Ten Steps to Promote a Stronger Emphasis on Student Learning

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Abstract

Inspired by the AAHE Assessment Forum's Principles for good practice for assessing students' learning, the author has generated Ten Steps (1992) to Promote a Stronger Emphasis on Student Learning in a Hydrology–Fluid Mechanics Course. Student-Learning must not be focused only about making the connections initially. Instead it should concentrate more about maintaining those connections in the long run. Student learning is fundamentally about a strong bond between the academic establishment and the student citizens of the entire community. Student-Learning is enhanced by the environment. It should take place in the context of a compelling situation that balances curiosity, challenge and opportunity. Student-Learning should have an active search for meaning by the learner – constructing knowledge rather than passively delivering it or receiving it. In other words one should create a Concept Mapping Model instead of a Structured Content Model. Student-Learning is developmental. In other words, it is a cumulative process involving the whole person, who is capable of integrating the new with the old. The settings, the surroundings, the influences of others contribute to successful accomplishments. Student-Learning should be viewed as an effort promoted by individuals who are intrinsically tied to others as social beings, actually interacting as collaborators. Student-Learning is strongly influenced by the educational climate in which learning achievements takes place. Student-Learning requires Action, Communication, Ownership, Reflection and Nurture (ACORN) as suggested by Hawkins and Winter (1997). Student-Learning in reality aims at an educational experience that takes place informally and incidentally, beyond explicit teaching in the lecture hall. Student-Learning is grounded in particular contexts and individual experiences, requiring effort to transfer specific knowledge and skills to other citizens. Student-Learning involves the ability of individuals not only to monitor their own learning, but also be able to enhance learning through collaboration and cooperation. References: Hawkins, P., & Winter, J. (1997). Mastering change: Learning the lessons of the enterprise in higher education initiative. London: Department for Education and Employment.

Ten Steps to Promote a Stronger Emphasis on Student Learning

Inspired by the AAHE Assessment Forum's *Principles for good practice for assessing students' learning*, the author has generated Ten Steps (1992) to Promote a Stronger Emphasis on Student Learning in a Hydrology–Fluid Mechanics Course.

1. Student-Learning must not be focused only about *making* the connections initially. Instead it should concentrate more about *maintaining* those connections in the long run. Student learning is fundamentally about a strong bond between the academic establishment and the student citizens of the entire community.

2. Student-Learning is enhanced by the environment. It should *take place in* the context of *a compelling situation* that balances curiosity, challenge and opportunity. A dynamic environment and an interactive dialog is of great help in this area.

3. Student-Learning should have an *active search for meaning* by the learner -- constructing knowledge rather than passively delivering it or receiving it. In other words one should create a *Concept Mapping Model* instead of a *Structured Content Model.*

4. Student-Learning is *developmental.* In other words, it is a cumulative process *involving the whole person*, who is capable of integrating the new with the old. The settings, the surroundings, the influences of others contribute to successful accomplishments.

5. Student-Learning should be viewed as an effort promoted by *individuals* who are intrinsically *tied to others as social beings,* actually interacting as collaborators.

6. Student-Learning is strongly influenced by the *educational climate* in which learning achievements takes place.

7. Student-Learning requires Action, Communication, Ownership, Reflection and Nurture (ACORN) as suggested by Hawkins and Winter (1997).

8. Student-Learning in reality aims at an educational experience that *takes place informally and incidentally*, beyond explicit teaching in the lecture hall.

9. Student-Learning is *grounded in particular contexts and individual experiences*, requiring effort to transfer specific knowledge and skills to other citizens.

10. Student-Learning involves *the ability of individuals not only to monitor their own learning, but also* be able to enhance learning through collaboration and cooperation.

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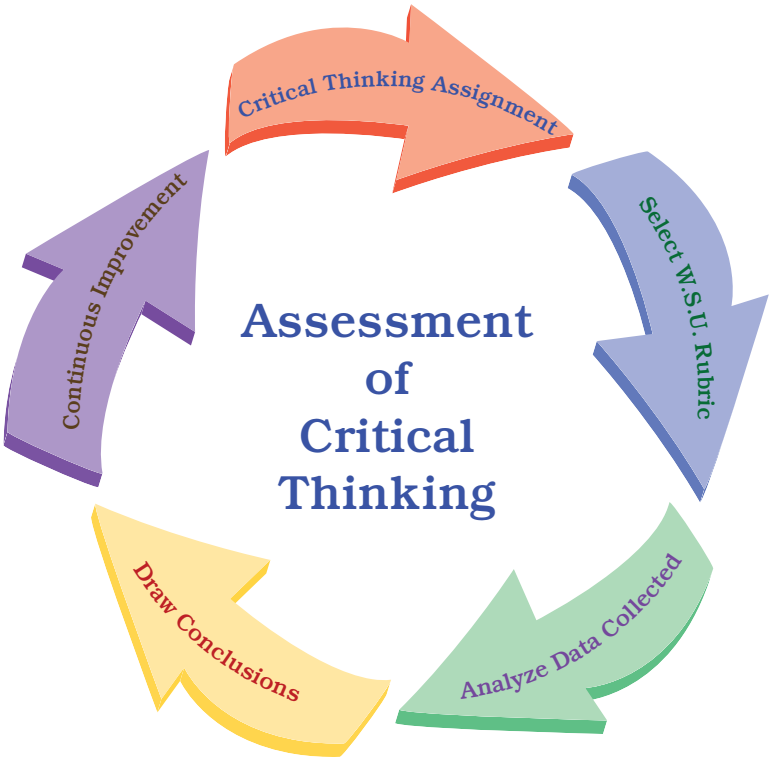
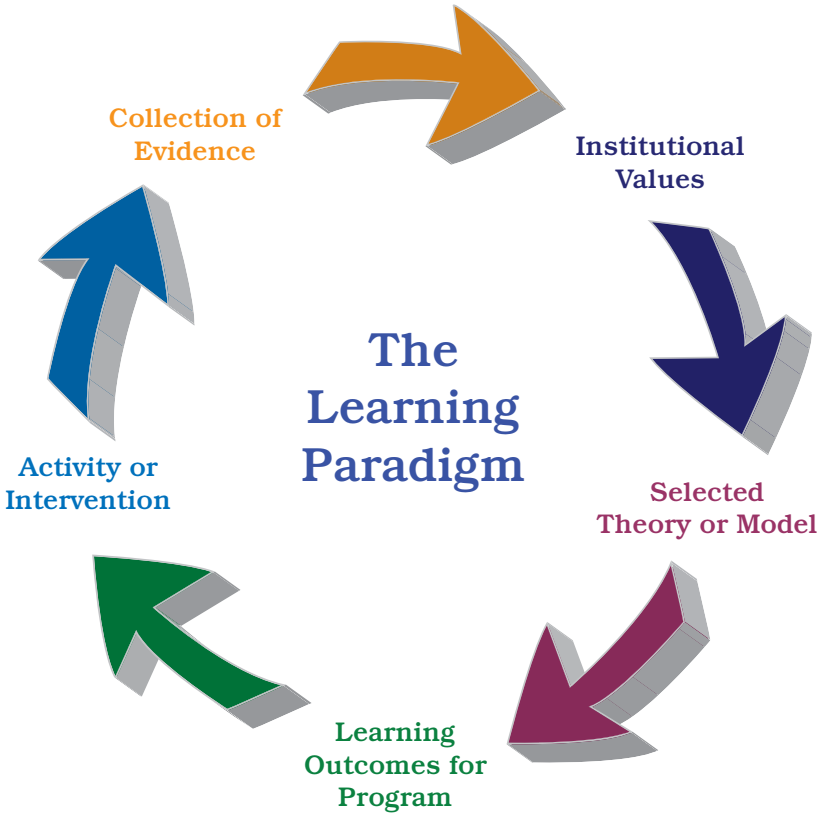
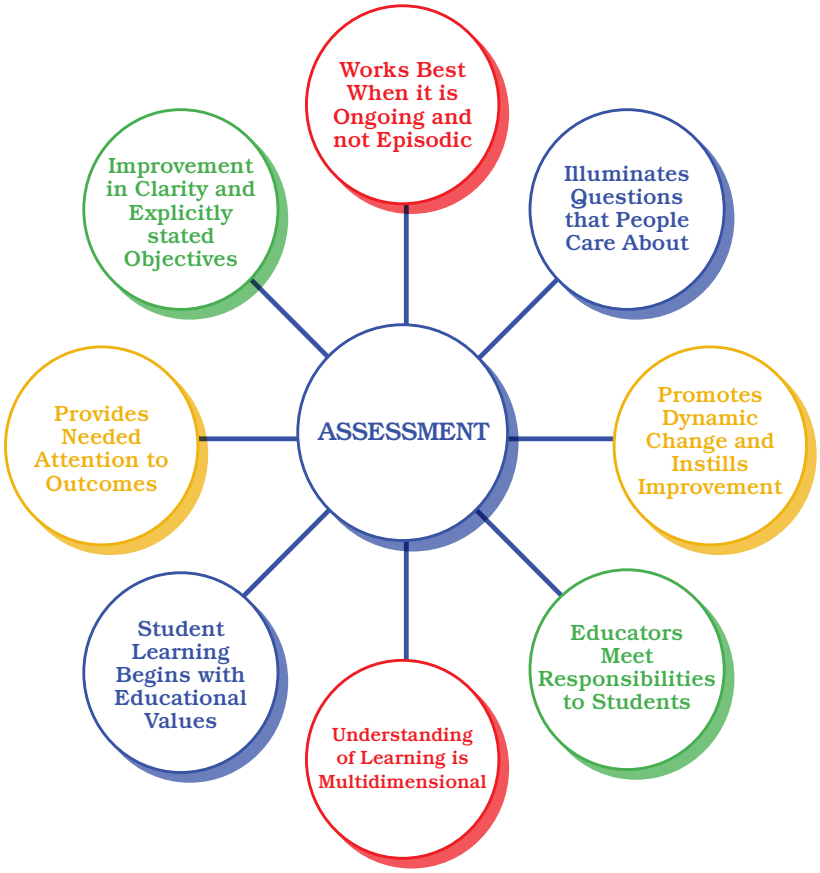
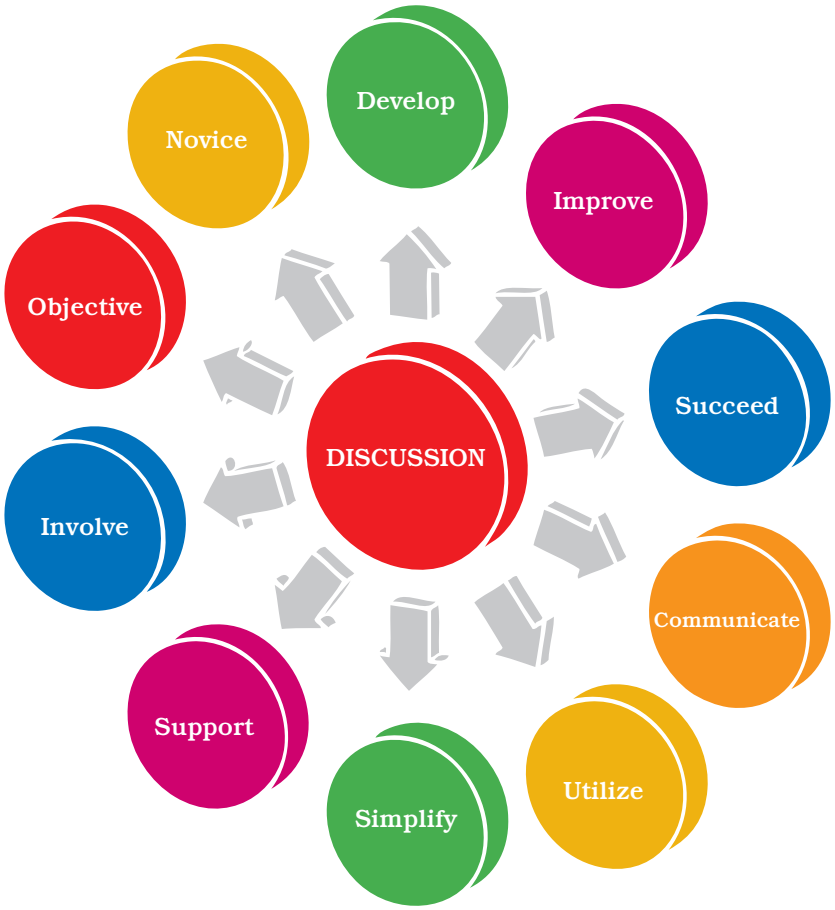
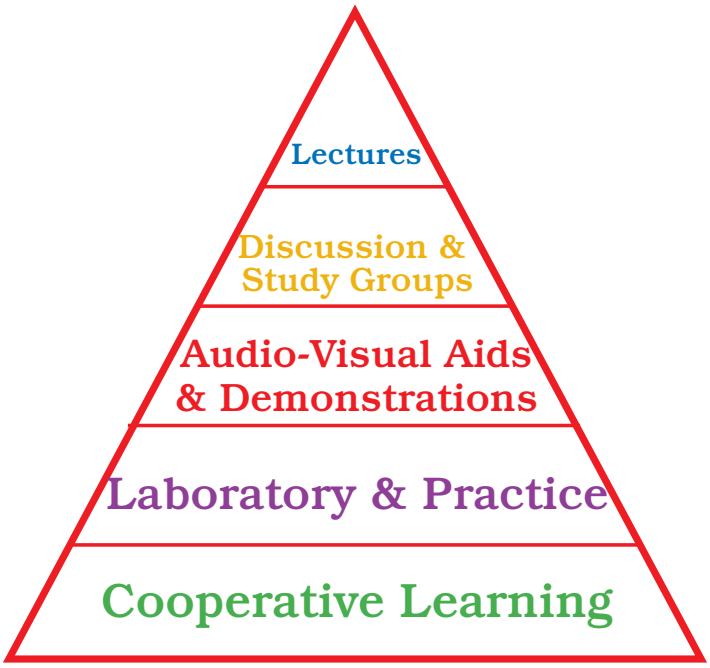

Assessment of Critical Thinking
Critical Thinking Assignment
Select W.S.U. Rubric
Analyze Data Collected
Draw Conclusions
Continuous Improvement

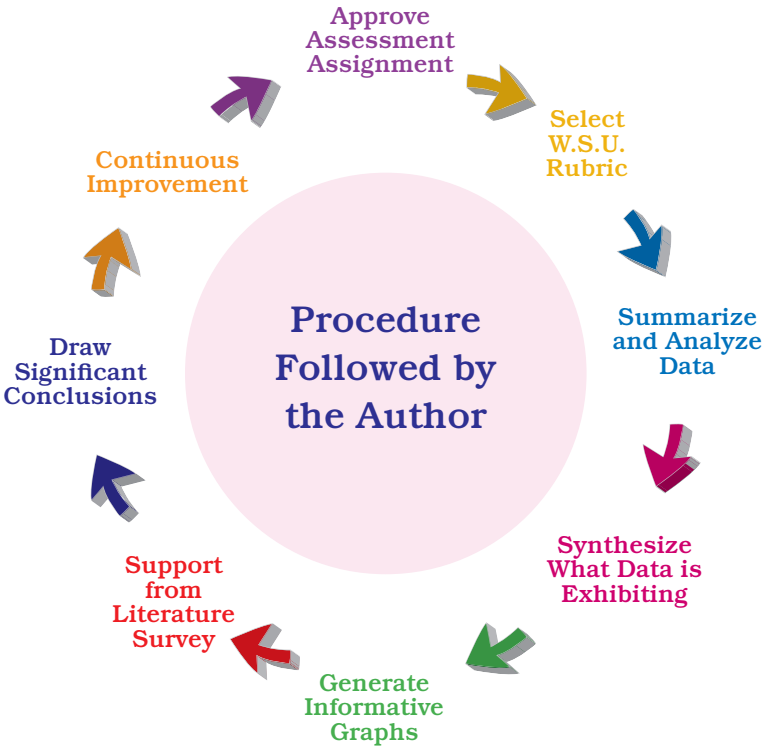

The Learning Paradigm
Institutional Values
Selected Theory or Model
Learning Outcomes for Program
Activity or Intervention
Collection of Evidence

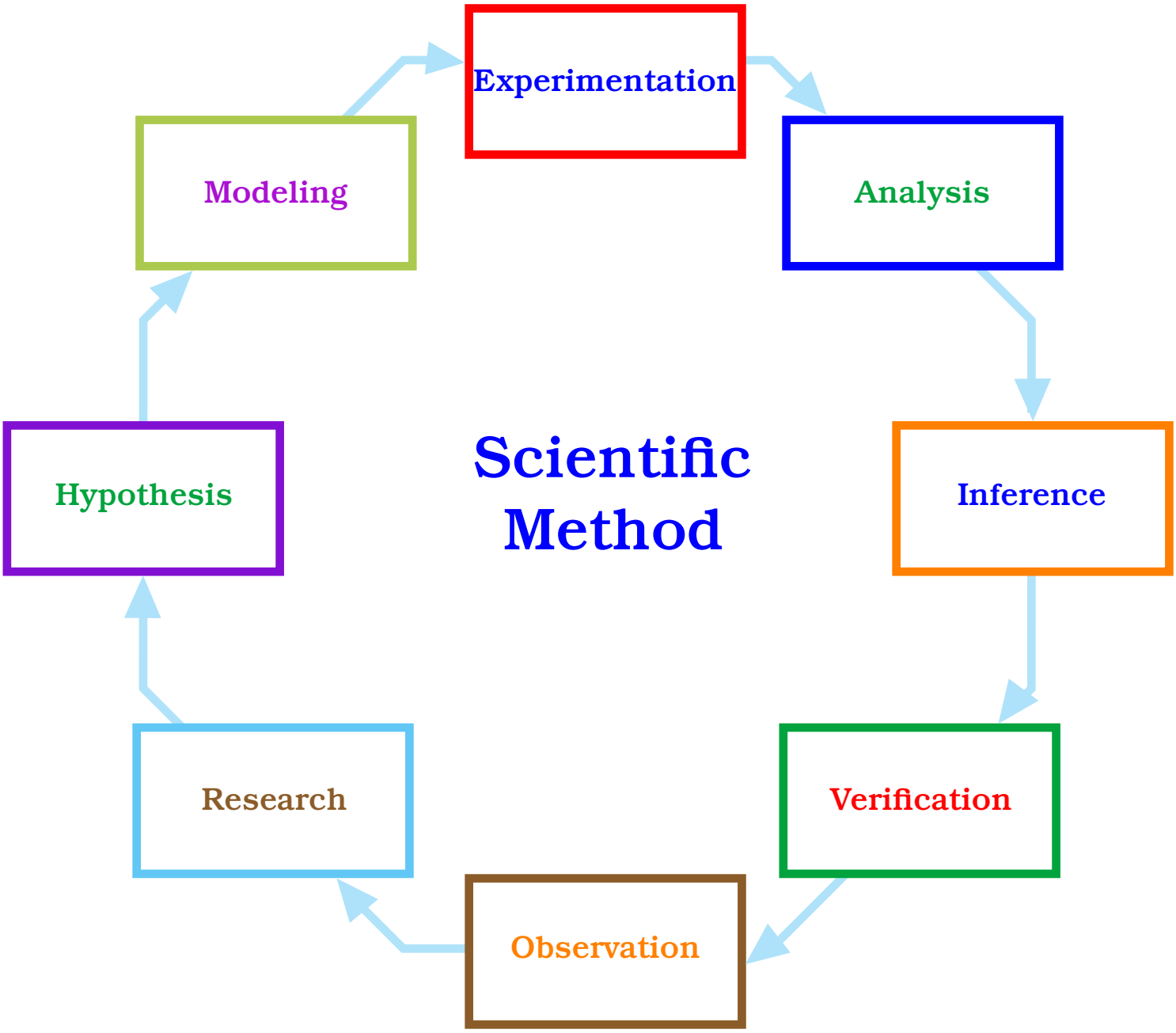

ASSESSMENT
Works Best When it is Ongoing and not Episodic
Illuminates Questions that People Care About
Promotes Dynamic Change and Instills Improvement
Educators Meet Responsibilities to Students
Understanding of Learning is Multidimensional
Student Learning Begins with Educational Values
Provides Needed Attention to Outcomes
Improvement in Clarity and Explicitly stated Objectives

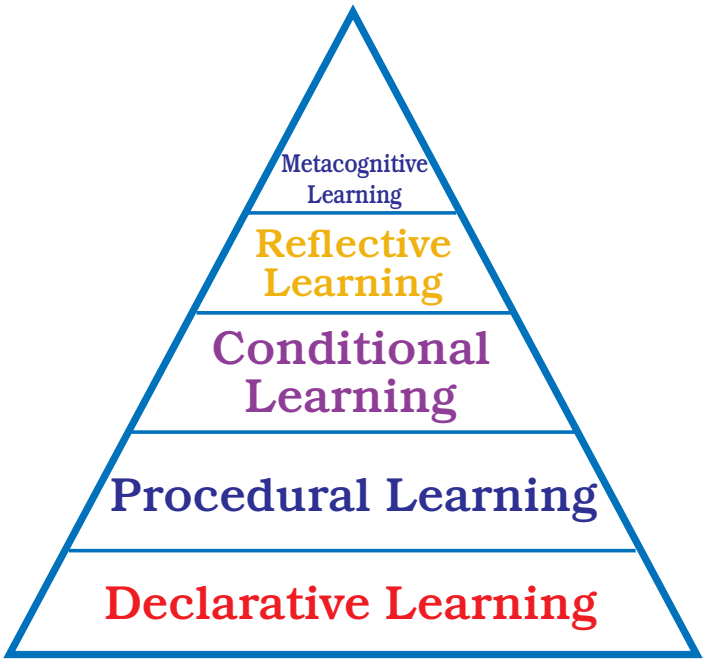

DISCUSSION
Develop
Improve
Succeed
Communicate
Utilize
Simplify
Support
Involve
Objective
Novice



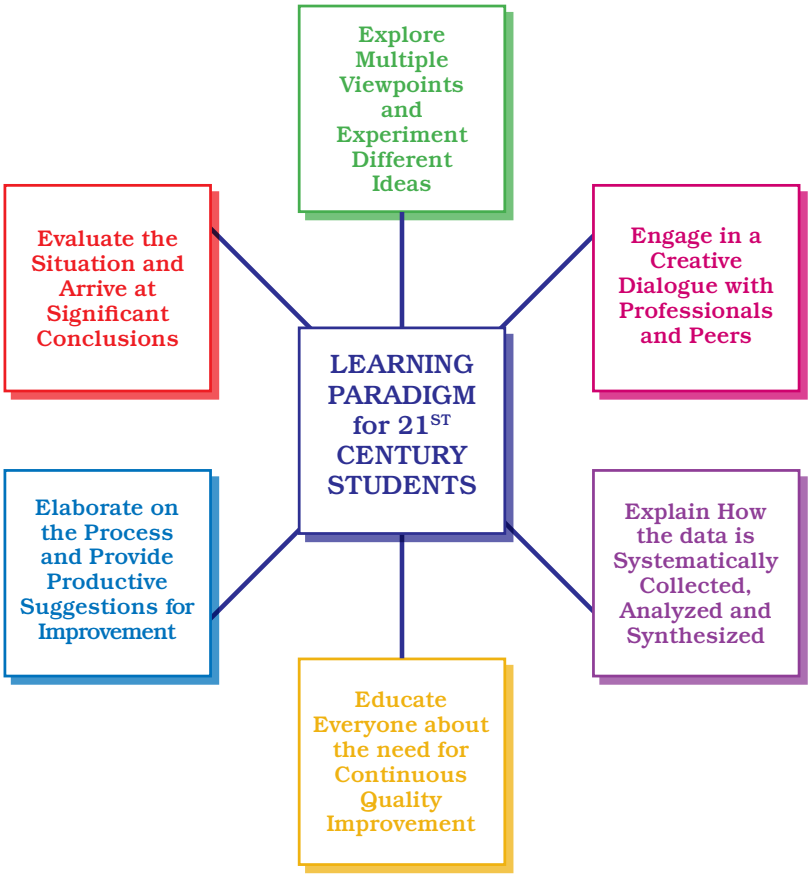
LEARNING PYRAMID




Scientific Method
Experimentation
Analysis
Inference
Verification
Observation
Research
Hypothesis
Modeling



ANGELO'S PYRAMID



Ten Assessment Strategies Suggested by Research

1. Have employees write, discuss, document and communicate their creative ideas.
2. Utilize proven rubrics to make standards and evaluation criteria explicitly clear.
3. Get employees working in groups, on substantive tasks, in and out of corporate environment.
4. Provide prompt and productive feedback frequently to the employees about their progress and accomplishments.
5. Establish and communicate high expectations, both for the supervisors and for the employees.
6. Provide opportunities and help employees to achieve those expectations and criteria.
7. Focus on helping the employees successfully attain their goals and objectives, with enthusiasm.
8. Promote Critical Thinking and support creativity. Respect diversified approaches and admire individual's talents.
9. Appreciate multitude ways of reason, logic and pave a path for problem solving methodologies.
10. Encourage supervisor-employee interaction, in and out of the industrial establishment circles.