the board and group them as Context Setting, Activity, and Reflection. Tell them we are now learning to guide the students' learning through questions or reflection.

## Main Activity:

Ask the Faculties to list the steps of the Experiential Method. Remind them how the end of the sessions in every module was taken. Ask them why they think it is done and how it impacted the session. Ask the Faculties to list the types of questions that were asked in previous sessions towards the end & to put them in separate buckets as per (What, So what & Now What) Hint:

1st bucket: What happened?

2nd bucket: So, what or a more personal exploration of why it happened?

3rd bucket, now what or how the lessons learned can be applied?

Show them the PPT and explain as such.

Now, ask them to create questions about a particular topic of their trade. Toward the end of the session, give them 15 minutes to review the questions.

## **Reflection:**

- 1. What did you learn?
- 2. Why is reflection critical?
- 3. How can you think of questions?
- 4. What would happen if reflection were not taken after the session?
- 5. How does having a good reflection lead to a good society?

## What is it?

Reflection is a key component of students' experiential learning. Defined as a cognitive process which requires active engagement on the part of the individual, reflection involves examining one's responses, beliefs, and premises in light of the situation at hand.



## **THREE STAGES TO REFLECTION MODEL**

## Instructions for facilitating 'What? So What? Now What?'

As WSWNW is split into three distinct phases, we've included instructions for each:

### What?

- After an activity to be reviewed is finished, gather everyone back together in their teams.
- Give each participant the opportunity to reflect individually for a couple of minutes, and ask them to write down their thoughts. It works well here as they'll be sharing their thoughts with others in their team.
- Encourage them to focus on the objective experience, and use facilitation questions to guide their thoughts. See the 'What?' section of the 'Good reflection questions' section in the following page for suggested questions.
- Ask individuals to regroup into their teams and share their thoughts with each other.
- Invite each team to present their thoughts to the group as a whole, with emphasis on objective reports of what happened rather than subjective interpretations.
- While groups are presenting, write key information down on a whiteboard or similarly visible surface.

### So What?

- Again, give each participant the opportunity to reflect individually, asking them to write down their thoughts about the subjective aspects of the task.
- Use the facilitation questions from the 'So What?' section to guide their thoughts.
- Repeat steps 4-6 above, emphasising subjective information instead of objective.
- Discuss emergent ideas and conclusions as a group.

### Now What?

- Give participants a minute to jot down their ideas about how to move forward based on the insights from 'What?' and 'So What?'
- Give teams 5 minutes to share and build their ideas.
- Gather the whole group and encourage group discussion using the facilitation questions in the 'Now What?' section.
- To maximise the efficacy of WSWNW in an experiential learning context, we recommend repeating the initial task as a way for participants to put their ideas to the test.

## **Good reflection questions**

One important element of good reflection questions is choosing those which align well with the task at hand, and which prompt lines of thought that will lead to meaningful change. In general, you can tell good review questions from bad ones with a quick sense check. Bad review questions are closed, loaded, provoke a defensive response, shut down thinking, and get people to critique the activity rather than the process.



What were your actions based on?

What knowledge or expertise did you bring to the situation?

What is your understanding of the activity now?

Reflection questions for the 'So What?' stage

### What did you learn?

Did anything surprise you or deviate from your expectations?

Did you enjoy it? What did or didn't you like particularly?

What do you need to do in order to improve things next time?

What might be the root causes of any identified issues?

If you could do the project again, what would you do differently?

Reflection questions for the 'Now What?' stage How can you apply this learning in future iterations of this activity?

Is any follow-up needed to address any challenges or difficulties?

What learning occurred for you in this experience?

## Day 2 COMPLETE EXPERIENTIAL LESSON PLANNING

## Session 4



Time: 1 hr

Material used for Session: Lesson Plan Template and Experiential Planning Slide

**Objective:** By the end of the activity, Faculties will be able to make complete lesson plans using experiential pedagogy.

**Context Setting:** Show the faculty's Experiential Planning Slide and take them through the process flow. And tell that learning is only complete with a final application. In this part of the session, they will assemble all the elements of experiential pedagogy.

#### Main Activity:

- Ask Faculties to use the template given and create 2 lesson plans using experiential pedagogy.
- Give them 30 minutes for the activity.
- Ask as many faculty members to share their plans as time allows.

### **Reflection:**

- 1. What did you do?
- 2. How will the experiential lesson plan help you in your classroom delivery?
- 3. Why session plan /structuring is important?
- 4. Where can you use this?
- 5. How does this pedagogy contribute to the society at large?

## Experiential Methodology Worksheet

Name: Subject:	For class of: Topic:
About t	he session
Objective: Time:	Session requirement:
Design your session according to	these Session Planning components
1. Context setting	2. Main activity/ Method of execution
3. Discussion/ Reflection questions	Debrief/ Key takeaways (usually done after multiple sessions on a particular topic)
Anything extra	



Scan to read more

## **Experiential Methodology Lesson Planning Examples**

We would like to extend our gratitude to these teachers of several Ploytechnic in Uttar Pradesh who diligently understood and crafted these brilliant lesson plans for their trades and allowed us to use them in our handbook

## **TRADE: MECHANICAL ENGINEERING**

## **TOPIC: FORGING**

Mr Chandrabhan Prajapati Lecturer Mech Engineering Govt Polytechnic Bargarh Chitrakoot

Objective	To understand the concept and application of forging in manufacturing processes, its several types and uses.
Resources	Board, Marker
Context Setting	Ask the following questions to the students: -We have seen how easily we can Mold soft materials. Now, how might we go about moulding a material like iron? What is the name of the process involved? - Let us say we are tasked with crafting a "kadhai." How might you approach this task? What steps would you take? - Consider this scenario: After establishing a process, you need to produce 100 "kadhai" in just 3 days. How could you streamline this production? What automation options could you explore? - What processes do you envision automating, and why would automation be beneficial in this context? - Can you identify some industries where forging plays a crucial role? Think about sectors like aerospace and construction. - Let us introduce forging as a manufacturing process. What does it entail, and how does it differ from other manufacturing techniques?
Main Activity	<ul> <li>Conduct a demonstration or simulation of a forging process. This could involve using modelling clay or playdough to simulate the shaping of a metal component through forging.</li> <li>Divide students into groups and assign each group a specific forging process to research and present to the class. Encourage them to find examples of products made using their assigned process.</li> </ul>

Reflection Ask the following questions to the students:

What are the key differences between open-die forging and closed-die forging?
How does the choice of material impact the forging process and the properties of the final product?
In what industries is forging most used, and why?
Reflect on the advantages and disadvantages of forging compared to other manufacturing processes such as casting and machining.
How might advancements in technology impact the future of forging?
Where can you use forging for your own house?
Think of problems in your daily life or your village or home where forging can be a solution and cite them in the class.

## TRADE: DAIRY FARMING TOPIC: INTRODUCTION TO DAIRY FARMING

Mr Chandrabhan Lecturer Dairy Farming Government Polytechnic, Mehmudabad, Sitapur

Objective	To help students understand the significance of the dairy farming industry as a contributor to the economy of their village, city, state, and nation. To familiarize them with the different players involved and how they have evolved.
Resources	Board, Marker
Context Setting	<ul> <li>Ask the following students:</li> <li>Reflect on the various businesses thriving in your village. What are some examples you can think of?</li> <li>Now, let us focus on the dairy farm in your village. Why is it such a crucial aspect of the community?</li> <li>Do you have any idea how much capital might be needed initially to start a dairy farm? Do you know how much income at its best potential it can generate? How much, take a guess?</li> <li>Imagine expanding the project to encompass five neighboring villages. What equipment and processes would be necessary to facilitate this expansion?</li> <li>Today, we are delving into a fascinating avenue for income generation. We will explore how seemingly humble beginnings have become major economic drivers nationwide.</li> </ul>

#### Context Setting

Ask the following questions to the students:

I want you to consider Doordarshan. These programs are recorded in Delhi/ Mumbai. But how can we see them?

- The servers for broadband are so far off, but how can we access the internet from our homes

- How do we communicate through our mobile phones?

- What is a common factor in all the examples used above?

Imagine a boat floating on a calm lake. The boat represents our carrier signal, which is the medium through which information will be transmitted. Now, imagine that someone on the boat is waving a flag. The motion of the flag represents the information we want to transmit. Can you guess which is the "Carrier Signal," which is the information, and what is then Modulation?
a) (Ans: Carrier Signal (Boat): In our analogy, the boat represents the carrier signal. Just like the boat moves across the water, the carrier signal moves through a transmission medium (such as air for radio waves or cables for electrical signals).

b) Information (Waving Flag): The waving flag represents the information we want to transmit. In electronics, this could be audio signals for broadcasting music, digital data for sending text messages, or voice signals for making phone calls.

c) Modulation (Waving Motion): Modulation is the process of impressing the information onto the carrier signal. In our analogy, the waving motion of the flag represents modulation. The flag's waving motion is superimposed onto the boat's movement. Similarly, in electronics, modulation alters some properties of the carrier signal (such as its amplitude, frequency, or phase) to encode the information)

d) Explain: Types of Modulation:

e) Amplitude Modulation (AM): This is like changing the height of the waves created by the boat's movement. Higher waves could represent one type of information, while lower waves represent another.

f) Frequency Modulation (FM): This is asking to change the speed at which the boat moves across the water. Faster movements could represent one piece of information, while slower movements represent another.

g) Phase Modulation (PM): This is like changing the direction in which the boat is moving. For example, moving left could represent one piece of information, while moving right represents another.

h) Reception (Observing the Flag): At the receiving end, someone observing the boat from the shore can interpret the waving flag's motion to understand the transmitted information. Similarly, in electronics, receivers decode the modulated carrier signal to retrieve the original information

Main Activity	<ul> <li>Divide students into small equal groups and give each group a different real-life scenario for modulation. Examples could include:</li> <li>Broadcasting a radio program</li> <li>Transmitting data wirelessly (Wi-Fi or Bluetooth)</li> <li>Sending text messages or making calls on a cellular network</li> <li>Each group will research their assigned scenario, focusing on how modulation is used in that context and what specific parameters are modulated (e.g., amplitude, frequency, phase). After research, each group will present their findings to the class using multimedia presentations or simple demonstrations for 5 minutes each. Facilitate a class discussion on the presented scenarios. Encourage students to compare the diverse types of modulation used in each scenario.</li> </ul>
Reflection	<ul> <li>Ask open-ended questions to stimulate critical thinking, such as:</li> <li>1. How does modulation enhance the efficiency of communication systems?</li> <li>2. What are some advantages and disadvantages of different modulation techniques?</li> <li>3. How do advancements in modulation technology impact our daily lives?</li> <li>4. Think of a crazy futuristic idea of what the advancement of modulation technology achieves.</li> </ul>

## TRADE: CIVIL ENGINEERING TOPIC: CONSTRUCTION MATERIAL

Sachin Kumar Gupta Lecturer Civil Engineering Government Polytechnic Badgarh, Chitrakoot

Objective	Students will gain an understanding of materials used in construction and
	list types of material used.

**Resources** Board, Marker, online or physical pictures of construction projects

Context Setting	<ul> <li>Begin the session by showing pictures or videos of iconic construction projects, such as skyscrapers, bridges, or dams. Highlight these projects' scale, complexity, and innovation to pique students' curiosity.</li> <li>Ask students what they think are the key materials used in these construction projects and why they think those materials are chosen. Encourage speculation and curiosity</li> </ul>
Main Activity	<ul> <li>Divide students into small groups and give each group samples of different construction materials (e.g., bricks, concrete blocks, steel rods).</li> <li>Ask each group to examine the properties of the materials they are given, such as strength, durability, flexibility, and cost.</li> <li>Challenge the groups to develop a hypothetical construction project (e.g., building a bridge, a high-rise building, or a road) and discuss which materials they would choose for different project parts and why.</li> <li>Each group will present their material choices to the class, explaining their reasoning and discussing potential advantages and disadvantages of each material.</li> <li>Encourage students to analyze and critique each other's decisions.</li> <li>Ask probing questions to stimulate critical thinking, such as:</li> <li>What factors should be considered when selecting materials for a construction project?</li> <li>How do environmental concerns impact material choices in construction?</li> <li>Can you think of innovative materials or construction techniques that could improve sustainability or efficiency?</li> <li>Encourage students to think beyond conventional solutions and consider the broader implications of their material choices on society and the environment.</li> </ul>
Reflection	<ul> <li>Have students reflect individually on the material choices discussed during the activity. Ask them to consider what they have learned about the importance of materials in construction and how it might influence their future decision-making.</li> <li>1. What surprised you the most about the role of materials in construction?</li> <li>2. How do you think understanding construction materials will impact your future career or interests?</li> <li>3. What ethical considerations should be considered when choosing construction materials?</li> </ul>

## TRADE: ENGINEERING (MATHS) TOPIC: DETERMINANTS

Sanjeev Agarwal Lecturer: Mathematics Govt Polytechnic Orai, Jalaun

**Objective** Students will be able to apply determinants to solve various problems, such as solving a system of linear equations areas of a triangle and discussing coplanarity of 3 vectors

Resources Board, Marker

Context

**t** Ask the following questions to the students:

Setting

Can you solve 2 equations with 2 unknowns? Example x+y= 8

- Can you solve 3 equations with 3 unknowns?

- How can you find out the area of a triangle with the coordinates of verticals given or solve the area and volume of geometric shapes?

- What methods do one use to determine a company's solvency based on its financial data?

- How can we solve systems of linear equations to optimize designs in engineering?

- What is common in all the above questions (Ans: All the above can be solved by use of determinants)

- Tell:

a) Determinants provide valuable insights and solutions in mathematics, finance, science, and engineering.

b) Understanding determinants enhances problem-solving skills and analytical thinking.

c) Real-life examples help bridge the gap between abstract mathematical concepts and practical applications.

Main Activity	Divide the class into 2 main groups, and they must find answers to the following 4 questions, each given to each team:
	Group A:
	Concept of Matrix
	<ul> <li>Find out numerous examples of Matrices</li> <li>Definition of a square Matrix</li> </ul>
	<ul> <li>Definition of Determinants</li> </ul>
	Group B:
	Value of Determinants
	<ul> <li>How does the determinant find out the value of a Matrix</li> <li>How does it help in solving linear equations?</li> </ul>
	<ul> <li>How can we find out the area of a triangle using determinants?</li> </ul>
	Make smaller groups within groups so that every student participates. Ask every group to present their ideas.
Reflection	<ol> <li>What is the definition of determinants?</li> <li>How to calculate the area of a triangle with this?</li> <li>Give a real-life example of where you can use Determinants.</li> <li>Where all can you use this knowledge?</li> </ol>

# HOW TO BE A BETTER FACILITATOR?

#### Transition from Part 1 sessions to Part 2:

#### **Discuss the following:**

"Until now, our focus has been on implementing strategies to enhance classroom engagement, aiming for optimal learning outcomes. However, an equally crucial aspect lies in the role of the facilitator. A facilitator's effectiveness greatly hinges on their communication skills and mindset.We will explore these essential facets further in the upcoming training sessions. By refining communication abilities and cultivating the right mindset, facilitators can significantly elevate the learning experience for all involved."



## Day 2 EFFECTIVE COMMUNICATION SKILLS

## Session 5



#### Time: 2 hr

Material used for Session: PPT, case studies (cited below).

**Objective:** By the end of the session, participants will be aware of the importance of effective communication. List the barriers to effective communication and the application of correct nonverbal and verbal communication for students and themselves.

**Context Setting:** Divide the group into equal teams. Make the first person stand in line with each member facing the back of one in front (like in a queue). Ask them to pick a leader from the first team. That leader will stand last in the Que. Show the actions of starting a scooter, accelerating the scooter, and then driving the scooter without using any words. This can be shown only twice. The leader must understand it and then, without any word usage, offer it to the person standing in front. Likewise, each participant will see, understand, and then pass it on till it reaches the first person. The first person will demonstrate the action to the whole group. Next, the other team will get a chance to do the same. At the end of the activity, ask both teams why they did or did not win and ask what, according to them, are essentials of effective communication and what the barriers are. Now, list them down.

### Main Activity:

#### Give the following case study:

A university introduced an online portal to make more data-based informed decisions. The management ordered everyone to use the portal, but only a few people did. The rate of usage was just 12%. Seeing his response, they started giving stricter instructions, yet it could only pick up to 15%. The appointed director resorted to finally firing teachers who were not doing so. After three months of upheaval in the university and many protests and strikes later, the management hired a third party to come to resolutions. The third party's first step was to analyse the management and staff gap. Within three months, the usage picked up to 35%, and today the use is 85%.

Questions to ask the participants:

- 1. What steps could the management have taken to avoid such a catastrophe?
- 2. What would be your steps if you were in place of a teacher?
- 3. What was the most significant game-changing activity that the third party did?
- 4. Which skill do you think the third party applied to emerge as the winner

Tell: Understand the working methods of those you need to convince. If leaders seem bound up in stats and spreadsheets, give them what they want. Gather data to prove your ideas work, show them a process, and outline a clear outcome, and they will soon be on your side. Measuring internal communications will help to provide the rationale behind your ideas. Equally, if the types of internal communication you use do not seem to connect with your employees, do not be afraid to try a different approach.

## Case Study 2:

Twenty students were selected for OJT from a Haryana ITI in a private organisation. They started going and would return each day at 5 PM. After observing them for five days, the superintendent scolded them and asked them to stay till 7 PM. The students disagreed and started protesting as they felt they were being made to work more. The protest soon turned violent, and all of them were expelled. The TPO (Training and Placement Officer) called for a meeting with the company but was turned down. The ITI faced several unfortunate incidences and called for third-party intervention. This organisation met with the students, teachers, and Company owners and resolved this issue.

Questions to ask the participants:

- 1. What stand would you have taken if you were the principal?
- 2. What made the whole scenario worse?
- 3. How could this be avoided?
- 4. What measure do you think the third party could have taken to resolve it?
- 5. Which skill do you think the third party applied to emerge as the winner?

**Solution:** The third-party started an orientation session for students going to such OJTs, where they were informed of what to expect and that the work timings would be the factory timings, not the ITI timings. This helped the students a lot, and there were fewer such incidents.

### **Reflection:** Ask the following questions.

- 1. What went wrong in the first case?
- 2. What could have been done to avoid this?
- 3. Where do you think you can apply these essentials of communication?
- 4. Why is effective communication a two-way process?
- 5. Do you think non-verbal communication played a role here?
- 6. Which non-verbal bit are you going to work on?

7. What is the correlation between effective communication and a loving home /school/ societal environment?

Summarise the whole session with the PPT.

# **COMMUNICATION SKILLS**

## What are Communication Skills?

The abilities you utilize when offering and receiving several types of information are known as communication skills. Examples include sharing fresh perspectives, emotions, or even project updates. The four essentials of communication are listening, speaking, observing, and empathizing. Understanding the contrasts between face-to-face contacts, phone calls, and digital communications like email and social media is also beneficial.

## **Communicating effectively in the workplace**

While there are several communication skills you will use in different scenarios, there are a few ways you can be an effective communicator at work:

- Be Clear and concise: Making your message as easy to consume as possible reduces the chance of misunderstandings, speeds up projects, and helps others quickly understand your goals. Instead of speaking in long, detailed sentences, practice reducing your message to its core meaning. While providing context is helpful, giving the most necessary information when communicating your idea, instruction, or message is best.
- **Practice empathy:** Understanding your colleague's feelings, ideas, and goals can help you communicate with them. For example, you might need other departments' help to start a project. If they are unwilling to help or have concerns, practicing empathy can help you position your message in a way that addresses their apprehension.
- Assert yourself at times: It is necessary to be assertive to reach your goals, whether you are asking for a raise, seeking project opportunities, or resisting an idea you do not think will be beneficial. While presenting confidently is essential to the workplace, you should always be respectful in conversation. Keeping an even tone and providing sound reasons for your assertions will help others to be receptive to your thoughts.
- Be calm and consistent: When there is a disagreement or conflict, it can be easy to bring emotion into your communication. It is essential to remain calm when communicating with others in the workplace. Be aware of your body language by not crossing your arms or rolling your eyes. Maintaining consistent body language and an even tone of voice can help you conclude peacefully and productively.
- Use and read body language: Body language is a vital part of communication in the workplace. Pay close attention to the messages people send with facial expressions and movements. You should also pay close attention to how you might communicate (intentionally or not) with your body.
# 9 Common Barriers to Effective Communication

A professional communicator must be aware of the various obstacles that stand in the way of effective communication and work to overcome them. Active listening, reflecting, and other techniques can remove these obstacles to effective communication. To determine whether the message was utterly understood, the communicator must get feedback from the audience. Some of the typical challenges to effective communication are listed below.



Using Jargon It may be challenging to understand if technical words are overly complex or unfamiliar.

#### Lack of Attention or Interest

The message might not be successfully conveyed if the recipient is not the intended audience or there are outside distractions (such as concurrent speech).





#### **Perception Difference**

It could be easier to interpret the message if two persons have opposing opinions appropriately.

#### **Physical Disabilities**

If the receiver has hearing problems or the speaker has speech disabilities, then communication will not be effective. It will distort the message.



#### **Emotional Barriers**

Sensitive subjects make it challenging for the speaker or the receiver to participate effectively in communication. It is also possible that some people need help to articulate themselves, which causes their words to lose some of their intended meaning. Politics, religion, physical or mental disability, racism, sexuality, and other unpopular viewpoints may be taboo or offlimits to some people.

# 5



#### The Difference in Culture

Social interactions have different norms in distinct cultures. For example, the idea of space exists in some cultures and social settings but in various forms in others. These cultural differences could prevent effective communication.

#### **Physical Barriers to Communication**

A face-to-face conversation has many more components than words. The entire communication process also considers gestures, body language, and facial expressions, among other things. Some messages can be missed if you cannot see the recipient. Technology-based methods of communication, such as text messages and phone calls, have a different impact than face-to-face interactions.





#### Language Difference

The difference in dialects of different regions or unfamiliar accents can make it challenging to understand the message sent.

#### **Prejudices**

Most individuals have predetermined ideas about diverse topics, so they pay attention to what they want to hear instead of what is being stated. These erroneous presumptions and stereotypes cause communication hurdles.



# What is non-verbal communication?

Non-verbal communication consists of everything unsaid, including:



It can be awkward to communicate with someone with poor non-verbal communication. Have you have ever felt too uncomfortably near to someone while networking at a cocktail party or wondered why someone you just met is staring at your body instead of your face? Unless you have a close relationship, we have been taught to give others at least two feet of personal space and to look them in the eye when speaking. This is an example of poor nonverbal communication on the part of the other person.

Culture-specific non-verbal communication abilities exist. While extended eye contact during conversation is common in European cultures, it is seen as a challenge to authority in Asian and Hispanic cultures. Understanding these cultural differences will help you be a better communicator.





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# How does non-verbal communication affect performance?

Now that you understand workplace verbal and non-verbal communication skills, how do nonverbal skills affect workplace harmony? Your verbal message and how others receive it depend on your nonverbal communication skills. For example, if you are teaching a student while standing with your arms crossed at your chest or sporting a stern expression, the student might assume that you are upset or disappointed with them. This can hurt how you have a good relationship with the student. A warm grin or open body language that lightens the mood can help things get better.

On the other hand, students need to pay attention if they have their arms crossed and appear on guard while listening to directions on executing a task. They are on the defensive. You can diffuse the situation and move on to session by observing their non-verbal cues and using open-ended questions to learn more about what is happening.

That quote, "People will forget what you said, but they will always remember the way you made them feel," illustrates the influence of nonverbal communication, both positively and negatively. They will remember it if you insult them with an eye roll or snarky tone, which could damage your professional relationship. On the other hand, if you tried to console someone

#### "People will forget what you said but will always remember how you made them feel."

Asking close friends or family members about how you come off will help you improve your nonverbal communication abilities. You could be shocked to learn that your appearance or facial expressions unintentionally say something. Whether they love their current career or desire something else, the best teachers have an open mind and are always interested in learning new things to improve their performance. After hearing the truth from those who love you, consider how you may change your behavior to come across as you want to in both your personal and professional life.

# Day 2 EFFECTIVE COMMUNICATION ACTIVE LISTENING SESSION PLAN

### **Session 5 continued**



Time: 30 mins

**Material used for Session:** picture for action demo, topics for role play (Barriers of active listening), PPT for Active Listening

**Objective:** By the end of the session, participants will be able to understand the importance of active listening, list out the barriers to active listening, and apply the steps of active listening

**Context Setting:** Divide into two groups. Ask them to pick a volunteer for their teams. Take the person aside and show a picture of an airport to the team. They must explain this picture to the person who was taken aside who will draw it as instructed. The team cannot use the exact names of objects in the picture. Instead, they can only use shapes. Likewise, the other team must perform using another picture of a house. The trainer can decide on the number of rounds and the number of pictures to be shown. Whichever team draws the most pictures correctly wins. Ask the following questions.

- 1. What were you feeling when you were drawing? (Ask the person who was drawing)
- 2. How were you feeling when you could not understand? (Ask the person who was drawing)
- 3. Why were you not able to draw immediately?

#### Main Activity:

Divide into pairs and ask each pair to share an important incident that profoundly impacted their lives (5 mins for each person). Ask five people to volunteer and share their partner's story.

#### **Reflection:**

Ask the following questions to the volunteers who shared their partner's story:

- 1. How did you feel while listening?
- 2. Were you able to remember the sequence of events correctly?
- 3. If yes, how? If not, why?
- 4. What do you think are the requirements of active listening?

Ask these questions to the volunteer's partner whose story they shared.

1. Do you agree that your story is told as you said it, or did they add their own words or interpretations?

2. If not, what would have made you feel that they did listen intently? How did you feel when they were not listening properly?

3. Why do you think so? What did they do or do not do that made you feel they were or were not listening properly?

4. Imagine if this were some necessary official communication; what would be the consequences if it were not heard properly?

5. Can we list the steps for listening actively?

6. A world with better communication, ...... (complete the statement)

Summarise by showing the steps in PPT, making them practice using another incidence, and applying them to paraphrase.

# ACTIVE LISTENING

# What is Active Listening?

Active listening is the process by which an individual secures information from another individual or group. It involves paying attention to the conversation, not interrupting, and taking the time to understand what the speaker is discussing. The "active" element involves taking steps to draw out details that might not otherwise be shared.

### Why is it Important in your work?

By using active listening with students, teachers build a relationship of **trust and care that is** essential to student motivation. By teaching active listening, teachers help students overcome poor listening habits, such as: focusing on the personal characteristics of the speaker or their poor delivery, which prevents understanding.

# **Examples of Active Listening Techniques**

There are plenty of active listening techniques that will improve the impression students or teachers can make at a job interview or workplace respectively.

Active listening techniques include:

- Building trust and establishing rapport
- Demonstrating concern
- Paraphrasing to show understanding
- Using nonverbal cues that show understanding such as nodding, eye contact, and leaning forward
- Brief verbal affirmations like "I see," "I know," "Sure," "Thank you," or "I understand."
- Asking open-ended questions
- Asking specific questions to seek clarification.
- Waiting to disclose your opinion.
- Disclosing similar experiences to show understanding.

Employing these active listening techniques will not only impress students' interviewer as a thoughtful, analytical, and highly desirable candidate for the position, it will also make you a more approchable and empathetic facilitator.

### Four Steps to Complete Active Listening

02 01Connect with the participant Strive to take in all aspects who is contributing. You behind the spoken message, frequently establish with eye implicit, explicit, and nonverbal contact, open posture, and "intonations." Do not judge or evaluate, to the positive or the nonverbal responses that signify acceptance. negative. CONTACT **ABSORB STEPS REFLECT** & **CONFIRM FEEDBACK** Obtain confirmation from the Mirror, reflect, or feedback what has been heard and WHY speaker that you represent the the contributor claims to be participants message 04 03 pertinent and valid. accurately.



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# Day 3 FEEDBACK MECHANISM

#### Session 1



Time: 1 hr

Material used for Session: PPT for feedback Mechanism whiteboard, marker.

**Objective:** By the end of the session, Faculties will be able to understand and apply the sandwich technique

**Context Setting:** Tell an anecdote: Anu was so involved in her teenage years that she could not come out of it for years. Ask the Faculties which feedback they received was very impactful in a good or a bad way. Ask why it was good or bad, and start listing the points on the whiteboard, making two sections: "Good" and "Bad." Then pick a person who is looking good and compliment her and say after that," .... but your hair is looking bad. Ask that person how she feels listening to this. Which part of the sentence was more memorable, the first or the one after "but"? Ask why it was so.

#### Main Activity:

For the next part, make them play this game. Write on the board, "I didn't say that I killed my dog." Now explain that you will be underlining one word, and the person appointed by you must read the whole sentence by EMPHASISING it. So, e.g., if "I" is underlined in I did not say that I killed my dog, she will say that sentence emphasising I. Erase the previous underlined word and repeat the process by underlining "didn't" and asking someone to read it as such. Keep repeating the process till all words are done. After this, read the sentence emphasising one word at a go until all words are finished.Explain that, therefore, the "how" part must be important while giving feedback rather than what you say.

Show the PPT and read it out. Then show the faculties, sandwich approach slides in the PPT and explain that effective feedback will start with a positive compliment, like the burger bun, have an "area of improvement" in the middle, like the patty, and another positive feedback in that last, like the burger bun. Now, give the faculty 5 minutes to think of feedback to give someone in the group using the sandwich approach. Ask for 4 or 5 volunteers. Explain that just like in the burger, the size of bread is smaller than the patty size.

Like so the compliment should take lesser time and the area of improvement should be about :

1. What is not right

2.What should be done

3. How to do it

4.What will be its benefit for the person

#### **Reflection:**

- 1. Ask the Faculties if the meaning changed with each way of speaking.
- 2. How could it be possible because the words were the same?
- 3. So, what made the difference, how it was said or what was said?
- 4. Why should the sandwich approach feedback be used with the students?
- 5. What happens if we remove negative criticism from our society?

# What is feedback?

It entails providing the originating or controlling source with evaluative or remedial information regarding a specific action, event, or process. When working with students, we must be careful to provide constructive criticism rather than praise.

Positive Criticism or reinforcement in the form of constructive criticism is crucial for efficient teaching and classroom management. This article offers education. **Criticism**, in general, involves an assessment of an individual's performance. This includes the provision of positive or negative feedback.

When speaking of criticism, it can be categorized as,

- Destructive criticism
- Constructive criticism

**Destructive criticism** involves negative feedback that harms the individual. But constructive criticism is also negative feedback that has been stated to improve the performance of the individual. With this basic understanding, now let us move on to constructive criticism.

**Constructive criticism** is the feedback given to an individual so that they can make a positive change. Unlike most criticism that lowers an individual's self-esteem, constructive criticism does not. It attempts to point out an individual's flaws thoughtfully so that it does not hurt the individual.

# **Difference between Criticizing and constructive feedback**

First, let us define the meaning of the word criticism. It can be understood as an expression of disapproval. It is not easy to be the object of criticism because it can be hurtful and can lower our self confidence/self-esteem. However, not all objection is being made with the intention of disapproving. Sometimes the complaint is made to create a change in the individual for the better. This is referred to as constructive criticism.

For example, imagine a person criticizing your every move, such as your hair, dress, work, people you associate with, etc. Criticism does not have a solid basis, yet it can be excruciating. In such cases, it is necessary to ignore such criticism.

Let us take another example. We want a student to start dressing better.

Statement 1. "What a useless sense of dressing up you do!"

Statement 2. "Why don't you try a different way of dressing up, which will improve your look?"

Observe that statement 1 is very hurtful, and the underlying intention does not feel like a proposition to suggest improvement but just a statement made to show disrespect. But statement 2 shows the purpose of offering improvement.

It is important to note here that before we give feedback or criticize someone, we must ask ourselves whether it will hurt the listener or involves feedback that brings about a positive change in the individual.

Points to remember while giving constructive feedback:

- Voice: The voice should be expected not in a high-pitched angry tone
- Body Language: Non-threatening body language, which means no aggressive behavior
- Environment: Should be done in a private space so as not to embarrass the individual
- Word Choice: Try probing and ask why the problem is happening. You can even use five why method. Carefully choose your words. They should be motivating and kind.



# Why is it important?

- Feedback contributes to learning when it is noticed.
- Feedback contributes even more to learning when the learner reflects on the lessons for next time.
- Feedback containing advice originating from the student's own recent work is more likely to be given attention, understood and acted upon.
- Feedback can fuel constructive reflection by the learner.



### Sandwich Approach

**Example:** To tell a student that he has a punctuality problem, open with a compliment: "Your grades have considerably improved. It seems you are working hard". Then add a constructive observation: "However, I see that you come in very late to school. If you plan your schedule the night before, you may see a more organized day and not miss out on anything." Then close with another compliment: "Your Sports scores are also quite good."



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# Day 3 ROLES OF A FACILITATOR

#### Session 2



#### Time: 1 hr

Material used for Session: Whiteboard, marker, and chart papers for each team, PPT.

**Objective:** By the end of the session, Faculties will be able to list and understand the Skills and Roles of a facilitator and the advantages of being a facilitator rather than a faculty

**Context Setting:** Ask some volunteers in the group to recall the days of your college and think of role model Faculties. Ask them why they thought so. List all the points on the whiteboard. Draw out points that led them to become facilitators.

#### Main Activity:

Divide the group into two teams and ask them to discover the qualities of a faculty member and a facilitator. On one side of the chart paper, write down the qualities of a facilitator; on the other, write down the qualities of a faculty member.

#### **Reflection:**

- 1. Are there any similarities between the earlier list on the whiteboard and your chart paper?
- 2. What do you understand about the difference between a facilitator and a faculty member ?
- 3. Which can help a student improve in school life and after, and why?
- 4. So, what do you think are the roles of a facilitator?
- 5. Why was it important to do this module, and where can you use it?
- 6. Who do you think can become a facilitator?
- 7. How can we balance our faculty and facilitator roles?
- 8. What effect would this balance have on students?
- 9. What must you do to be a good Facilitator? (List down on board)
- 10.what component of Experiential Pedagogy are you doing by doing this exercise

# ROLE OF A FACILITATOR - TRAINER REFERENCE

### Unleashing the Power of Facilitation: Redefining the Educator's Role

In the dynamic landscape of education, the distinction between a teacher and a facilitator carries profound implications for learning outcomes and student empowerment. Understanding the meaning, differences, and advantages of being a facilitator over a traditional teacher is essential in navigating the evolving needs of today's learners.

### Meaning:

A facilitator transcends the conventional role of a teacher by assuming a guiding and empowering stance in the learning process. Unlike a teacher who primarily imparts knowledge through lectures and directives, a facilitator orchestrates experiences, fosters collaboration, cultivates critical thinking among learners. Facilitators create an environment conducive to exploration, inquiry, and self-discovery, where students actively engage with the subject matter and construct their understanding.

#### **Difference:**

The disparities between facilitators and teachers lie in their approach, focus, and impact on student development. While a teacher typically serves as the primary source of information, delivering content in a one-way transmission, a facilitator adopts a learner-centred approach, emphasising active participation and shared responsibility. Facilitators guide students through inquiry-based learning experiences, encouraging them to explore diverse perspectives, collaborate with peers, and construct knowledge collaboratively. Unlike teachers who may adhere to rigid curricular frameworks, facilitators adapt their methods to suit individual learners' unique needs and interests, promoting personalised and meaningful learning experience

#### **Advantages:**

Embracing the role of a facilitator offers several distinct advantages over traditional teaching methods. Firstly, facilitation empowers students to take ownership of their learning journey, fostering autonomy, self-efficacy, and intrinsic motivation. By promoting active engagement and critical thinking skills, facilitators cultivate lifelong learners capable of navigating complexities and adapting to change in diverse contexts. Furthermore, facilitation enhances interpersonal skills, communication abilities, and collaborative capacities, preparing students for success in an interconnected world. Additionally, facilitators foster a supportive and inclusive learning environment where diverse perspectives are valued, and creativity flourishes. Ultimately, the facilitative approach nurtures holistic development, empowering learners to thrive academically, socially, and emotionally.

In conclusion, the transition from being a teacher to embracing the role of a facilitator signifies a change in basic assumptions in education, emphasising empowerment, collaboration, and student-centredlearning. By understanding facilitation's meaning, differences, and advantages, educators can unlock the transformative potential of guided learning experiences, cultivating resilient, resourceful, and reflective learners poised for success in the 21st century and beyond.

# Day 3 PROBLEM-SOLVING TECHNIQUES 1-CIRCLE OF INFLUENCE AND CONCERN (Also called Area of Influence and Control)

#### Session 3



Time: 1 hr

Material used for Session: Picture of Area of Influence and Control whiteboard, Marker.

**Objective:** By the end of the session, faculty members will be able to list out, understand, and apply the Circle of Influence and Control technique and identify the root cause of the problem to resolve it.

**Context Setting:** Ask faculty members about the challenges they face in preparing students for internships/apprenticeships or placements/jobs. List these challenges into separate categories, such as Teachers, Students, and Employers. "Now, ask the faculty to pick the ones they can do something about in each category. Circle the ones you can do something about and leave the rest.

#### Main Activity:

Now, show them the picture on the slide showing the area of influence and control. Explain the two concepts. Divide the group equally now and ask them to pick up a problem from the list on the whiteboard and find at least five probable reasons for it. Then, present it to everyone

#### **Reflection:**

- 1. What is your understanding of the two topics?
- 2. Why should we concentrate on things we can control only?
- 3. Which other fields can you apply this technique to?
- 4. How does this help you?
- 5. What will happen if the circle of Concern gets bigger & bigger?
- 6. How can this technique help build a better society?

# **Circle of Influence/Concern vs. Circle of Control**

### WHAT IS IT?

A million things may concern you — your children, your work, politics, and climate change. That is your Circle of Concern/influence and Circle of Control. Carefully determine whether you have the power to control the issue or influence it without having any impact. Things that you cannot control the outcome of, come in the Circle of Influence. Things you can directly control the outcome of, come in the Circle of Control. The difference between your circle of influence/concern and your circle of control is that proactive people focus on the circle of control, and those falling in the circle of concern/influence category, are reactive.



#### WHY IS IT IMPORTANT?

Whether we realize it or not, the Circle of Concern/Influence and Circle of Control are part of our lives. Proactive people focus their time and energy on their Circle of Control. Why waste your efforts spinning your wheels about concerns that you cannot impact? Proactive people focus on the circle of control and concern themselves with only what they can change.

On the other hand, if you are reactive, you focus on your Circle of Influence/Concern, and what you can directly control becomes secondary. You worry about the housing market, the fate of your sick aunt, or your irritating co-worker. Spending your mental and emotional energy on things outside of your Circle of Control reinforces feelings of victimization — you are allowing things out of your control to determine your actions and emotions. The Circle of Influence/Concern and Circle of Control help us see where we do have control and where we do not.



# Day 3 PROBLEM-SOLVING 2- FIVE WHYS

#### Session 4



#### Time: 1 hr

Material used for Session: PPT of 5 examples of why's method.

**Objective:** By the end of the session, Faculties will be able to list out, understand, and apply techniques of 5 whys

**Context Setting:** Tell your faculties that we often arrive late to the office but do not analyse why. This is what we will explore in this session.

#### Main Activity:

Ask the Faculty to raise their hand if they ever get late to the office. Talk to one of them. Now, use the five whys method and ask why at the end of every answer the participant gives. Repeat the process five times. Chances are that you will discover the route cause within the five times. But if not, ask why as often as you need to complete the process and take appropriate actions. Now, show the slide of examples and read as such. Tell the Faculties that this method can help you find the root cause of any problem and take adequate measures to prevent it. A famous Japanese entrepreneur devised this method, and it is frequently used in management.

Discuss the following example: Problem statement: Why was the TAJ Mahal deteriorating every day?

1st Why: Because there was a lot of Bird Poop

2nd Why: Because there were a lot of birds hovering for food

3rd Why: Because there are a lot of insects all over it.

4th Why: Because at night they used big halogen lights to it. highlight

So, the root cause was the Halogen Light

Solution: Remove the light

#### **Reflection:**

- 1. So, what have you learned?
- 2. How will this technique help you?
- 3. Where else can you apply this technique?
- 4. How can you transfer this learning to help your students?

5. How can this technique help you and your students to be better members of the society?

# **5 Whys Technique**

Unexpected problems may occur in any classroom or department. However, problems are just symptoms of deeper issues. Fixing a problem quickly may be a convenient solution, however, it doesn't protect your teaching and learning process from recurring mistakes. This is why your students and you need to focus on finding a problem's root cause and tackling it properly.

The 5 Whys technique is one of the most effective tools for root cause analysis. Every student or class faces roadblocks in daily work. However, using the 5 Whys will help you find the root cause of any problem and protect your learning process from recurring mistakes and failures.

#### **5 WHYS IN ACTION**

When applying the 5 Whys technique, you want to get to the problem's essence and then fix it. Actually, the 5 Whys may show you that the source of the problem is quite unexpected. Often, issues that are considered a technical problem actually turn out to be human and process problems.

This is why finding and eliminating the root cause is crucial if you want to avoid iteration of failures.



Problem – We didn't send the newsletter for the latest software updates on time.

- 1 Why didn't we send the newsletter on time?
  - Updates were not implemented until the deadline.
- 2 Why were the updates not implemented on time?
  - Because the developers were still working on the new features.
- 3 Why were the developers still working on the new features?
  - One of the new developers didn't know the procedures.
- 4 Why was the new developer unfamiliar with all procedures?
  - He was not trained properly.
- 5 Why was he not trained properly?
  - Because CTO believes that new employees don't need thorough training and they should learn while working.

You can notice that the root cause of the initial problem turned out to be something completely different from most expectations. Furthermore, it is obvious that it is not technological but a process problem. This is typical because we often focus on the product part of the problem as we neglect the human factor.

Therefore, the 5 Whys analysis aims to inspect a certain problem in depth until it shows you the real cause. Keep in mind that "5" is just a number. **Ask "Why" as many times as you need** to complete the process and take appropriate actions.

# How to Get Started with 5 Whys

The 5 Whys technique may help you achieve continuous improvement at any level of your institution. Here are some basics steps you need to follow:

#### Form a Team

Form a team from either your own department or other departments. Everyone must know the process under review, so as to collect information.

#### **Define the problem**

Discuss the problem with the team and make a clear problem statement.

#### Ask Why

Empower one person to facilitate the whole process. This team leader will ask the questions and try to keep the team focused. The answers should be based on facts and real data, rather than on emotional opinions.

The facilitator should ask "Why" as many times as needed until the team can identify the root cause of the initial problem.



Advice 1: Don't ask too many Whys. If you keep going, you may end up receiving tons of unreasonable suggestions and complaints, which is not the purpose. Focus on finding the root cause.

Advice 2: Sometimes there could be more than one root cause. In these cases, the 5 Whys analysis will look more like a matrix with different branches. This may even help you detect and eliminate institutional issues that have permanent negative effects on overall performance.

#### **Take Action**

After the team detects the root cause(s), it is time to take corrective actions. All members should be involved in a discussion to find and apply the best solution that will protect your process from recurring problems.

When the decision is made, one of the team members should be responsible for applying the right actions and observing the whole process.

After a certain period of time, the team needs to meet again and check if their actions actually had a positive impact. If not, the process should be repeated.

In the end, the case should be documented and sent across the institution. Sharing this information will give an insightful overview of different kinds of problems a team may face and how those problems can be eliminated.

# **5 Whys Template**





Scan to read more

# Day 3 CLOSING

#### Session 5



Time: 1 hr

Material used for Session: Link to survey Form, link to a feedback form, camera/phone for photographs, WhatsApp group of Faculties (use earlier one)

**Objective:** To close the session by collecting data through survey forms, feedback and giving a closing speech.

#### **Context Setting:**

Clear Instruction required for data collection:

Tell the Faculties to understand the effectiveness of this facilitation we will be giving them feedback and survey forms, which we are requested to fill in. They would be required to fill in the documents honestly and without bias. The data they fill in for Medha will be completely confidential, and no individual report will be shared with anyone. We want to gauge this facilitation session's effectiveness and improve it in the future.

Now, give the survey link to the WhatsApp group and give them 25 minutes to complete it. When they have filled it out, give the feedback form link.

Now, thank everyone and close the session, taking verbal feedback if anyone wants to share it. Make sure everyone has filled in the attendance sheet and both forms.

Take a group photograph and close the program.







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