













Creating Technology Enabled Learning

Prof O R S Rao
VC, ICFAI University, Jharkhand
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POINTS FOR DISCUSSION



- Teaching-Learning Paradigm Shift
- 21st Century Learners
- Technology Tools for Effective Teaching-Learning
- Experience Sharing Practices at ICFAI University
- Questions & Answers

Traditional Teaching



- Gurukul System
 - Only, the interested students approach the teacher
 - Teacher can decide whom to accept as the student
 - Teacher shares his Knowledge freely and it is up to the student to grasp it
- It is like feeding a flock of birds / distribution of Prasad to the masses
- If a student does not get, it is the Student's problem!

All students are treated equally. Teacher typically addresses middle of the class. Students have to adjust to the Teacher

What has changed in the last few years?



- Education as a Commercial Service (pay and get it)
- Teacher is Service Provider and the student is Customer
- Education to ALL
- Teacher can not choose the students
- Students choose the Institution

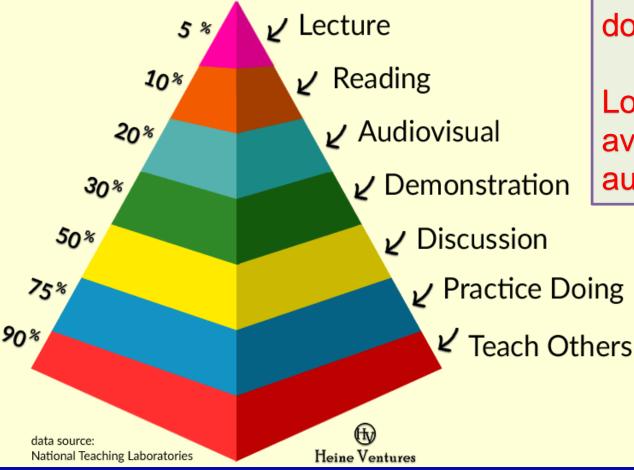
Shift from Teaching to Learning – as per the Learner's requirements

Developments in Neuro Sciences (How Human Brain learns?)



THE LEARNING PYRAMID

average student retention rates



Learning effectiveness increases as we go down the Pyramid

Low Cost Technology available for building audiovisuals

21st Century Learners



- Choosy on what to learn and when to learn
- Low attention span
- Tech-savvy
- Interactive and engaging
- Need Flexible pacing
- To be Responsive and supportive
- Learning for specific purpose (to make a living)
- Learning to include Knowledge and Skills (for employability)

Need to understand the LEARNERS so as to improve Learning Effectiveness

Bloom's Revised Taxonomy

Creating

Generating
new ideas,
products, or ways of
viewing things
Designing, constructing,
planning, producing, inventing.

Employers expect Higher Order Skills for High Paying jobs and 2nd and 3rd level skills for any job

Higher - order thinking

Evaluating

Justifying a decision or course of action Checking, hypothesizing, critiquing, experimenting, judging

Analyzing

Breaking information into parts to explore understandings and relationships Comparing, organizing, deconstructing, interrogating, finding

Applying

Using information in another familiar situation Implementing, carrying out, using, executing

Understanding

Explaining ideas or concepts Interpreting, summarizing, paraphrasing, classifying, explaining

Remembering

Recalling information Recognizing, listing, describing, retrieving, naming, finding



Role changes in the shift from Teaching to Learning.







Student Centric

Teachers are in the active role

Students are in a. receptive role





Learning)

Students involved in the learning process

Focuses on the student's needs, abilities, interests, and learning styles

Technology Tools for Teaching-Learning



- Video Case Studies
- Management Games, Simulation etc.
- Self-Learning Tools- MOOCs
- NPTEL Video Lecturers (1200+), SWAYAM Courses
- Virtual Labs ,E-Yantra- to teach Robotics
- Virtual Reality/Augmented reality tools for visulisation
- You Tube video lectures on a variety of topics
- Digital Library (NDL, e-Shodh Sindhu) to support Learners
- Learning Management System registration to evaluation
- Artificial Intelligence/Machine Learning for matching learning with personality type
- Smart Class Rooms and Virtual Class Rooms

Shift from mass/group teaching to Personalised Learning

Challenges



- Adaptation of Technology as per the practical situations (students, teachers, courses/subjects)
- Training of teachers on Technology-enabled teaching-learning
- Adaptation of teachers to the new situation (changing personal beliefs and habits in teaching
- Institutional Support for faculty efforts to alter teaching practices
- Investments on resources—time and financial

Do-able ,but needs strong leadership commitment

Practices at ICFAI University



- Use of Videos, Movie Clips, TV Clips, Animation etc...
- Using Spoken Tutorials from IIT-Bombay in IT Courses
- Using SWAYAM Courses selectively accountability with the Teacher
- Using MOODLE LMS for :
 - Online attendance
 - Conduct of Online exam (MCQ part)
 - ICFAI Online courses /modules to supplement class room teaching
- Online student feedback

Faculty training, Acceptance by Teachers and Students – keys to the success.

Ease of use and personal benefits drive better acceptance by the teachers and students



Technology will not replace great teachers, but technology in the hands of great teachers can transform the education and make it accessible to all ,without sacrificing quality.



Any Questions?

In case of any queries, please contact me at orsrao.icfai@gmail.com



