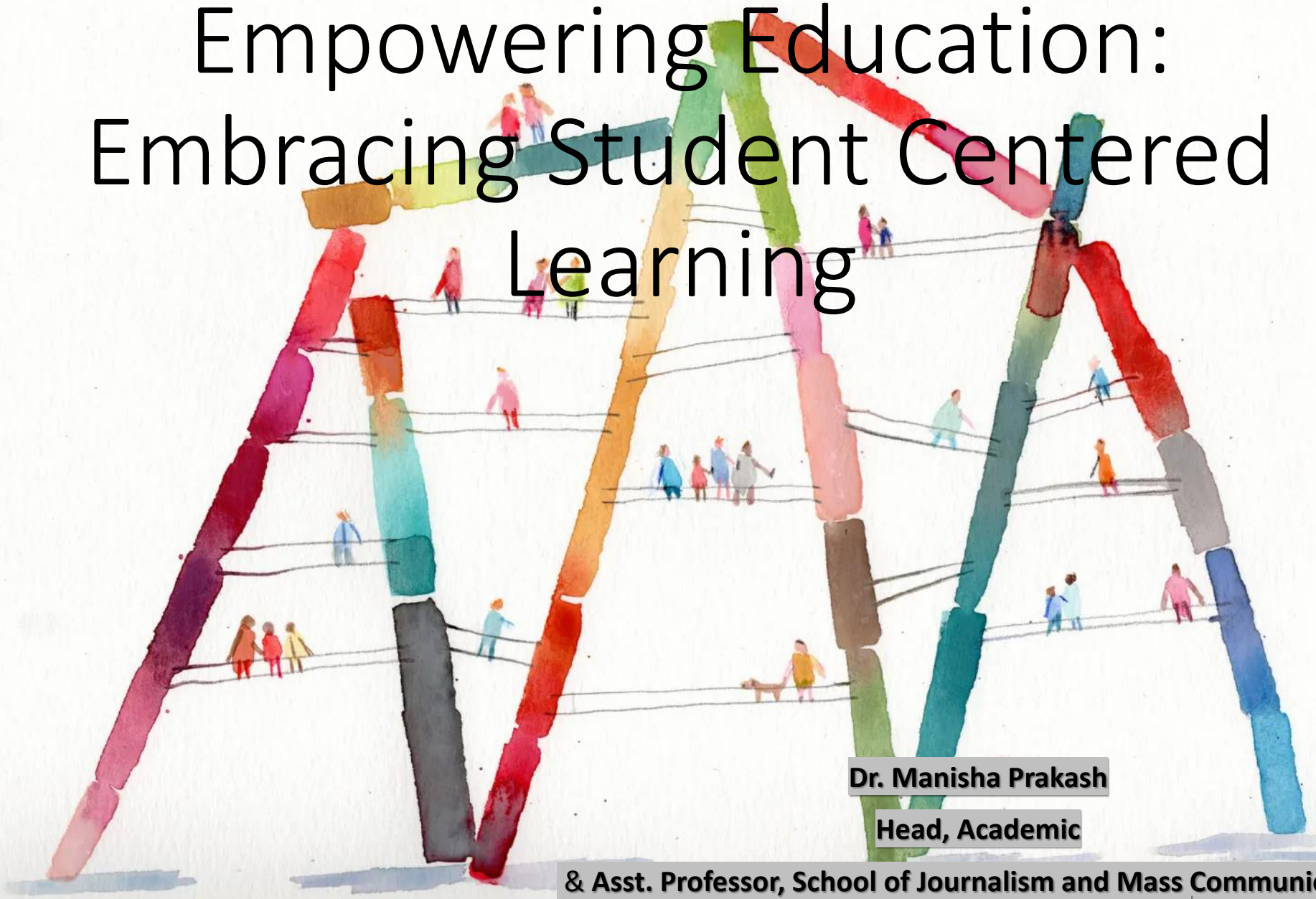
Empowering Education: Embracing Student Centered Learning

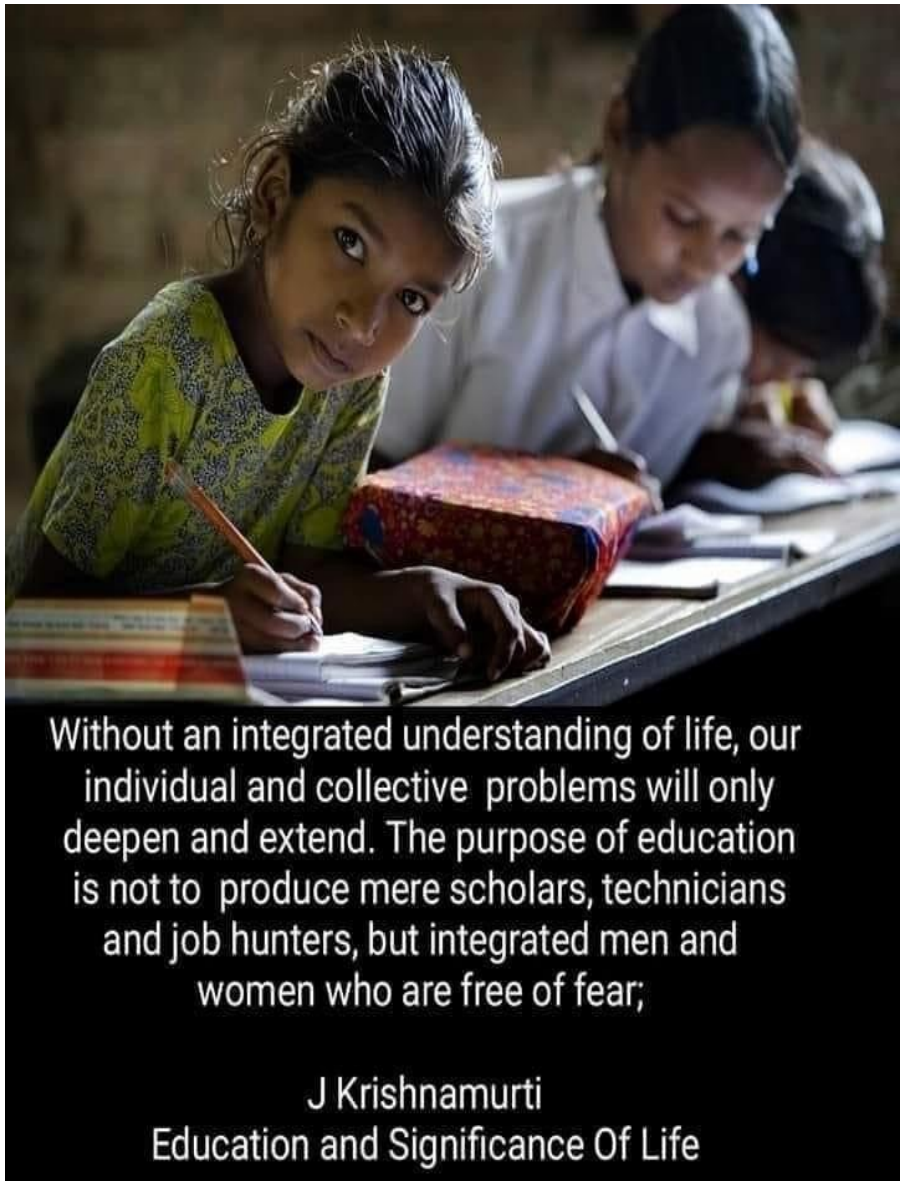


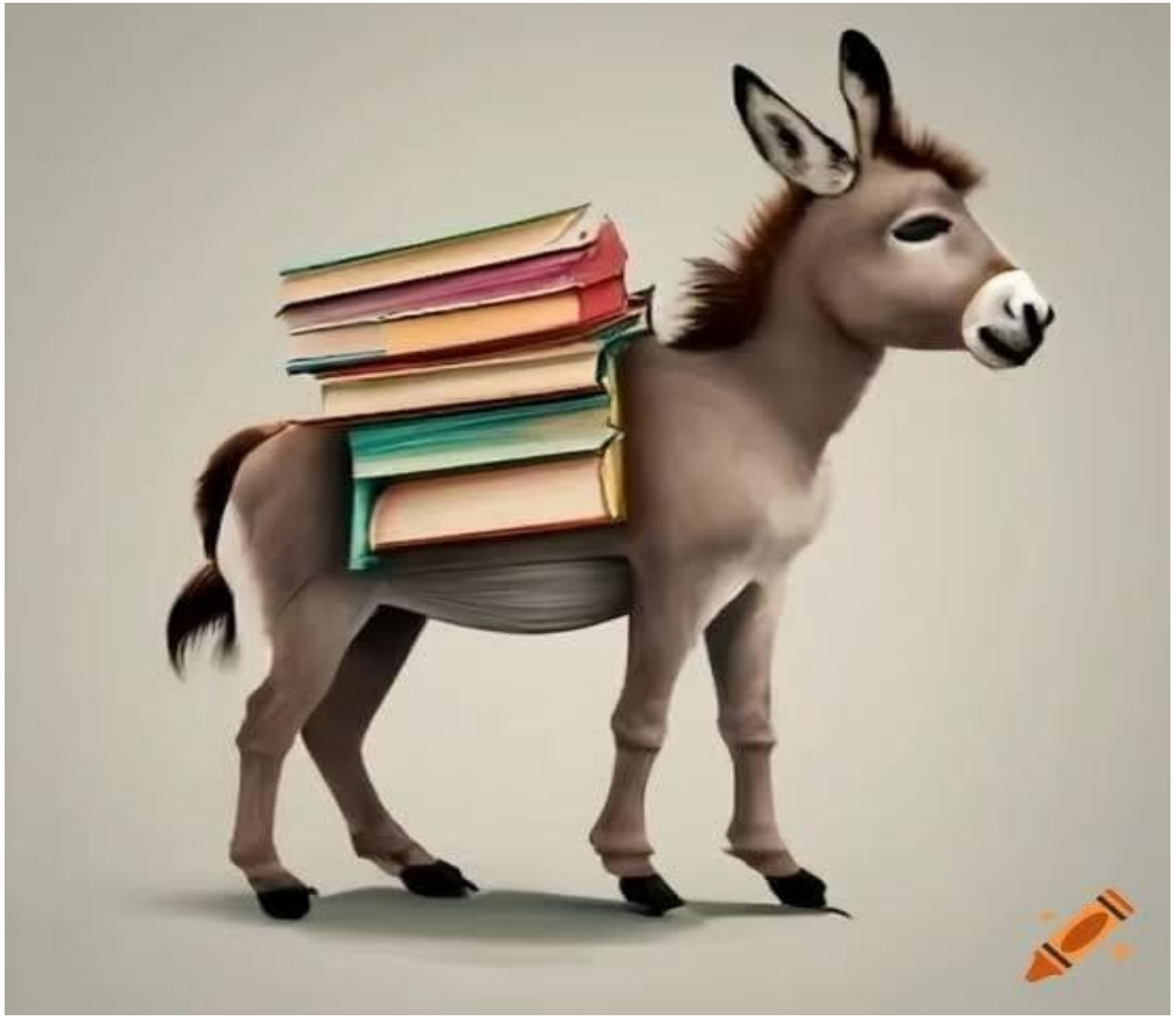
Dr. Manisha Prakash

Head, Academic

& Asst. Professor, School of Journalism and Mass Communication, Aryabhatta Knowledge University

“Education has no meaning unless it helps you to understand the vast expanse of life with all its subtleties, with its extraordinary beauty, its sorrows and joys. You may earn degrees, you may have a series of letters after your name and land a very good job, but then what? What is the point of it all if in the process your mind becomes dull, weary, stupid?” : Jiddu Krishnamurti, Think of These Things





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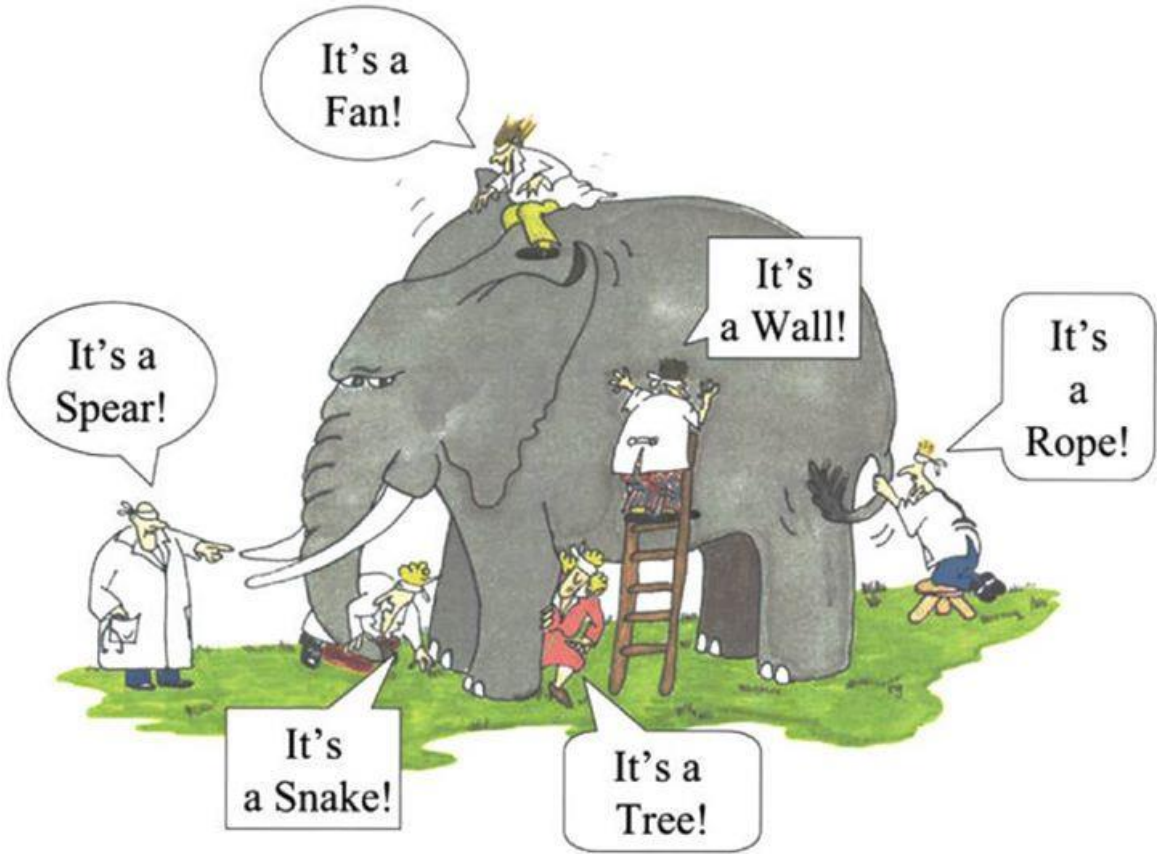
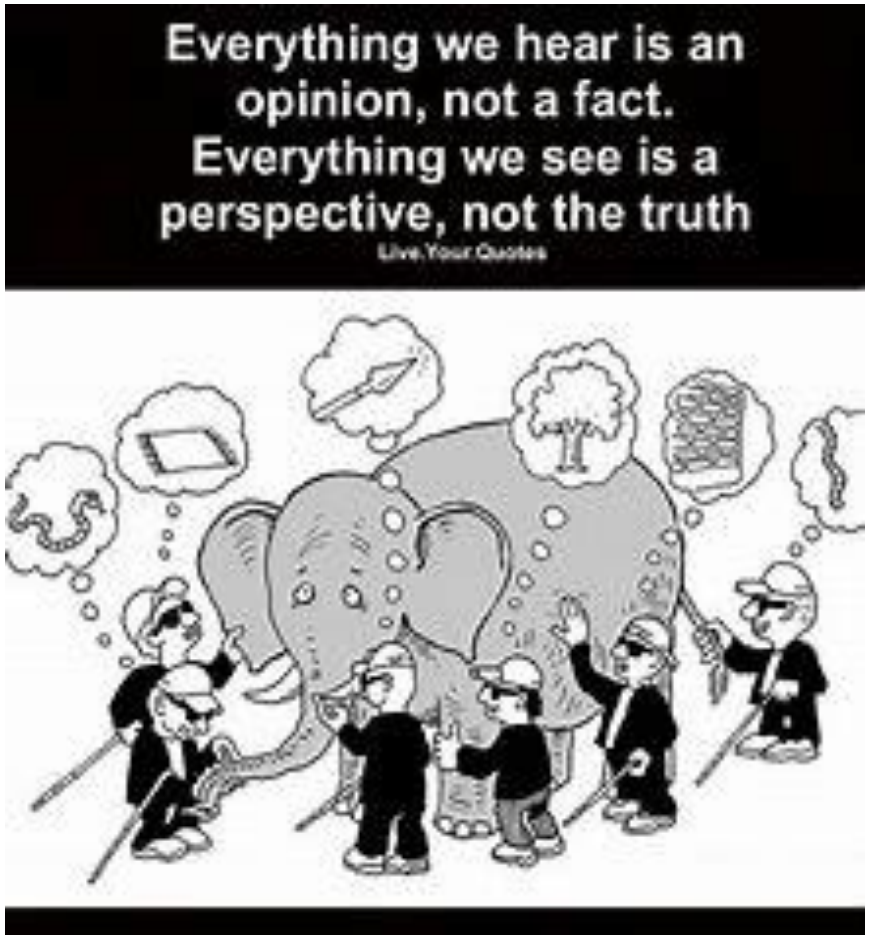
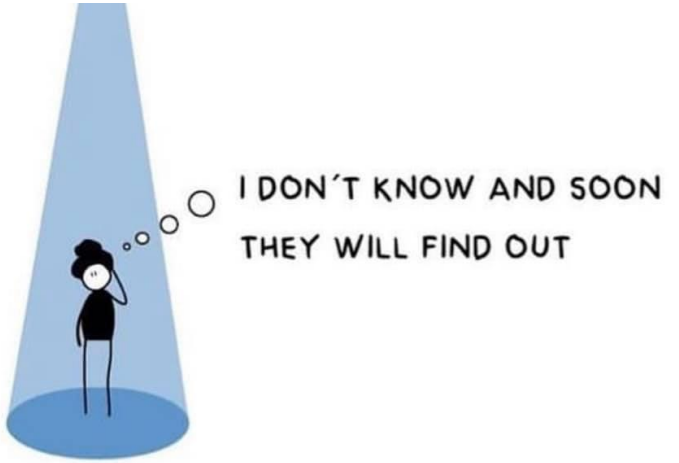
The blind men and the elephant





Time to embrace change

- **Foster innovation** and encourage critical thinking. Let students take the lead in their learning journey, promoting ownership and engagement.
- **Personalized Learning** - Tailor education to individual needs, allowing for flexibility and personal growth. Embrace a learning environment that values diversity and inclusivity.
- **Technology Integration** - Leverage technology to enhance learning experiences. Utilize digital tools for interactive and dynamic learning opportunities.
- **Project-based learning** - Encourage creativity and collaboration through hands-on projects. Foster a culture of problem-solving and real-world application.
- **Assessment for Learning** shift focus from grades to growth and progress. Embrace ongoing assessment to support continuous improvement and learning outcomes.
- **Community Engagement** to connect education to the community for real-world relevance. Foster partnerships and community involvement in the learning process.
- **Support educators** with professional development and resources. Encourage innovation and collaboration among teachers.
- **Embrace a culture of adaptability** and growth mindset. Empower education by embracing change and evolving with the needs of students.



Faculty Development for Interactive and Participative Learning

- Fostering overall growth of students by promoting their social, cognitive and emotional abilities is the first step for teachers to enable holistic learning in NEP 2020. The new guidelines necessitate a shift from conventional teaching practices to a student-centric approach that promotes interactive and experiential learning.
- Educators are encouraged to embrace technology and practice multidisciplinary teaching – an approach where teachers collaborate across varied subject areas and integrate knowledge from multiple disciplines in order to promote a holistic understanding of essential concepts. Moreover, they are expected to take on mentoring roles in order to guide students and transform them into lifelong learners.

NEP 2020

The National Education Policy (NEP) 2020 recognizes the need for a transformative shift in education. It emphasizes **holistic learning** and aims to create well-rounded individuals who possess essential skills for the 21st century. Let's delve into the key aspects of holistic education as outlined in the NEP 2020:

1. Learning How to Learn:

1. NEP 2020 acknowledges that in our rapidly changing world, it's crucial for students not only to acquire knowledge but also to learn how to learn effectively.
2. Education should move away from rote memorization and focus more on critical thinking, problem-solving, creativity, and adaptability.
3. Pedagogy must evolve to make learning **experiential, inquiry-driven, and enjoyable**.

2. Integration of Skills and Values:

1. For holistic development, specific skills and values are to be incorporated at every stage of learning, from preschool to higher education.
2. The curriculum should go beyond traditional subjects and include arts, crafts, humanities, sports, languages, and values.
3. Students should develop social, theoretical, intellectual, emotional, and moral capacities in an integrated manner.

3. Multidisciplinary Approach:

1. NEP 2020 encourages a multidisciplinary approach that transcends conventional learning methods.
2. Collaborative learning models are promoted to propel student growth across various dimensions.
3. The goal is to create smart learners who can adapt to diverse fields and challenges.

In summary, NEP 2020 envisions an education system that nurtures not only academic excellence but also character, creativity, and adaptability. By integrating skilling, industry connections, and employability, it aims to prepare students for a dynamic and interconnected world

THE FUNDAMENTAL PRINCIPLES OF NEP

- Recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing teachers as well as parents to promote each student's holistic development in both academic and non-academic spheres.
- Flexibility, so that learners have the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests;
- No hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning.
- Multidisciplinarity and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge;
- Emphasis on conceptual understanding rather than rote learning and learning-for-exams.;
- Creativity and critical thinking to encourage logical decision-making and innovation;
- **Ethics and human & Constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice;**
- Promoting multilingualism and the power of language in teaching and learning;
- **Life skills such as communication, cooperation, teamwork, and resilience;**
- Focus on regular formative assessment for learning rather than the summative assessment that encourages today's 'coaching culture';
- Extensive use of technology in teaching and learning, **removing language barriers**, **increasing access for Divyang students**, and educational planning and management;
- **Respect for diversity** and **respect for the local context** in all curriculum, pedagogy, and policy, always keeping in mind that education is a concurrent subject;
- **Full equity and inclusion** as the cornerstone of all educational decisions to ensure that all students are able to thrive in the education system.

A NEW AND FORWARD-LOOKING VISION FOR INDIA'S HIGHER EDUCATION SYSTEM

- Quality higher education must aim to develop good, thoughtful, well-rounded, and creative individuals.
- It must enable an individual to study one or more specialized areas of interest at a deep level, and also develop character, ethical and Constitutional values, intellectual curiosity, scientific temper, creativity, spirit of service, and 21st century capabilities across a range of disciplines including sciences, social sciences, arts, humanities, languages, as well as professional, technical, and vocational subjects.
- A quality higher education must enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to the society.
- It must prepare students for more meaningful and satisfying lives and work roles and enable economic independence.

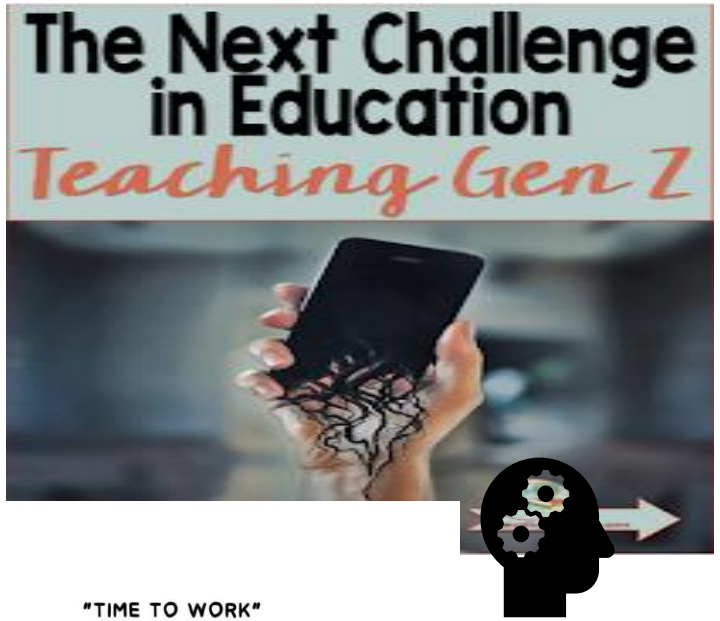
- Some of the **major problems currently faced by the higher education system in India** include:
- a severely fragmented higher educational ecosystem;
- less emphasis on the development of cognitive skills and learning outcomes;
- a rigid separation of disciplines, with early specialisation and streaming of students into narrow areas of study;
- limited access particularly in socio-economically disadvantaged areas, with few HEIs that teach in local languages,
- limited teacher and institutional autonomy;
- large affiliating universities resulting in low standards of undergraduate education.

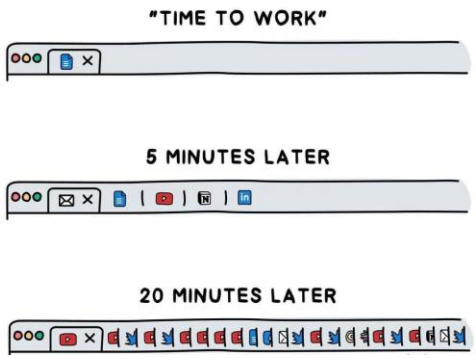
IMPLICIT ASSUMPTION:

The student cannot be trusted with his own learning.

Carl Rogers, *Freedom to Learn* (1969)

The paradox that the only thing constant is change is true. We have a new generation on our hands, a generation that has not seen the world without technology.

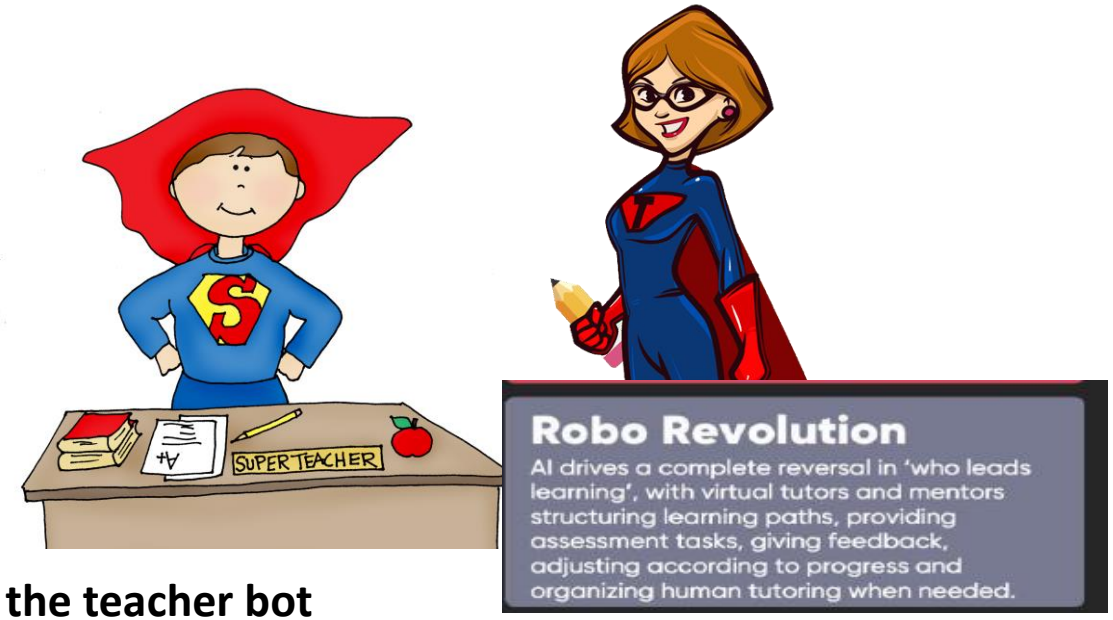




Here are some observations about Gen Z:

1. They have smaller attention spans than previous generations.
2. There's a lot of "noise" in their lives. They don't always listen unless we are addressing them directly (one-on-one).
3. They are more interested in what "real people" are doing (on social media platforms like YouTube) than in popular television shows or movies.
4. They never, ever have to be bored and don't expect to be.
5. They already are, or anticipate being, entrepreneurs.
6. They don't have patience for the oldies including teachers as they are felt to be on the opposite side of the digital divide.

The 10x Revolution in Education - Meet the Teacher Bot



Meet the teacher bot

Your teacher bot … is **yours**. Always available, never on strike or sick, never sleeping or having lunch, never angry or in a bad mood, infinitely patient, understanding and energetic. If you so desire, your teacher bot is human-like, either as a stylized avatar or with a face as real as that of an actual person. Your teacher bot can be male or female, young or old, funny or serious, or all of the above, in turn, for however long you decide.

In order to make humans **AI-proof,** education is now compelled to emphasize 21st-century competencies and more specifically non-cognitive, social and emotional skills. But there is much more. Education is becoming **AI-powered**. This is on the verge of disrupting one of the most fundamental bricks of education: the Teacher. In the process, the greatest democratization of education ever will be set in motion.

10x talent, as the label implies, is able to deliver ten times more than is expected, but what makes them so valuable is that they are multidimensional.

They are smart, good communicators, and have interests beyond their core specialty.

Their curiosity and love of learning drives them to do more and do it better.

They love what they do, and they love solving problems.

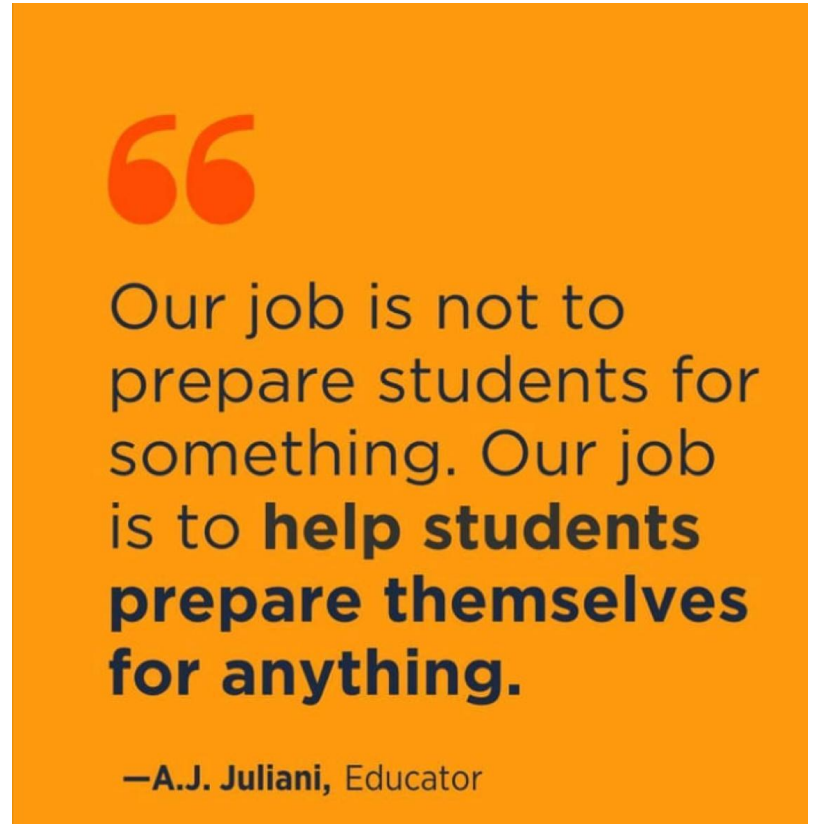
But 10xers are not only high IQ but high EQ. They work well on teams. Making it on the team is the new success. And of course, this means openness to feedback.

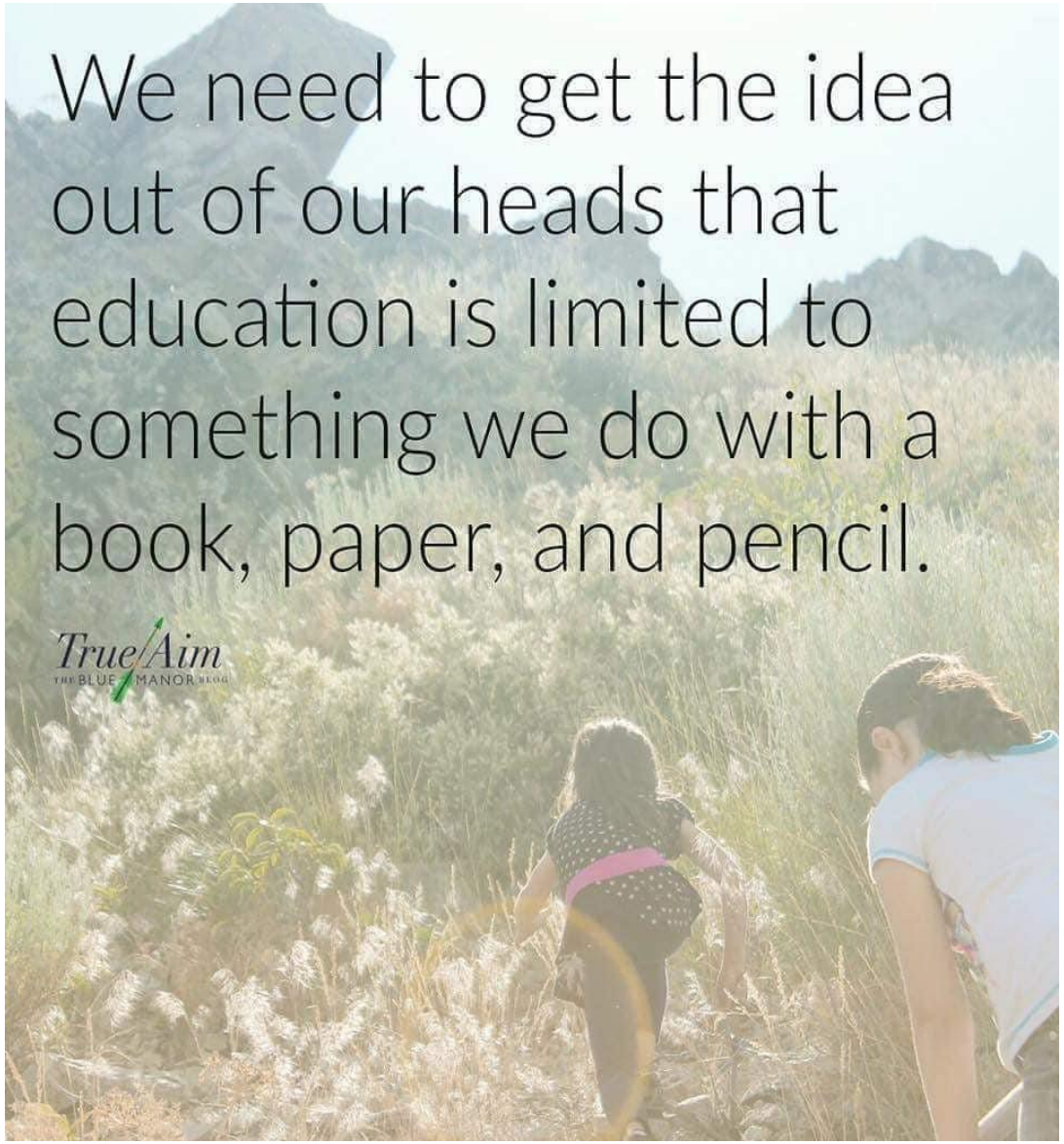
"Great talent becomes 10x when it develops the quality of ***manageability*—the ability to seek out and internalize powerful outside guidance, built on an invisible desire for growth and improvement**."

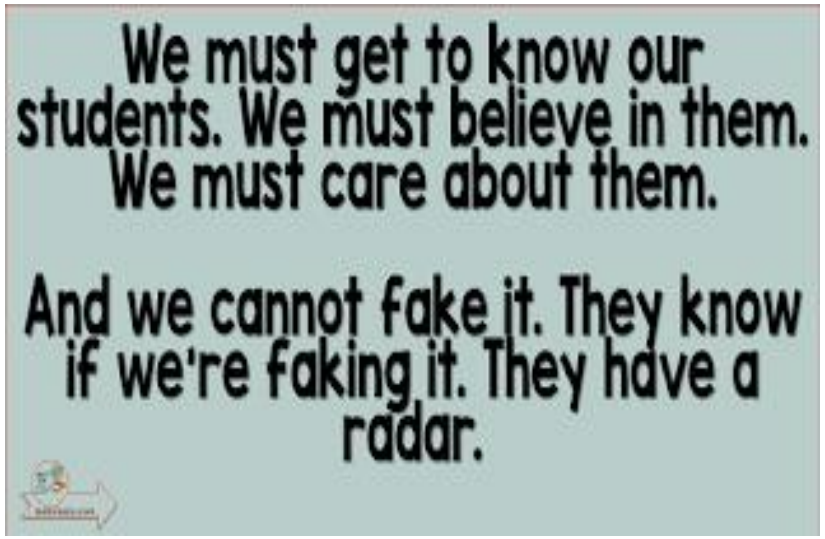
Hi-Fi Teacher: High Impact Freedom Intending
VIP Teacher: Visionary, Innovative & Passionate

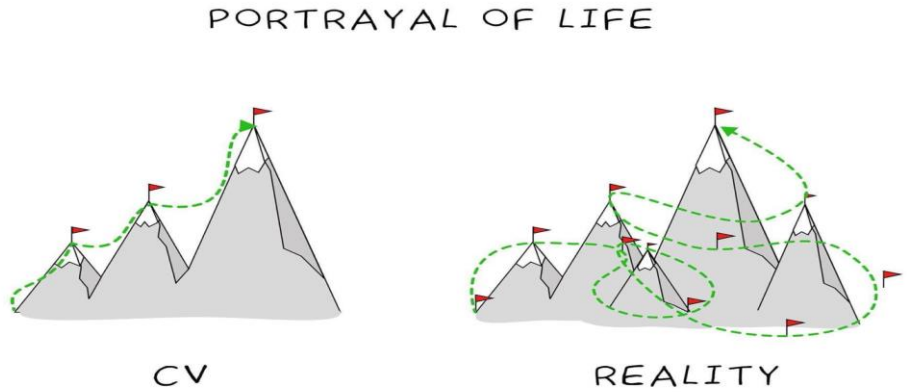
Responsibility as an Educator

- Teachers experience a complex blend of emotions: disappointment, sadness, and a profound sense of collective responsibility if the students fail in any area. Such situations prompt introspection, compelling us to question our effectiveness as an educator.
- Teachers have more than the responsibility of imparting knowledge. They have the commitment to educating individuals who embody integrity in all areas of their lives. We seek to cultivate an environment where honesty and respect are as important as the knowledge itself, ensuring that the commitment to integrity embeds seamlessly into our educational journey.




We need to get the idea out of our heads that education is limited to something we do with a book, paper, and pencil.
TrueAim
THE BLUE MANOR BLOG


We must get to know our students. We must believe in them. We must care about them.
And we cannot fake it. They know if we're faking it. They have a radar.


PORTRAYAL OF LIFE
CV
REALITY

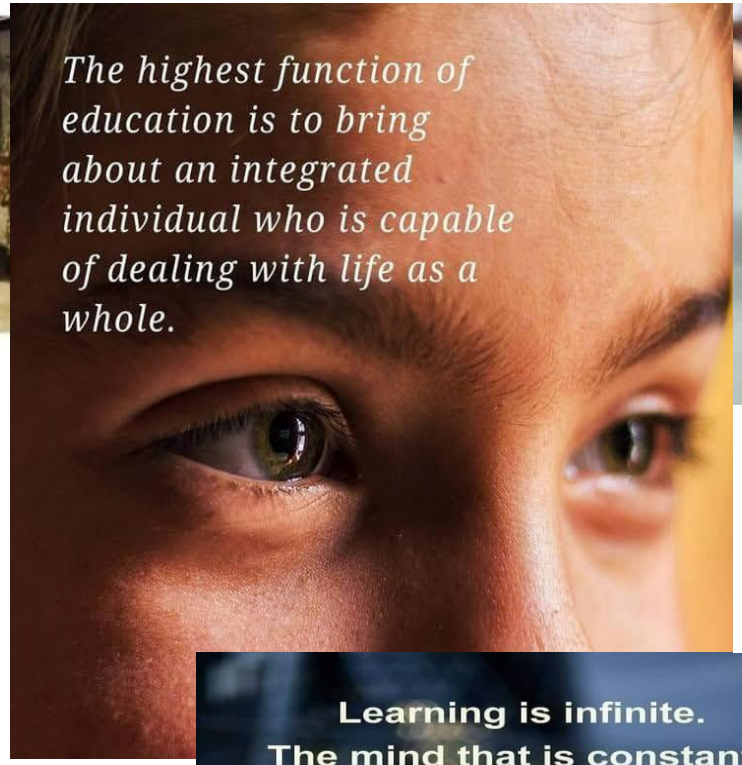
What is learning ?

- Learning is a life-long and continuous process. It commences from the moment one is born.
- The day one stops learning new things professionally or personally, plainly speaking , it is the end of life. Even animals and insects learn something or the other, as it is a natural process.
- The saying "Necessity is the mother of invention" holds good for every learning activity.
- **Learning occurs in spite of the teacher and it also occurs because of the teacher. There is some truth in both these statements. But the presence of the teacher (direct or indirect) must make the difference. That is why, we are so much concerned to explore how learning can be made more effective and efficient. One of the ways for doing this is by using a variety of teaching methods.**

By learning I do not mean the mere cultivation of memory or the accumulation of knowledge, but the capacity to think clearly and sanely without illusion, to start from facts and not from beliefs and ideals. There is no learning if thought originates from conclusions.

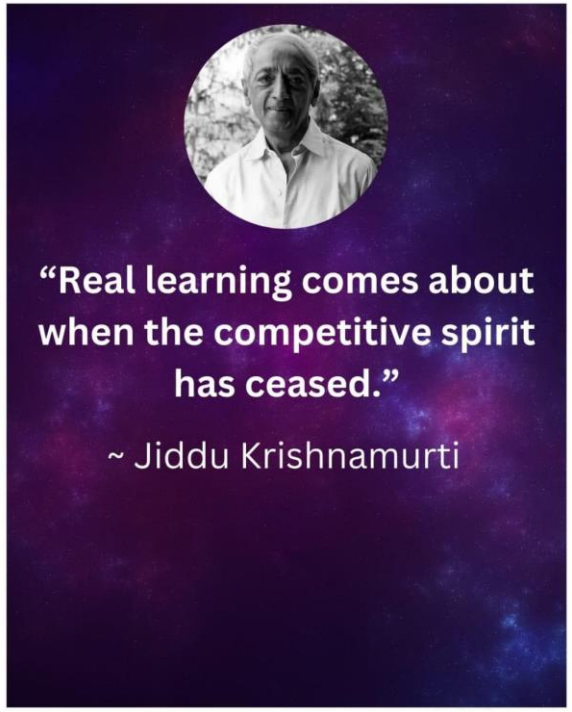
Jiddu Krishnamurti

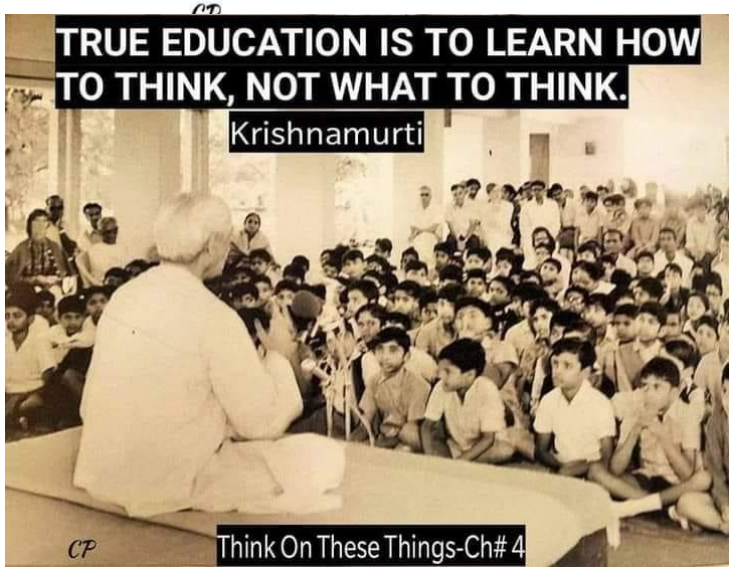
The Book of Life

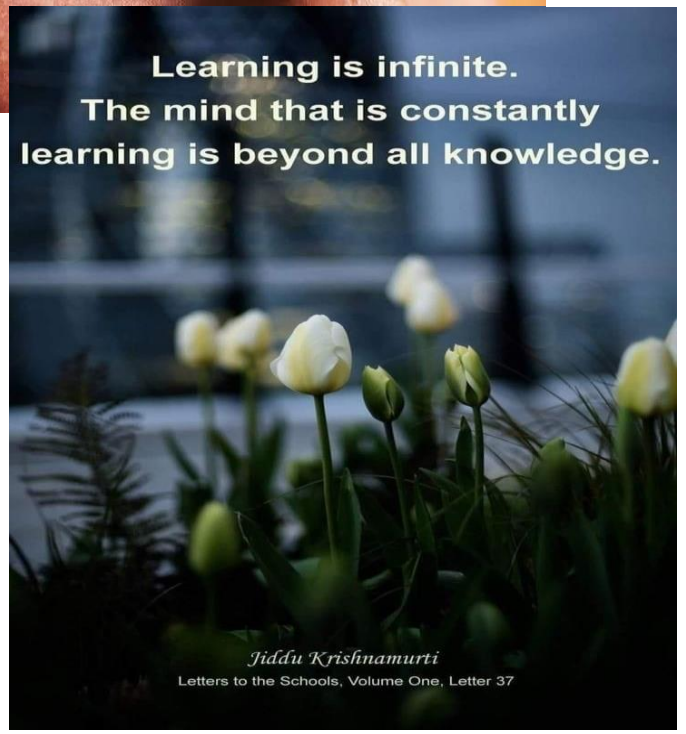


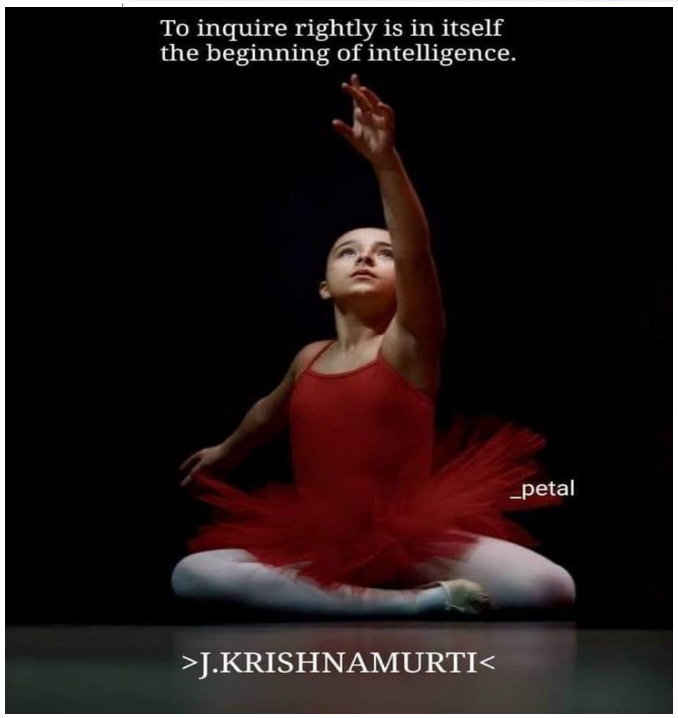
Emotional openness and sensitivity can be cultivated only when the student feels secure in his relationship with his teachers. The feeling of being secure in relationship is a primary need of children.

J Krishnamurti, Life Ahead





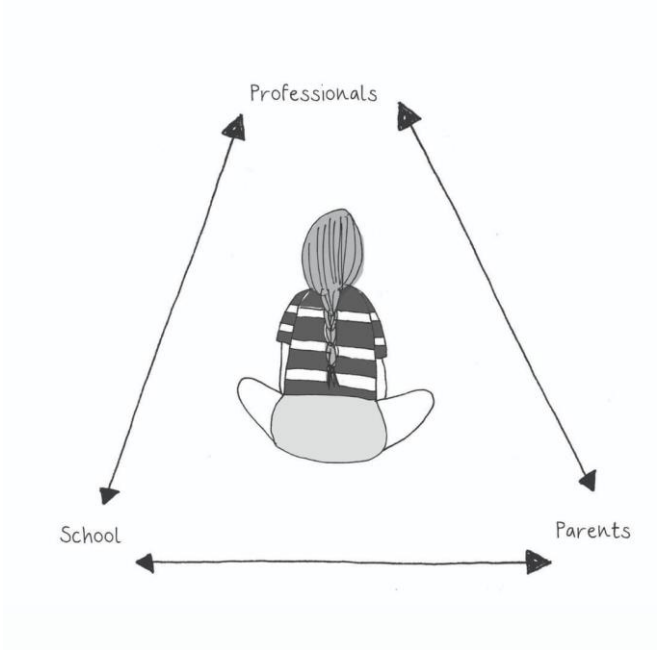


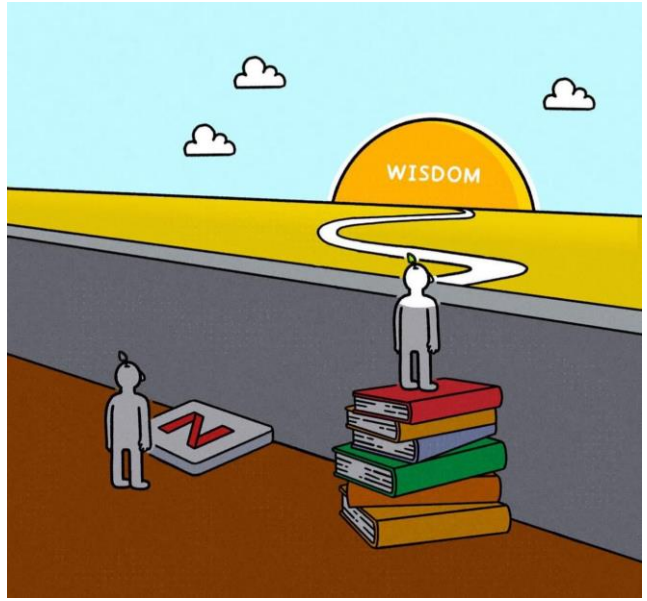


The urgency

Rising Student Suicides in India: A Silent Epidemic

- In an alarming situation, a total of 7,62,648 suicides were reported in India between 2018 to 2022 of which student suicides accounted for 59,239 that is 7.76%, as per the data provided by the National Crime Record Bureau (NCRB)
- As per the National Crime Records Bureau (NCRB) 2020 data, suicide was reported as the leading cause of death among people aged 15 to 30. The NCRB 2020 data also revealed that every 42 minutes, a student commits suicide. This means that an average of 34 students die by suicide every day.
- To address this issue, the government claims to have undertaken multiple initiatives. The ministry of Education has prepared (UMMEED) 'Understand, Motivate, Manage, Empathise, Empower and Develop: Prevention of Suicide – Guidelines for Schools, 2023', which it claims to provide an understanding for all stakeholders of the school system about suicide, associated myths and facts, risk and protective factors and warning signs for identifying students at risk.
- The draft guidelines stress that 'Every Child Matters' is the foundational belief driving their development for the prevention of student suicides.
- It further explains that when students cannot manage their personal social issues, the consequences often involve feelings of sadness, dissatisfaction, frustration, mood swings, hopelessness, and at extreme ends, self-harm, including suicide.





IF THEY CAN'T LEARN
THE WAY WE TEACH,
WE TEACH
THE WAY THEY LEARN.

The focus is always students

- The focus component of any T-L system is always students. We teach the students not only for the sake of teaching but we intend to see that learning occurs in them.
- How can we become confident that learning has taken place? We would certainly like to measure whether or not or how much learning has taken place. How do we get this information?
- To start with we must know what learning' is all about including its 'process', the result of which is the 'product' or in other words ‘learning outcome’.

Let us first define what learning really means.

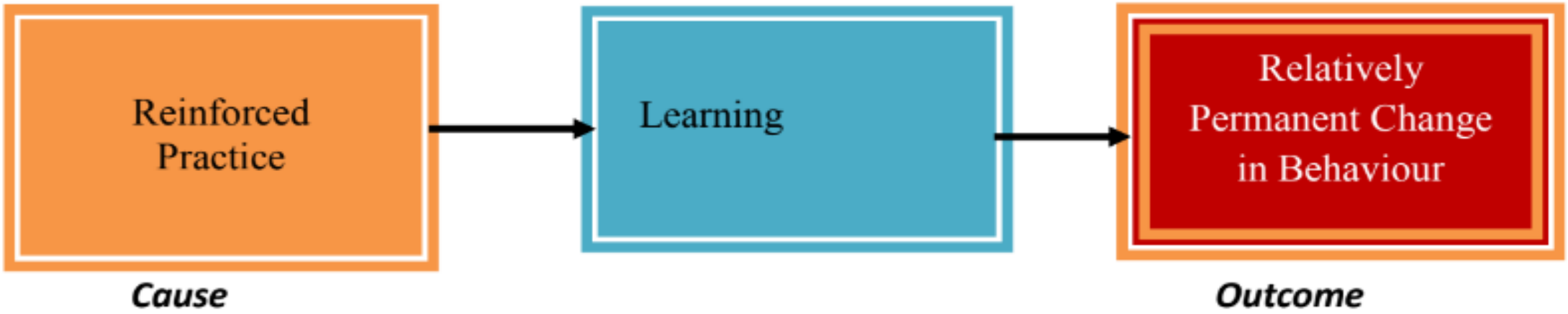
Learning is relatively permanent change in behaviour and is the result of reinforced practice.

The above definition highlights three major aspects:

- **i. Learning is a change in behavior;**
- **ii. This change occurs due to practice or experience; and**
- **iii. The change must be relatively permanent.**

In the above definition the word "behavior" is very important which means anything in particular with reference to any teaching – learning environment, a student does or says.

Basic Process of Learning



Learning is a 'Process'. It is really a complex process, which needs to be examined further. Process is a stage where the change occurs due to certain factors and results in some learning outcome.

SUB-PROCESSES OF LEARNING

Process of learning can be further classified in five stages:

A. Acquisition

As a result of teacher inputs, using instructional strategies, instructional media and interactions, and the learning efforts put in by the students, they acquire requisite knowledge and skills as well as develop desirable attitudes.

B. Organization

The information (knowledge, skills etc.) thus acquired are organized in the brain due to the internal processes of perception, understanding, thinking and the like. These acquired things are thus organized in the students' brains.

C. Retention

Depending upon the teaching strategies adopted by the teachers and learning efforts put in by the students the items to be learned are understood and organized in the brain in such a manner, that these are stored in the memory.

D. Recall (Retrieval)

Before teaching a new concept, the teacher by questioning or other strategies makes the students to recall prior learning so that proper relationship can be established with the new concepts. Thus, learning of new concepts is facilitated.

E. Application

The confirmation of learning a concept or principle or any other component of content is the students' ability to apply and use the things learned so as to solve new problems.

Principles of learning

For effective learning to occur, the teachers are required to design, develop, implement and monitor the process of learning carefully. Assessment of students' learning gives the teacher evidence that learning has occurred in terms of the instructional objectives being achieved.

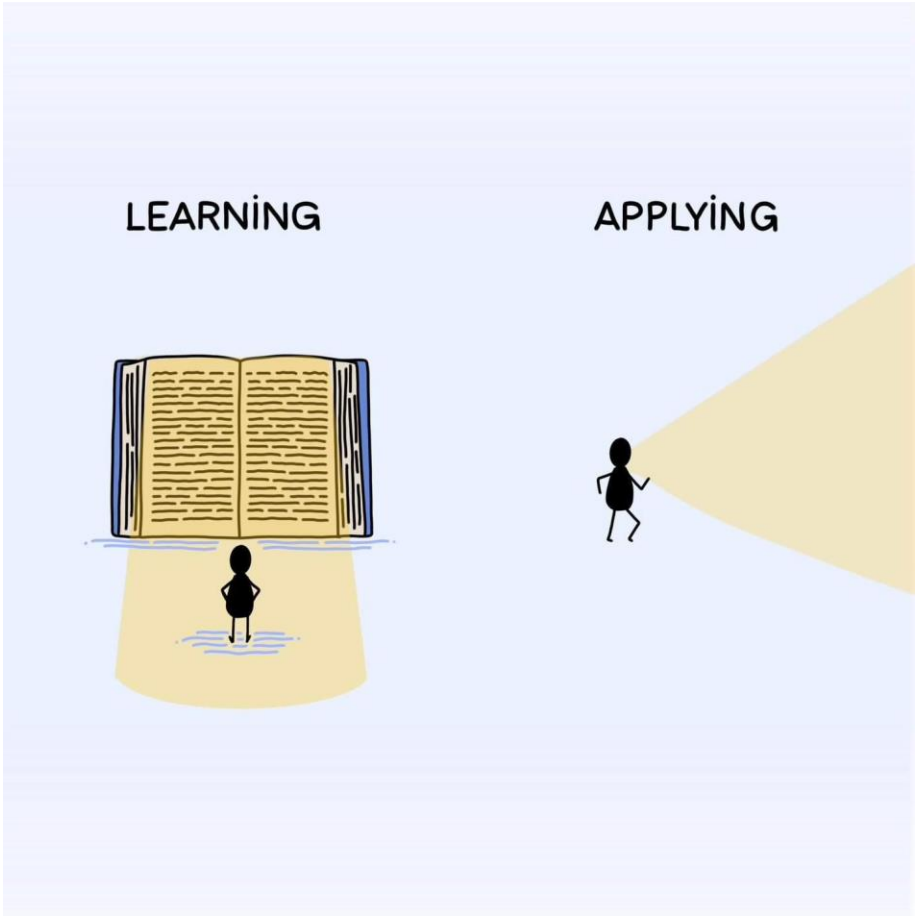
In the context of teaching-learning process the following two questions generally come to the minds of the concerned.

i. Why do students learn?

ii. How do students learn?

The answers to these questions are based on certain 'Principles of Learning' which facilitate the process of effective learning and which need to be followed in all learning situations. Apart from principles, there are certain important factors that impacts effectiveness of learning, about which a teacher ought to be concerned about.

Learning and Application



Teaching Styles

	LECTURER	DEMONSTRATOR	HYBRID	FACILITATOR	DELEGATOR
About	Formal authority style	Instructor is open to student-centered learning	Balance between instructor and student centered approaches	Instructor facilitates inquiry-based learning	Group-style learning; peer to peer collaboration
Pros	✓ Easy to prepare lectures ✓ Opportunity to teach large groups	✓ Incorporates many teaching formats	✓ Increased student engagement	✓ Increases students self-sufficiency	✓ Encourages learning and collaboration
Cons	✗ Low information retention ✗ No active learnings	✗ Not accommodating of all students needs	✗ More energy required from instructor ✗ Can be less focused and slower	✗ DIfficult to use with heavy theory content	✗ Possibility to be inefficient as students must find correct answer themselves

Teacher – Most important

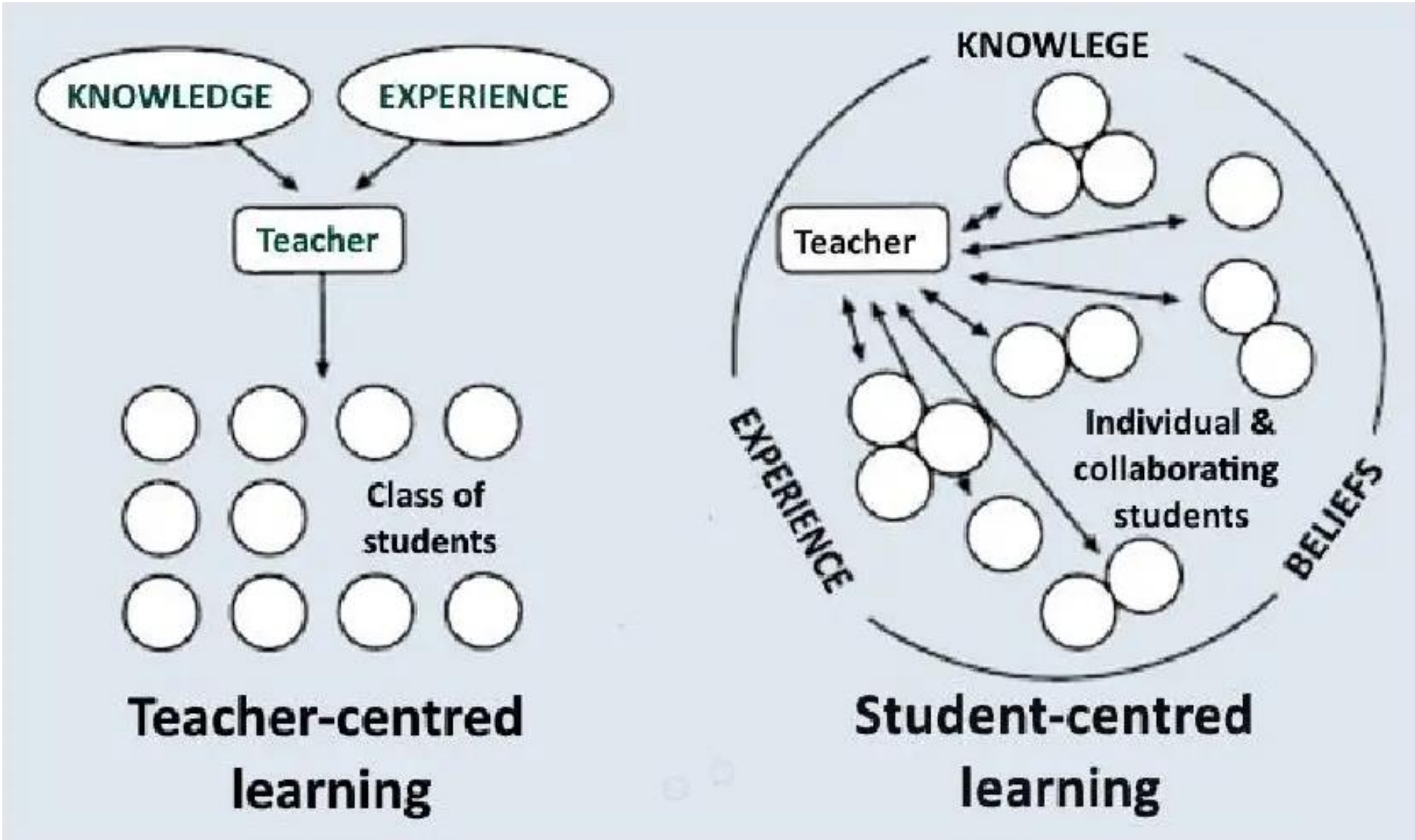
- If students cannot connect themselves with the material and information given to them during the lecture then they will not learn it.
- Learning style of the student is the key element which helps a faculty to connect with students during the lectures and achieve better learning experience.
- The teacher is still the most important person to achieve this overall learning as teacher needs to customize his lecture as per heterogeneity of learners in the classroom.

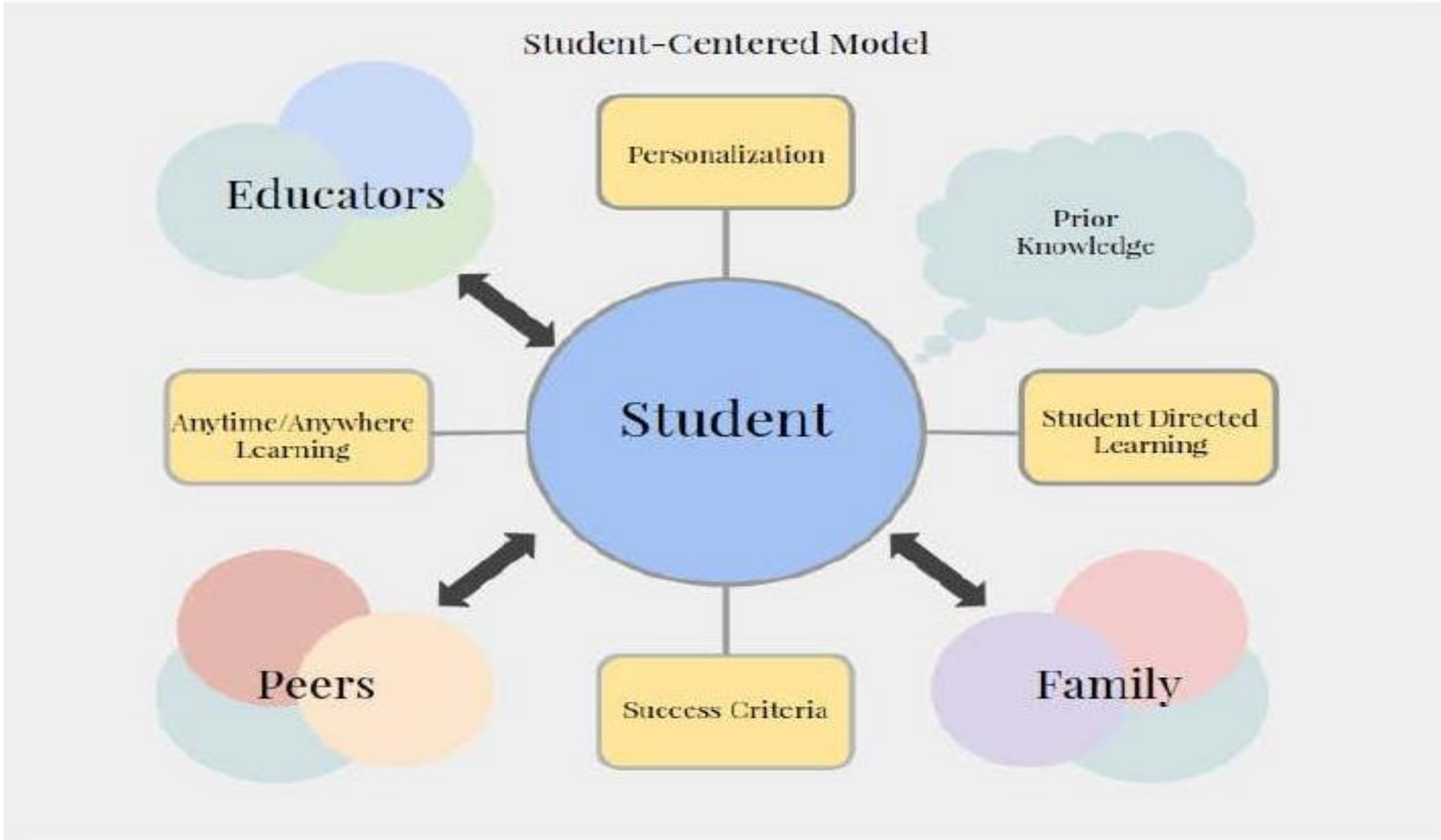
Student Centered Learning

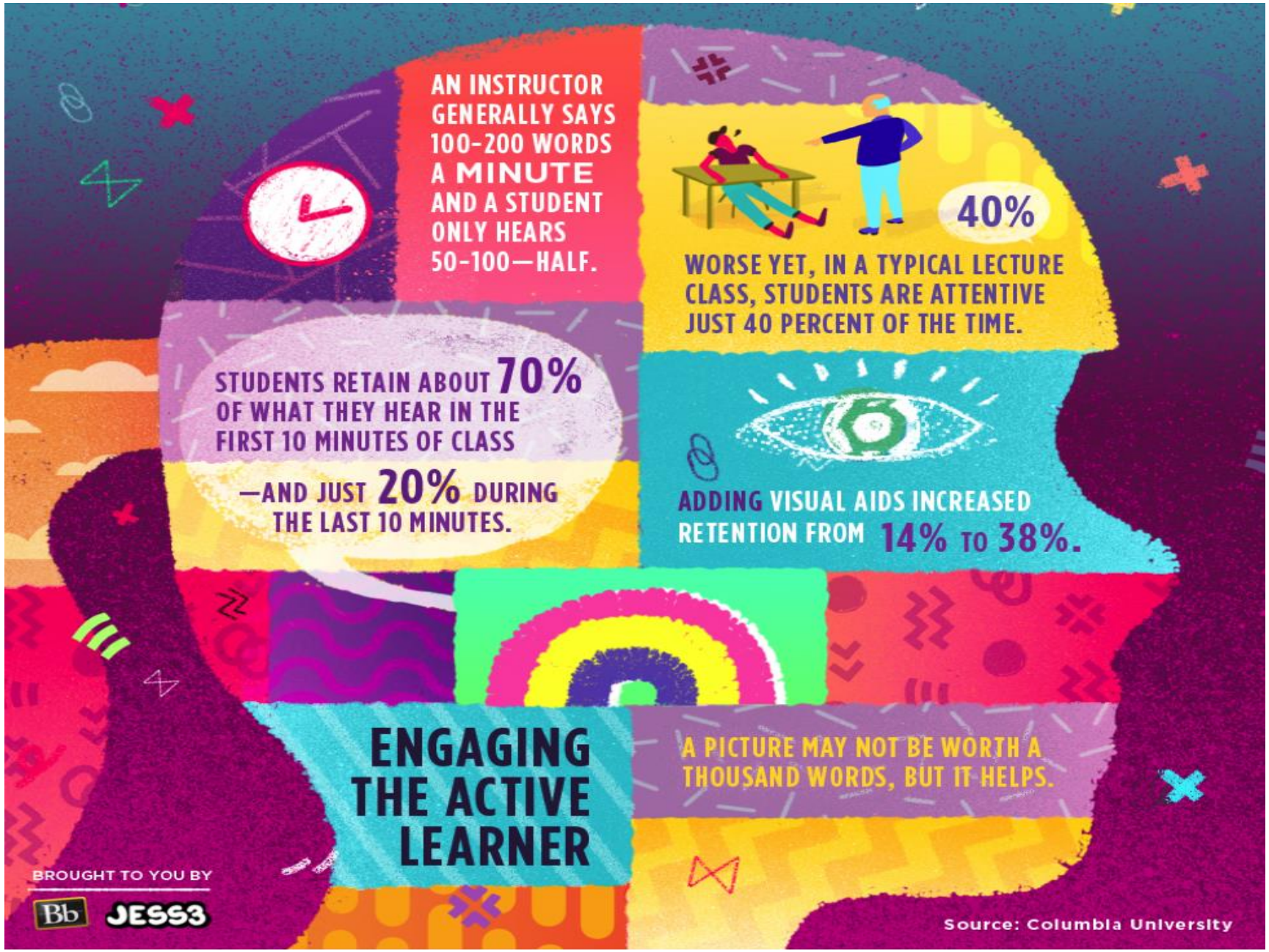
- Traditional and modern teaching methodologies focus less on the learning style of a student.
- In countries like India, the average strength of the class is 60 and it becomes very difficult to focus on each student individually.
- Instead of being student centric, the current education system is more teacher-centric.
- It is inappropriate to assume that the same learning methodology is applicable to all students. There should be an attempt to customize the lecture delivery method or teaching style suitable to address heterogeneous learners in the classroom.
- The implementation of student centered learning when aligned with the learning style of students can create a great impact on student's performance.

WHAT IS SCL?

SCL is a learning strategy where students as active and independent subjects who are fully responsible for their learning (Kustijono,2011)




Student-Centered Model
Educators
Personalization
Prior Knowledge
Anytime/Anywhere Learning
Student
Student Directed Learning
Peers
Success Criteria
Family


AN INSTRUCTOR GENERALLY SAYS 100–200 WORDS A MINUTE AND A STUDENT ONLY HEARS 50–100—HALF.
40%
WORSE YET, IN A TYPICAL LECTURE CLASS, STUDENTS ARE ATTENTIVE JUST 40 PERCENT OF THE TIME.
STUDENTS RETAIN ABOUT 70% OF WHAT THEY HEAR IN THE FIRST 10 MINUTES OF CLASS
—AND JUST 20% DURING THE LAST 10 MINUTES.
ADDING VISUAL AIDS INCREASED RETENTION FROM 14% TO 38%.
ENGAGING THE ACTIVE LEARNER
A PICTURE MAY NOT BE WORTH A THOUSAND WORDS, BUT IT HELPS.
BROUGHT TO YOU BY
Bb JESS3
Source: Columbia University

Learning style

- Educational institutes get students admitted from various geographical locations with great diversity in their attitude, aptitude, intelligence, interest, personality, etc.
- Apart from all the above mentioned diversities, an important aspect that plays a pivotal role in the overall learning of any student is his/her learning style. A learning style is a student's consistent way of responding to and using stimuli in the context of learning.
- Learning style is indicator which shows how each individual grasps, processes, comprehends and memorizes the information. Individual learning style is dependent on various factors like intellectual, physical, emotional, social, mental, environmental and cultural factors.
- Learning style is predominantly classified into three parts: visual, auditory and kinesthetic. Visual learners prefer diagrams and spatial understanding. Auditory learners prefer usage of sound, music and verbal explanation to learn new things. Kinesthetic learners or tactile learners prefer body, hand and sense of touch. Kinesthetic learning consists of both information perception as well as information processing. In information processing learner learns through activities like touching, tasting, smelling while in Information processing learner learns through moving, relating, doing something active while learning.

7 Different Learning Models:

- According to research, learning is far more than what we think it is. There have been new studies that can help make the process of learning more effective and fun.
- Learning models are one aspect of this research, and anyone can use them to boost their learning process.
- *A learning model is any form of learning new skills or information. These models have sub-categories that further divide into various learning styles.*

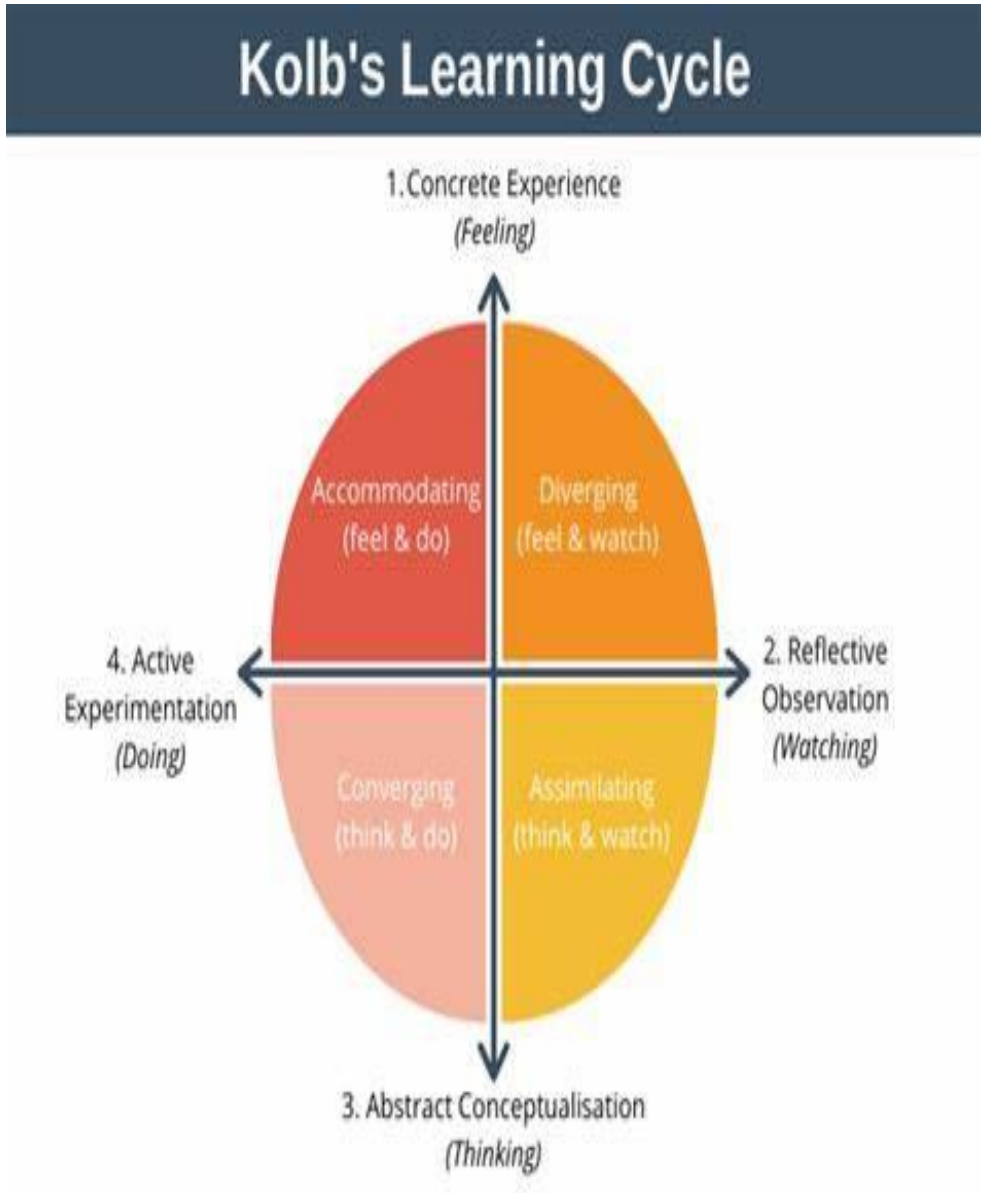
1. Kolb Learning Style Model
2. VARK Learning Style Model
3. Gregorc Learning Model
4. Hermann Brain Dominance
5. 4MAT Learning Model
6. Felder-Silverman Learning Style Model
7. Honey Mumford Model

1. Kolb Learning Style Model

- This learning style is also known as the experiential learning theory. David A. Kolb suggested in this model that learning is a cycle that comprises of four stages:

1. Concrete Experience
2. Reflective observation
3. Abstract conceptualization
4. Active experimentation

- In the first stage, the learner either experiences something new or goes through a variation of an old experience.
- This leads to the next stage in which the learner reflects on the said experience. The understanding of this experience is completely based on the learner's personal interpretation.
- Based on this understanding, the learner goes through abstract conceptualization in which either new ideas are formed or old ones are modified.
- In the last stage, everything that has been understood in the previous three stages is implied. The learner experiments with these new learnings in real life, the results of which then lead to a new cycle.

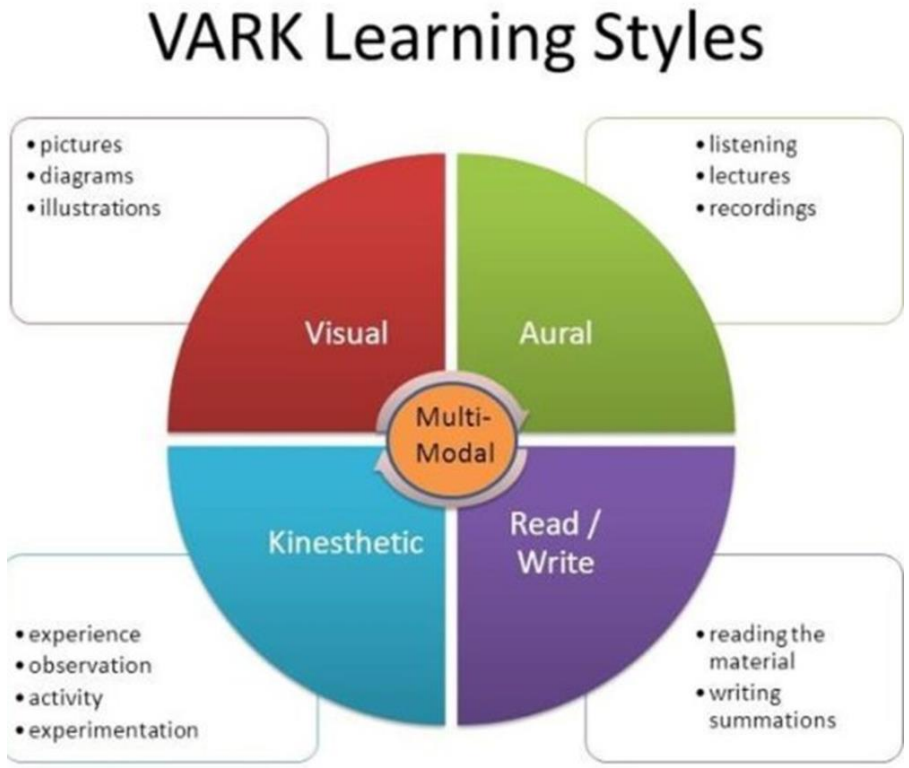


Based on the cycle, there can be four types of learners:

- **Convergers**: They like to experiment. For these individuals, it is important to apply their knowledge practically. Hence why they love technical tasks.
- **Divergers:** People with this learning style are more on the creative side of the spectrum. They like to imagine to great extents, which help them come up with unique ideas.
- **Assimilators:** Such learners take onto everything with the support of known information. They prefer conceptualization and reflection in absorbing information more effectively.
- **Accommodators:** Individuals with this learning style approach new tasks welcomingly. Their style is practical which is why their learning mostly comprises the last stage in the cycle.

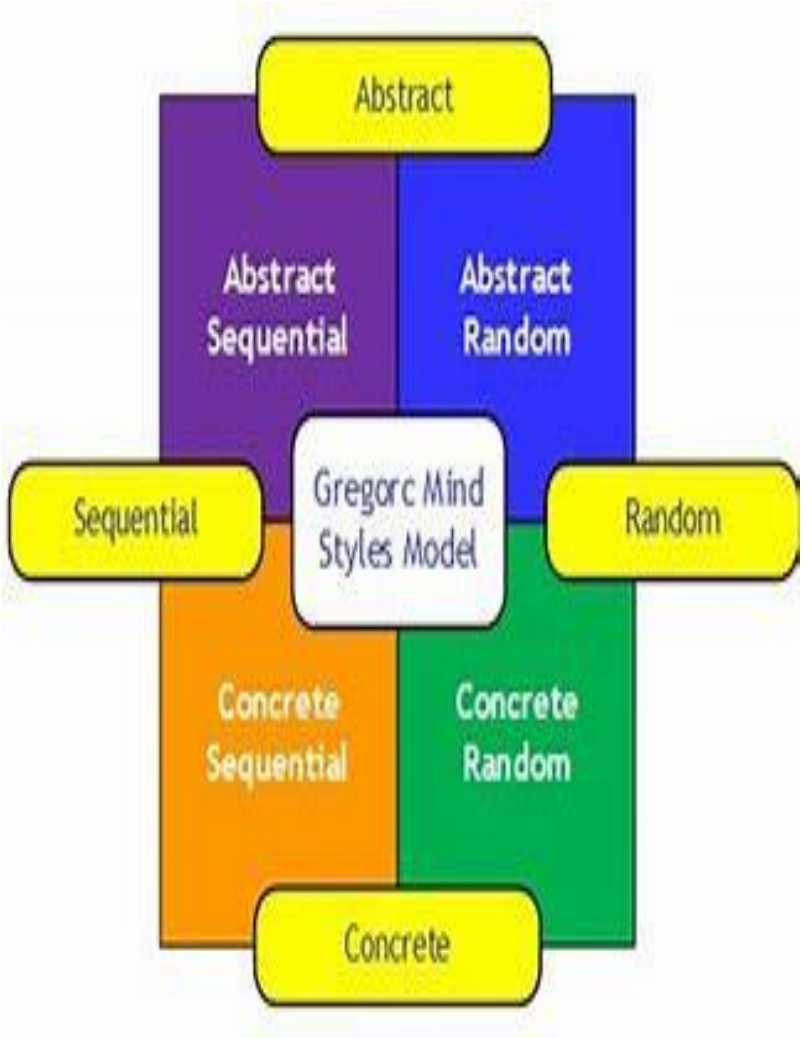
2. VARK Learning Style Model

- The acronym VARK explains the learning model itself. It stands for visual, auditory, reading/writing, and kinesthetic learning styles. This model states that every learner experiences learning through any one of these processes.
- Visual learners will be able to remember things they see better than the things they hear. Similarly, auditory learners absorb information best through audio sources, readers and writers like to do either of those, and kinesthetic learners gain knowledge by experiencing it.
- As per this model, learners are divided into two types. Type one learners can switch between the four learning styles as per the need of the situation. However, type two learners are referred to as slow learners because they only have one preference.



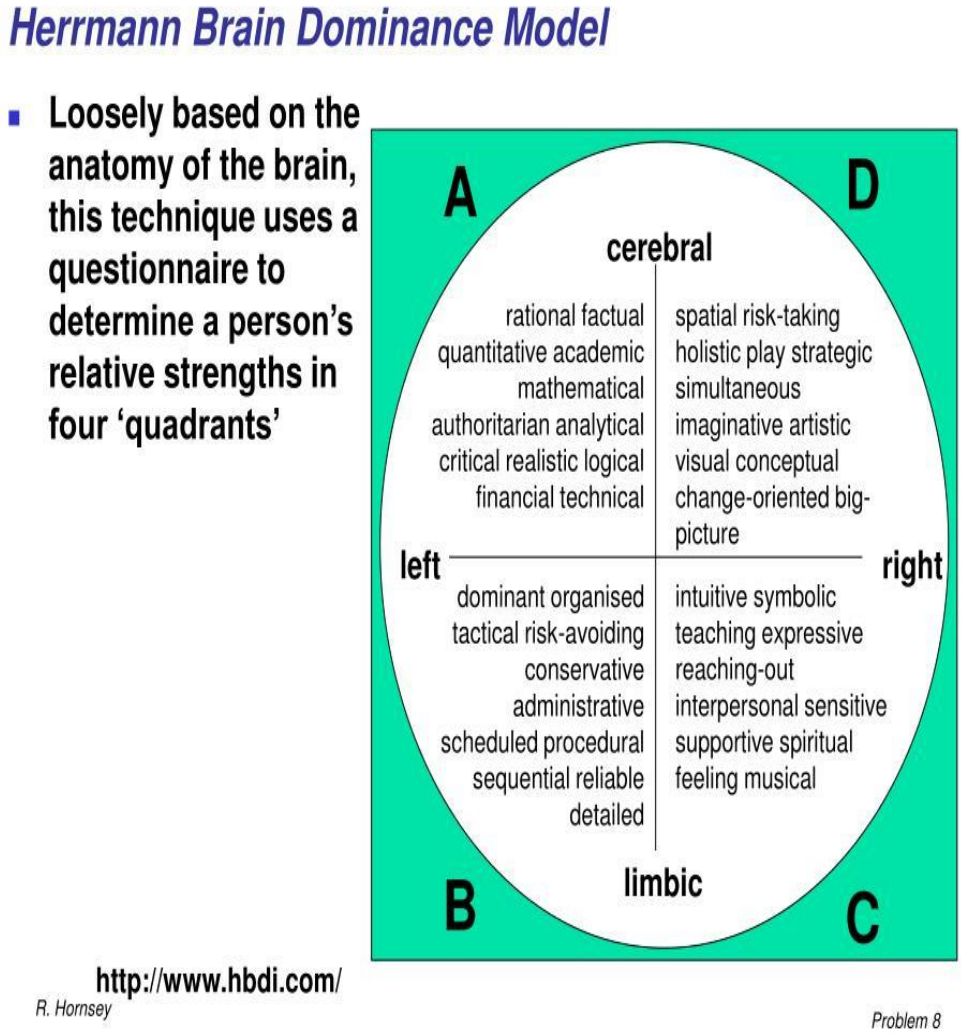
3. Gregorc Learning Model

- The Gregorc learning model looks deep into the way the mind works.
- As per this model, there is a dominant quadrant of the mind. Since this quadrant overpowers mental activity, it determines the learning style of every individual.
- The first of these learning styles is concrete sequential learning. These learners learn via hands-on experience. The use of all senses is noticed in such learning.
- Next: There is concrete random. Such individuals can memorize knowledge quickly but then interpretation is based on their prior knowledge. For example, a person learning the ukulele will have to relate the strumming pattern to an instrument they are already familiar with to learn it quickly enough.
- Moving forward, there are abstract sequential learners. People with this learning style require an organized learning environment with a lot of learning tools, especially visuals, for a successful learning process.
- Lastly, abstract random learners work in what seems like a disorganized manner. They have their own way to organize information in their mind as per their personal interpretation.



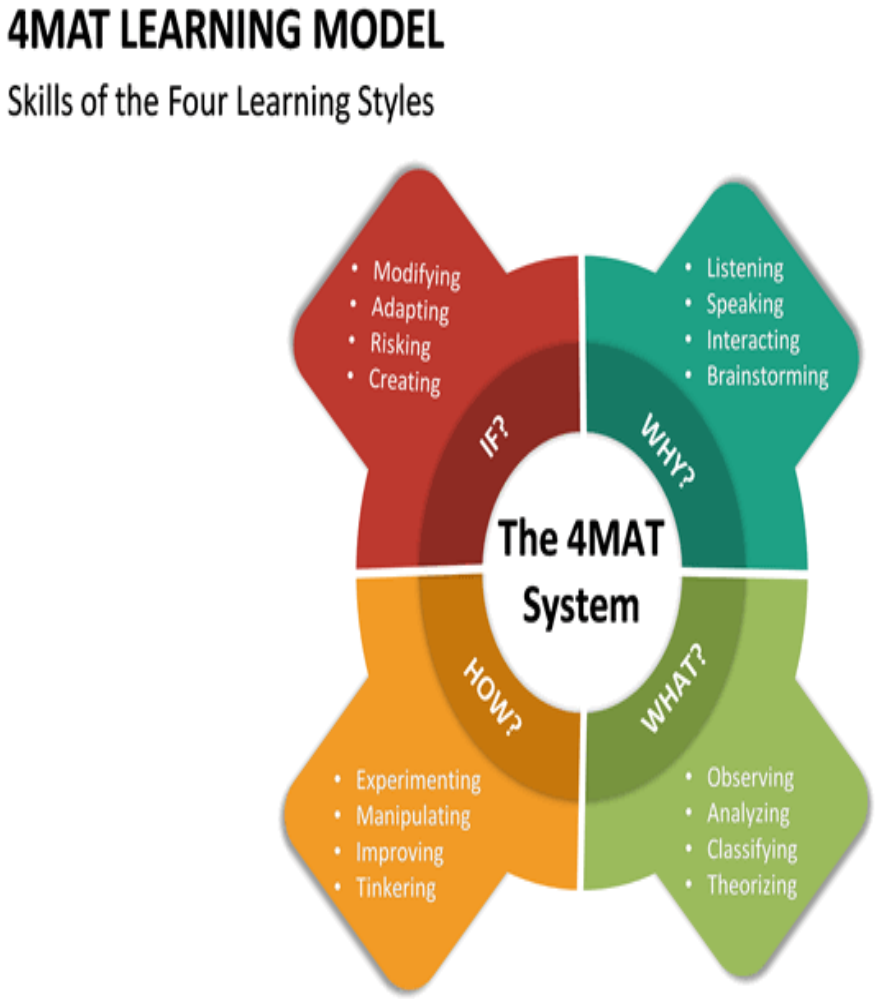
4. Hermann Brain Dominance

- The Hermann Brain Dominance Instrument (HBDI) is a model that introduced a mechanism to identify the learning preferences of individuals.
- Based on the results, this model suggests that learners can be theorists, organizers, humanitarians, or innovators.
- Theorists prefer sequential learning, so they are good at memorizing information.
- Organizers can only absorb new knowledge if all the information is arranged systematically.
- Humanitarians focus on interpersonal thinking so their learning comprises of emotions, feelings, and expression of ideas. Group interactions are pretty common for humanitarian learners.
- Lastly, innovators use existing knowledge to build upon with their creativity. Problem-solving and critical thinking are prominent traits of these learners.



5. 4MAT Learning Model

- The 4MAT learning model is an extension of the Kolb model. However, it presents 4 different learning styles which include imaginative, analytical, dynamic, and common sense.
- This model suggests that individuals who base their learning on experiences are learners who fall in the category of common sense.
- Imaginative learners conceptualize these experiences, whereas analytical learners apply and refine the ideas too. Dynamic learners make use of all the steps but mainly base their learning on their personal interpretation.



6. Felder-Silverman Learning Style Model

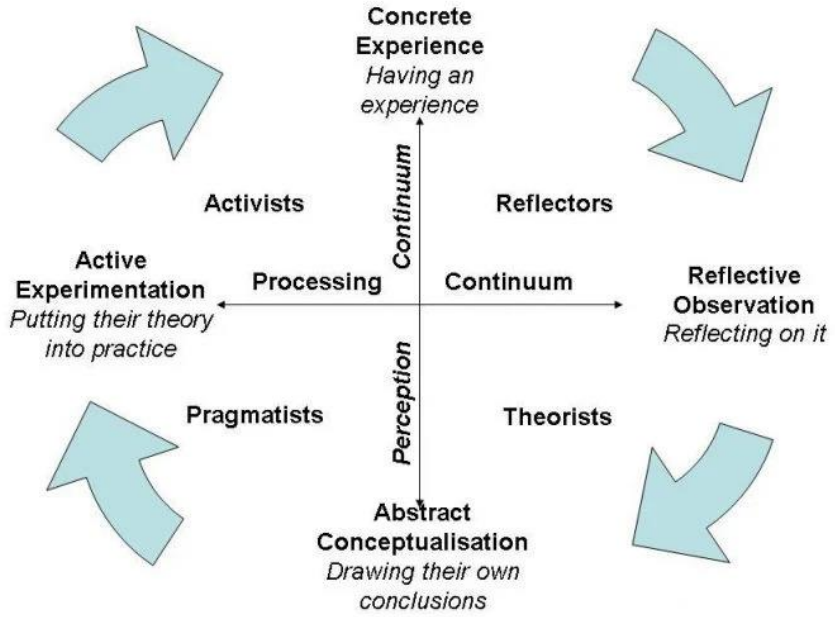
- This learning model is focused on the fact that every individual has their own preference when it comes to the process of grasping new information. Certain individuals may have multiple preferences, some may shift from one to the other, and some have only one.
- Active and reflective learners, as the name suggests, are very hands-on. Active learning is their favorite method to learn.
- On the other hand, sensing and intuitive learners focus on written facts and concepts. They can be presented with pre-existing ideas, and they will not have any issues memorizing them.
- For example, if a PR strategist can work better based on previous research instead of experimenting around in real-life situations with new ideas, it would account for this style.
- Sequential and global learners prefer organized and systematic learning.
- Visual and verbal learners go for supporting tools such as words and graphics.

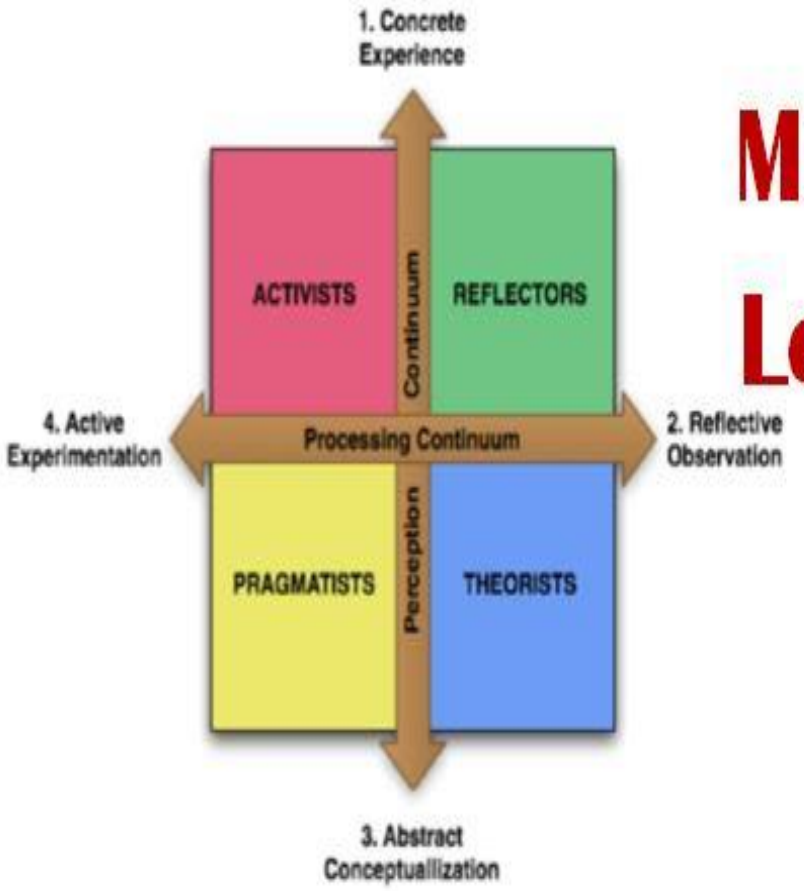
Continuum	Preference
Sensing - Intuitive	How you prefer to perceive or take in information
Visual - Verbal	How you prefer information to be presented
Active - Reflective	How you prefer to process information
Sequential - Global	How you prefer to organize and progress toward understanding information

7. Honey Mumford Model

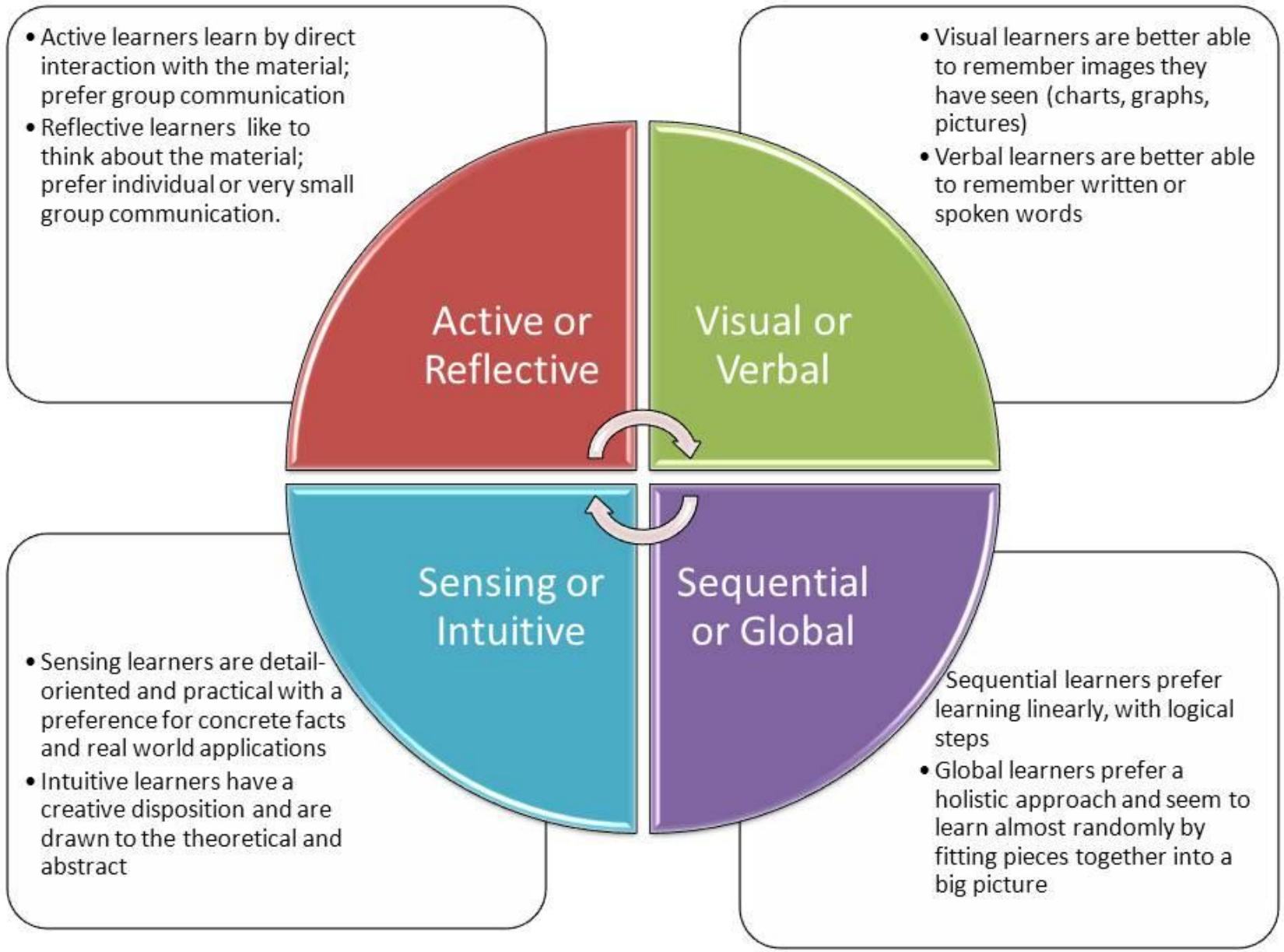
- The Honey Mumford model is pretty similar to the Kolb model. It introduces the following learning styles:
- Activists: Active learners do things practically to gain knowledge from them.
- Theorists: People who like to learn from existing facts and figures fall into this category.
- Pragmatists: Such individuals conceptualize and experiment with ideas before they learn from them.
- Reflectors: These learners reflect on what they see and learn from it.

Peter Honey and Alan Mumford's have used Kolb's experiential learning model and based on that learning styles are categorized in 4 different groups - Activist, Reflector, Theorist & Pragmatist (Mumford,1997).



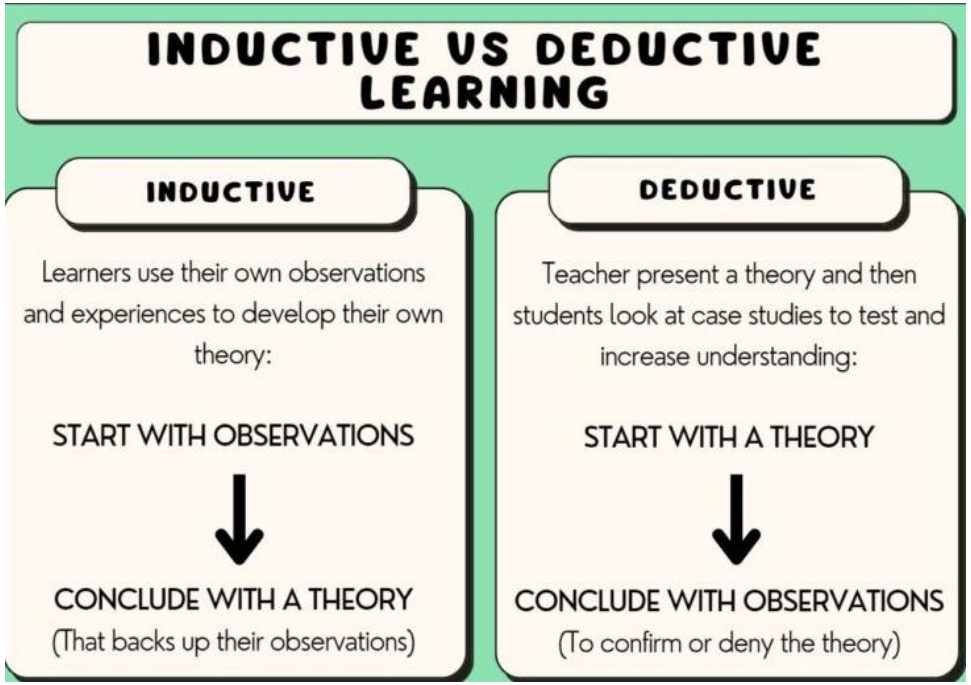


Honey Mumford Learning Style


• Active learners learn by direct interaction with the material; prefer group communication
• Reflective learners like to think about the material; prefer individual or very small group communication.
• Visual learners are better able to remember images they have seen (charts, graphs, pictures)
• Verbal learners are better able to remember written or spoken words
Active or Reflective
Visual or Verbal
Sensing or Intuitive
Sequential or Global
• Sensing learners are detail-oriented and practical with a preference for concrete facts and real world applications
• Intuitive learners have a creative disposition and are drawn to the theoretical and abstract
Sequential learners prefer learning linearly, with logical steps
• Global learners prefer a holistic approach and seem to learn almost randomly by fitting pieces together into a big picture

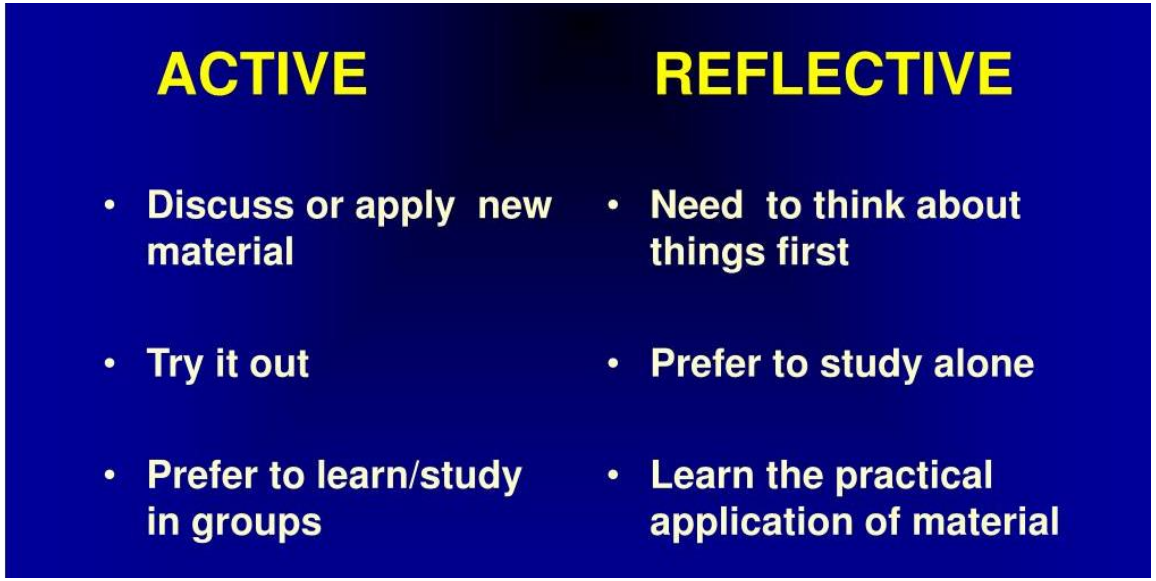
Inductive & Deductive Learning

Inductive learning is based on the observation ability of the learner. Small babies tend to learn many things from scratch just by observations. In deductive learning, learner initially understands the concept, law, rule and then practices it through various activities.



Active and Reflective Learners

Active learner is habitual to understand the things by doing a related activity like discussing or applying it, explaining it to others etc. Whereas reflective learner learns the things by examining or analysing the scene introspectively. Active learners have more extrovert personality.



Sequential & global learners

- **Sequential learners** learn best by understanding the details of a subject and slowly building an image of the bigger picture. They work very well with details but often have trouble understanding larger concepts and ideas.

- **Global learners** need to see the bigger picture and how the new material connects to information they have already learned. Global learners work well with larger concepts or ideas but struggle with the details.

Grasha & Reichmann formulated the new set of the **l**earning **s**tyle under the name Cognitive Model in which he made group of six different learning styles - avoidant, participative, competitive, collaborative, dependent & independent

Independent	The learner prefers independent study, self-paced instruction and would prefer to work alone on course projects than with other students.
Dependent	The learner looks to the teacher and to peers as a source of structure and guidance and prefers an authority figure to tell them what to do.
Competitive	The learner learns in order to perform better than their peers and to receive recognition for their academic accomplishments.
Collaborative	The learner learns by sharing and through cooperation with the teacher and peers. He or she prefers lectures with small group discussions and group projects.
Avoidant	The learner is not enthused about attending class or learning class content. He or she is typically uninterested and often overwhelmed by class activities.
Participant	The learner enjoys class and makes a good class citizen. He or she is interested in class activities and discussions and is eager to do class work.

ESTABLISHING CLASS GOALS

To identify goals, teachers may reflect individually using prompts such as these:

- What is going well? (what I want to continue doing)
- What could be improved? (routines and structures I want to keep but may need to revise and/or reteach)
- What is missing? (new ideas or structures to try out)

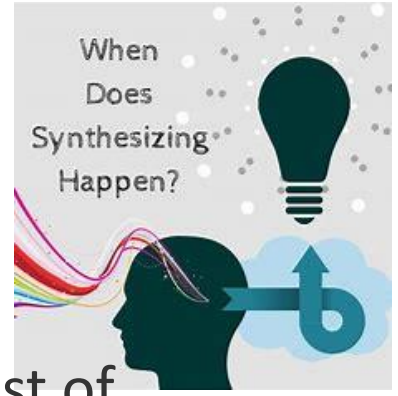
Your responses will offer a starting point for identifying relevant goals.

Sharing highlights from your reflection with your class, will facilitate student reflection.

SYNTHESIZING STUDENTS' REFLECTIONS

You may ask students for additional input through discussions and/or written responses to these prompts:

- What do you like about our class?
- What do you wish were different about our class?
- What do you think our classroom should look like/sound like?
- How do you know if students are learning in our class?



You may synthesize responses using an anchor chart, word map, or initial list of ideas or highlights. Then, work with students to select three to five goals. It's essential that these goals align with teacher and student reflections, while reinforcing established expectations. Selected goals should also encompass the ideal "classroom culture" that you have discussed.

When finalizing class goals, ensuring that the goals are concise and include student-friendly language, agreed upon by teacher and students, visible and accessible for quick reference, and are aligned with current classroom expectations is recommended.

ENACTING SHARED GOALS

- While class goals may use wording similar to classroom rules or expectations, the main distinction is that the goals are reviewed consistently, through frequent reflection paired with tracking or monitoring—which may help the goals become more pertinent to the students.
- Shared goals become a part of the daily routine, and students will begin to hold each other more accountable, since they will be working toward them as a class.
- After selecting the goals, the class may talk about what they would look like in action.
- Following directions and staying on-task and completing work will lead to building positive work habits and students being an active participant in the learning process.
- Teachers & students may discuss how these goals relate to the overarching goals and how they contribute to the learning community.

TRACKING PROGRESS

- After setting goals, a system may be developed for reviewing progress. Specific times may be designated for check-ins by subject on a daily or weekly basis.
- The class goals may be connected with something tangible or relevant to students, such as working toward a larger class goal or reward.
- To establish a consistent review of class goals, you may post the goals where they are clearly visible.
- You may prompt students to individually select a class goal to focus on for the day.
- Students may look at the class goals and determine, through reflection, teacher feedback, and group consensus, whether we met the expectations for each goal during the specified instructional time.
- If students do not meet the expectations for a specific goal, discuss how we could refocus and work towards it.
- This check-in gives students opportunities to reflect, acknowledge what went well and what needed improvement, and set manageable time frames throughout the day to focus on expectations.

CONSISTENCY IS KEY

- Consistently referring to class goals is an important part of the process. If individual students or the class needed a simple redirection, we could refer back to the class goal chart or prompt them by asking, “What class goal are we not meeting right now?” and “How can we fix it?” It is found that the students are quick to reflect, respond, and redirect behavior with minimal intervention.
- It is found that class goals are most effective when teachers use them within an existing classroom management structure. Consider what strategies you already have in place that work well, and envision how class goals can support and supplement them. You might connect class goals to an overarching class objective or reward, align them with individual student recognition, and/or reinforce specific behavior management strategies.
- By collaborating with students to generate class goals and establish a system to reflect on and measure them, you can leverage class goals to support the creation of an ideal culture and community of learners.

Make Instructions Stick

When students grow accustomed to “hearing instructions twice, three times, and even four times, listening the first time around becomes unnecessary.

REPEAT AFTER ME

To get students listening more closely the *first* time, ask a couple of students to re-explain the instructions to the class. They should never know who you will ask! It helps them to listen closely.

CHECK FOR CLARITY

- Especially in written work, it’s important to pressure-test your instructions. If multiple students aren’t following the directions, it most likely isn’t their fault, it’s yours.
- To reduce cognitive load and make your written instructions as clear as possible, you may follow a number of research-backed principles:

➢ Number steps and use bullet points.

➢ Use subheadings to chunk instructions for easier reading.

➢ Be consistent in formatting throughout the year.

➢ Avoid visual clutter; be deliberate about adding images, quotes, or links.

➢ Consider font size and readability.

DISPLAY KEY EXPECTATIONS

Posting crisp, concise visuals targeted at precise tasks, routines, or transitions can help clarify expectations and cut down on the need to repeat instructions.

HAVE STUDENTS MODEL IT

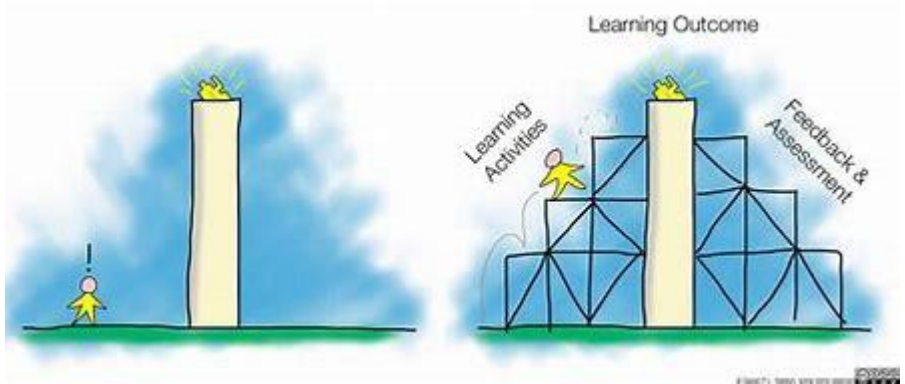
When laying out a set of steps, peer examples can help make instructions more vivid—and uniquely memorable for students. Assign selected students to model the procedures that you've described, such as the right way and wrong way to organize their class groups during collaborative work time.

MAKE IT A CHALLENGE

- The instinct to immediately step in when students struggle, or feel confused, runs deep in many teachers.
- When we sense discomfort in our classrooms, we can be quick to explain and provide steps to follow. But removing the struggle for students also removes the cognitive heavy lifting that leads to deep learning and understanding.
- After a short mini-lesson, for example, challenge students to turn and discuss work-related questions with a peer rather than asking the teacher for instructions. Students might be surprised by how much they've absorbed. Or consider occasionally designating the first five minutes of a classroom activity as a period where students must attempt the work without talking or asking questions. The exercise builds autonomy and gives students a chance to rely on themselves before others.

Foundational Ways to Scaffold Student Learning

- Good differentiation is one of the hardest bars to meet as a teacher. Students have a wide range of skills and abilities, and they also come preloaded with different experiences, dispositions, and prior knowledge, making a one-size-fits-all pedagogical approach a pipe dream.
- That's why anytime you're teaching a lesson, you should consider deploying scaffolds— 'support that is tailored to students' needs—to ensure that every student can keep pace. The benefits are hard to ignore: Advanced learners, who may easily grasp the material, will have more durable memories, while struggling students will receive the support they need to make learning more achievable.



1. FIRST, CLARITY

- Before beginning a lesson, review your materials for brevity and clarity. All too often, students are stuck, not because the lesson is too difficult but because the instructions aren't clear.
- Audit your instructional materials year to year, with the aim of gradually simplifying and improving them.
- After a lesson, check in with students to see how well they understood the directions and objectives.

2. BUILD BACKGROUND KNOWLEDGE

- **Tackling a new topic without sufficient background knowledge is like exploring a cave without a flashlight:** Without a foundation of familiar terms lighting up the path ahead, students will struggle to grasp the lesson. That's because the brain always seeks connections to previously stored material, which ties ideas together and reinforces the conceptual scaffolding.
- Before exploring a new topic—or after having students read an introductory text—have students identify words that confuse them, or draw up your own list of academic terms that all students should know beforehand.
- During a lesson, pause for a moment and explore those terms, so that all students can keep pace and not be tripped up by gaps in background knowledge. To get students to begin connecting new material to already-learned material, you can read an introductory text and have them engage in small group K-W-L ("Know", "Want to Know", and "Learned") activities, or you can sequence lessons so that overarching connections are made explicit, helping to reactivate prior knowledge on a regular basis.

3. BE MULTIMODAL

- Provide multiple ways for students to learn the material by pairing a written or verbal lesson with pictures, diagrams, or video, or by asking them to physically act out concepts, write songs, or reenact historical events. Relying on multiple sensory pathways encodes learning material more effectively—leading to more durable memories.

- In a 2015 study, for example, researchers discovered that handing illustrated diagrams to students who listened to a physics lecture boosted performance on a follow-up test by 70 percent, compared with their peers who listened to the lecture with no visual aids.

4. USE GRAPHIC ORGANIZERS AND ANCHOR CHARTS

- Visual scaffolds can serve as a road map for students, helping them navigate unfamiliar conceptual terrain by providing a bird's-eye view of the lesson. Distilling a complex topic into a handful of key ideas not only promotes comprehension but also can greatly enhance long-term recall of the material.
- Novice learners are often overwhelmed by the sheer amount of information presented in a lesson, and have difficulty telling the difference between key ideas and supporting details. Graphic organizers and anchor charts, however, can guide "students' selective attention" to what's important, giving them a leg up compared with their peers.
- In the early stages of learning—as students are grappling with unfamiliar information—it's helpful to scaffold and guide the learner's cognitive processing.

5. USE PRE-LESSON ACTIVITIES

- Giving students ungraded pre-lesson practice quizzes can boost follow-up tests of retention and transfer compared with simply jumping into a lesson without any warm-up activities.
- While embedding practice tests during—and after—a lesson is an effective way to strengthen student memory for the material, pre-lesson quizzes provide a different benefit: They scaffold the to-be-learned material, helping students to organize their thoughts, sparking curiosity as they venture guesses, and encouraging them to "search for the correct answers" during the actual lesson.
- Periodically, you might start a new lesson by asking students to solve challenging questions—ones that are just beyond their ability to solve. Used strategically, in small doses and for high-value concepts, the approach helps students learn how to deal with frustration in a supportive, productive environment. While many will struggle, it will activate prior knowledge and motivate students, clarifying what they know and what they don't know,".

6. ASK METACOGNITIVE QUESTIONS

- When students encounter new material, it can feel like a flood, overloading their ability to process the information. While external scaffolds—outlines and anchor charts, for example—provide valuable support, it's also beneficial to encourage students to develop their own portable strategies for managing novel information.
- Metacognitive questions provide students with a template for interrogating new material, putting them on the path to becoming independent learners. Students can ask questions like these:
- What stands out to me about this new material? What makes me wonder?
- Which parts or terms are unfamiliar to me, and which parts do I recognize?
- How does this connect with what I already know?
- What follow-up questions do I have?
- Why is this idea important?
- You can pair these metacognitive questions with new assignments, suggests Kimberly Tanner, a professor of biology at San Francisco State University, in a 2017 study. "The instructor's decision to make these kinds of questions part of an assignment—and part of the grading scheme for the assignment—can prompt students to bring a more metacognitive stance to their everyday coursework," she writes.

METACOGNITION

- The importance of metacognition in the process of learning is an old idea that can be traced from Socrates' questioning methods to Dewey's twentieth-century stance that we learn more from reflecting on our experiences than from the actual experiences themselves (**Dewey, 1933**). What is more recent is the coining of the term "metacognition" and the emergence of a metacognition research field in the last four decades.
- Credited to developmental psychologist John Flavell in a publication from the 1970s, metacognition is used in different disciplines in different ways, and a common, succinct definition appears to be elusive in the literature.

Metacognition refers to one's knowledge concerning one's own cognitive processes or anything related to them, e.g., the learning-relevant properties of information or data. For example, I am engaging in metacognition if I notice that I am having more trouble learning A than B; if it strikes me that I should double check C before accepting it as fact. (Flavell, 1976)

- *Students learn to monitor and direct their own progress, asking questions such as "What am I doing now?," "Is it getting me anywhere?," "What else could I be doing instead?" This general metacognitive level helps students avoid persevering in unproductive approaches… (**Perkins and Salomon, 1989**)*

What is a teacher ?

- You may now be some or all of this:
- A Learning Facilitator
- A Learning Partner
- A Guide
- A Follower
- A Friend
- A Confidante
- A Fellow Comedian
- A Safe Person
- A Connection
- A Suggester of ideas
- A Contributor
- A Listener
- A Learner
- An Equal

guru

['gʊr.uː] • noun

someone who guides you out of the darkness and into the light.

SLANG

Internet Slang, Chat Texting & Subculture

GURU

means

Gee You Are You

GURU

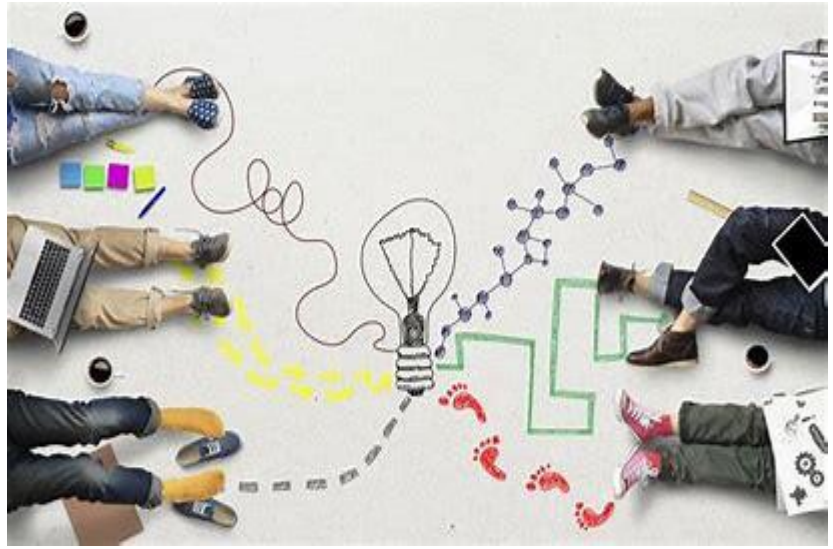
GENEROUS

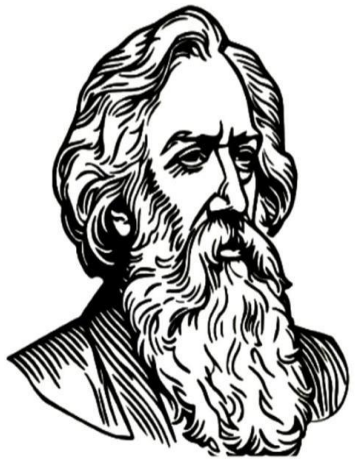
UNDERSTANDING

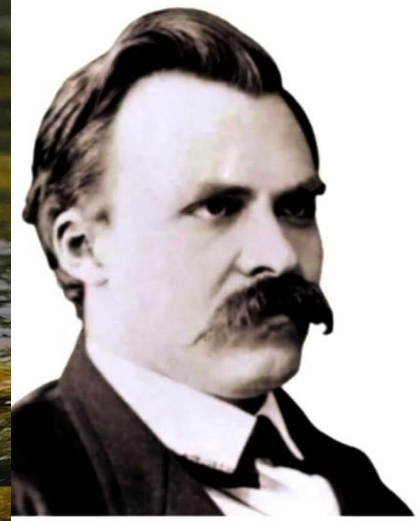
GUIDANCE

UNASSUMING


self-efficacy
creativity
metacognition
task value
peer learning
active help seeking
intrinsic motivation
choice
trust
acceptance
encouragement
care
dialogue







शिक्षा का मुख्य उद्देश्य
स्पष्टीकरण देना नहीं है, बल्कि मन के
दरवाजे खटखटाना है.!

रबीन्द्रनाथ टैगोर

एक शिक्षक बुरी
तरह से पछताता है।
अगर कोई एक शिष्य
केवल शिष्य ही
बना रह जाता है।

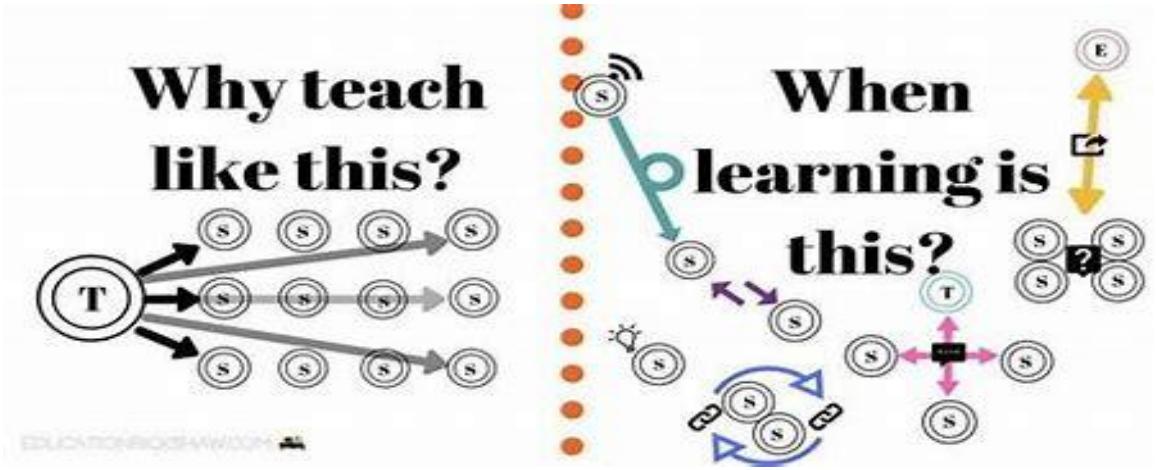
फ्रेडरिक नीत्शे

Key ideas

- Teaching is not learning.

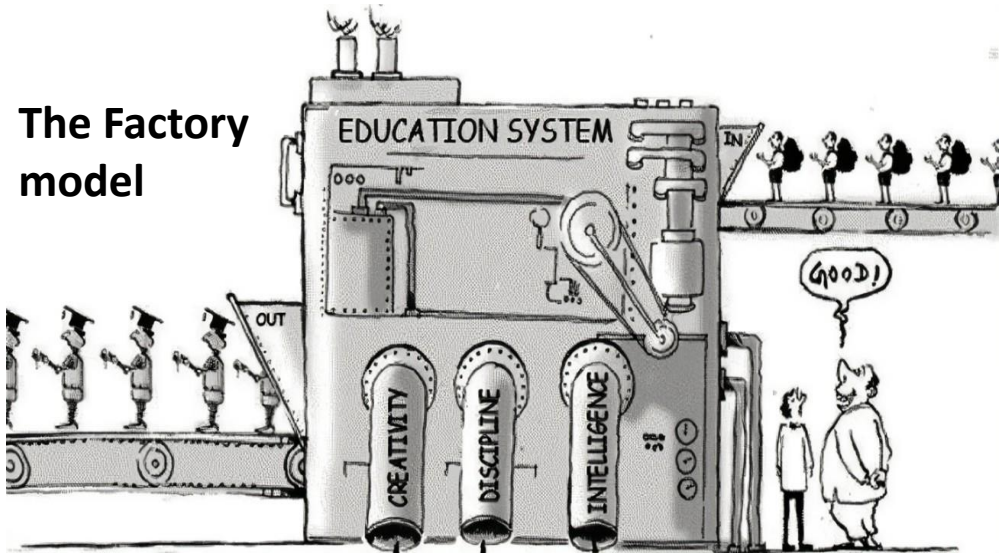
Teaching ≠ Learning

- Learning is not linear.



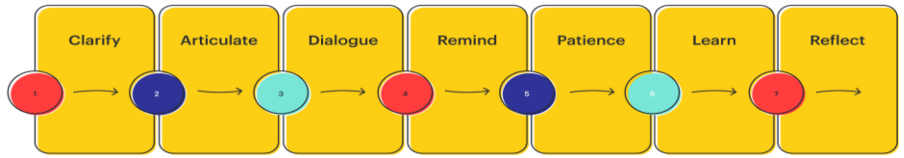
- Education should be organic

The Factory model



Vs.

The Organic model



Conclusion

Empower education by embracing a student-centered approach. Together, let's create a future where every student's potential is nurtured and celebrated.

All the evidence that we have indicates that it is reasonable to assume in practically every human being, that there is an active will toward health, an impulse towards growth.

- Abraham Maslow