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Assessing Student Accomplishments using the DISCUSS Model

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Abstract

Experts in the area of educational research have documented that students can simultaneously possess alternate knowledge frameworks. Furthermore, the development and use of such knowledge frameworks are context dependent. John Heron, of University of Surrey provides guidelines to transform attitudes towards learning in educational institutions and society at large. Inspired by John Heron's Research, the author has generated DISCUSS to cultivate inspiration in the college experience. In this presentation, the author presents an analysis of the data he has collected and tries to draw conclusions as to how to improve classroom teaching techniques. Directional: By providing direct guidance and steering them in the appropriate direction. Informative: By giving instruction and documenting necessary knowledge and information. Supporting: By affirming the worth and value of student's beliefs, actions and qualities. Catalytic: By motivating and encouraging them to learn and to move towards self-discovery. Uplifting: By enabling the student to ease tension and to react to powerful emotions. Steering: By means of creative feedback to challenging the student to rise to the occasion. Stimulating: By asking the student to develop interesting problem-solving methodologies. In this presentation, the author tries to present a model analysis. Here, he tries to apply qualitative research to establish and interpret a quantitative data representation. References Gardner, Howard. Intelligence Reframed: Multiple Intelligences for the 21st Century. New York: Basic, 2000. Barr, R. B., & Tagg, J. (1995, November/December). From teaching to learning: A new paradigm for undergraduate education. Change: The Magazine of Higher Education, 13-24. Saxe, S. (1990, June). Peer influence and learning. Training and Development Journal, 42 (6), 50-53. Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Currency Doubleday. Sims, R. R. (1992, Fall). Developing the learning climate in public sector training programs. Public Personnel Management, 21 (3), 335-346.

Socratic Questioning and Seven Principles to educate in the 21st Century.

Richard Paul created a taxonomy of Socratic questions in support for problem based learning (PBL). The taxonomy is not a hierarchy in the traditional sense. The categories build upon each other, but they do not necessarily follow a pattern or design. One question's response will lead into another category of questioning not predetermined by the facilitator. In keeping with the problem based learning (PBL) philosophy, this aspect of the model is most conducive! The role of the skilled facilitator is to keep the inquiry "train on track," but, also, to allow participants to "travel to a viable destination" of their own design. Paul suggests six types of questions that probe reasons and evidence:

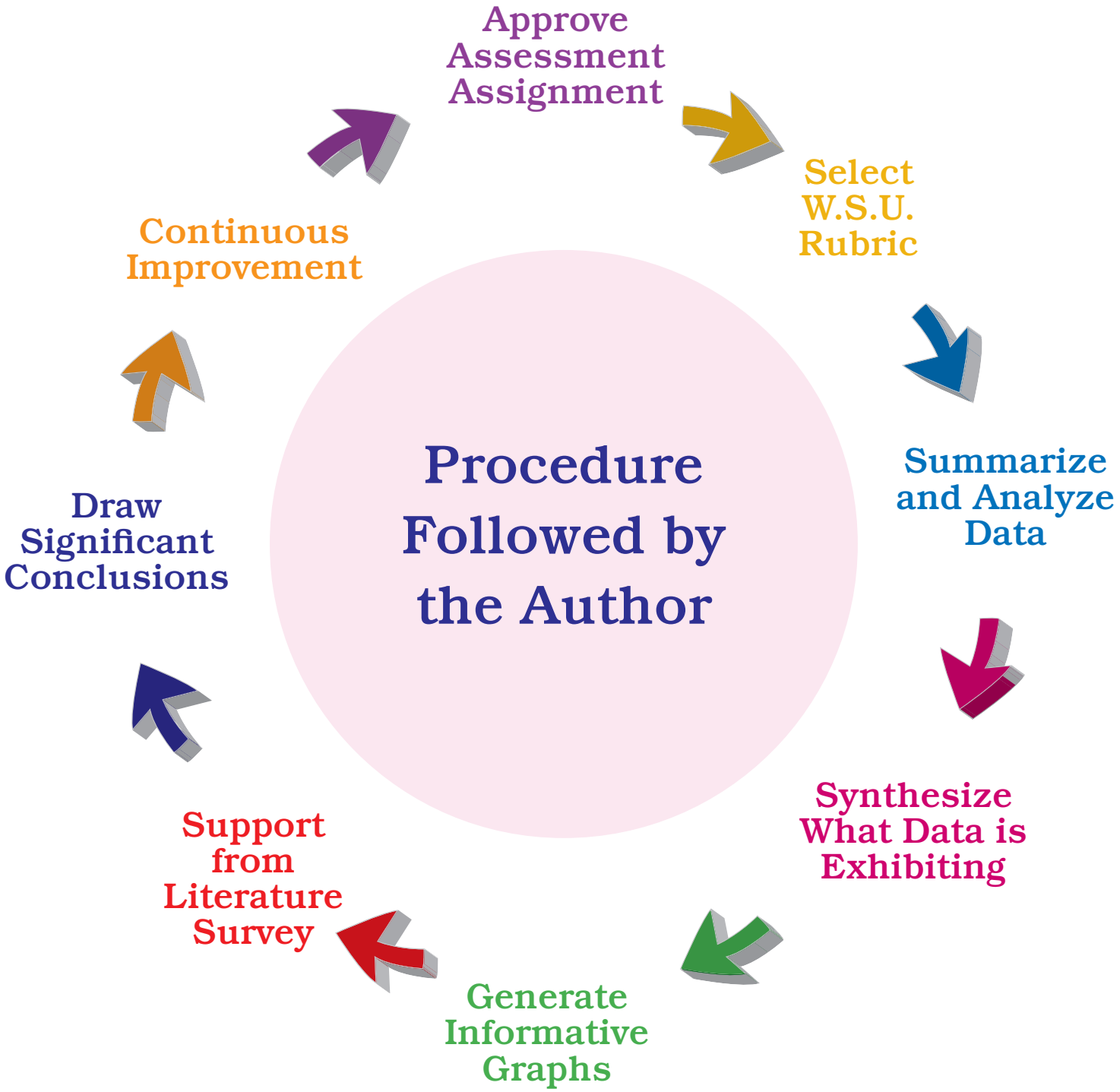
1. Questions of Clarification
2. Questions that Probe Assumptions
3. Questions that Probe Reasons and Evidence
4. Questions about Viewpoints or Perspectives
5. Questions that Probe Implications and Consequences
6. Questions about the Question

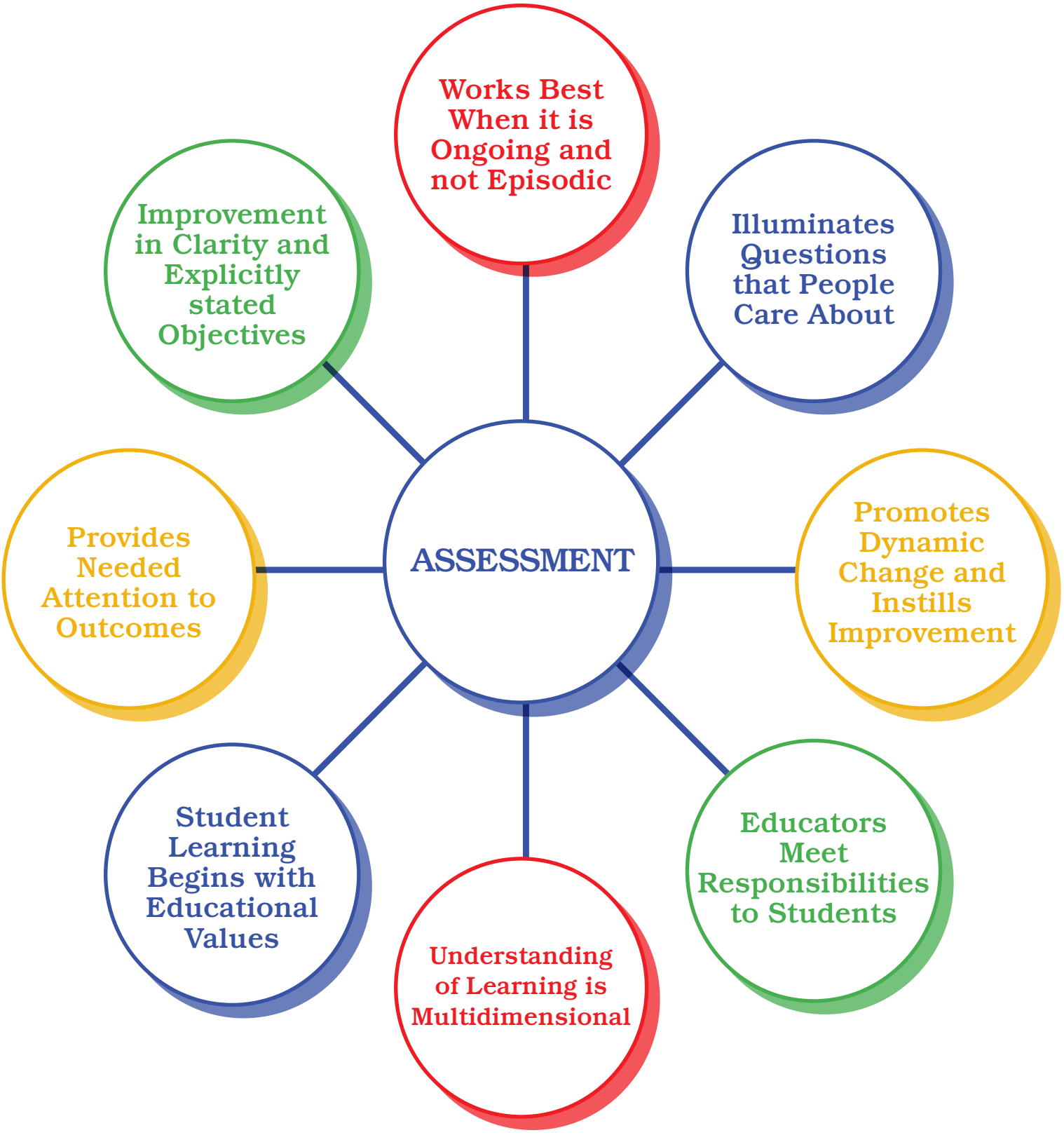
But how can students and faculty members improve undergraduate education? Many campuses around the country are asking this question. To provide a focus for their work, we offer seven principles based on research on good teaching and learning in colleges and universities.

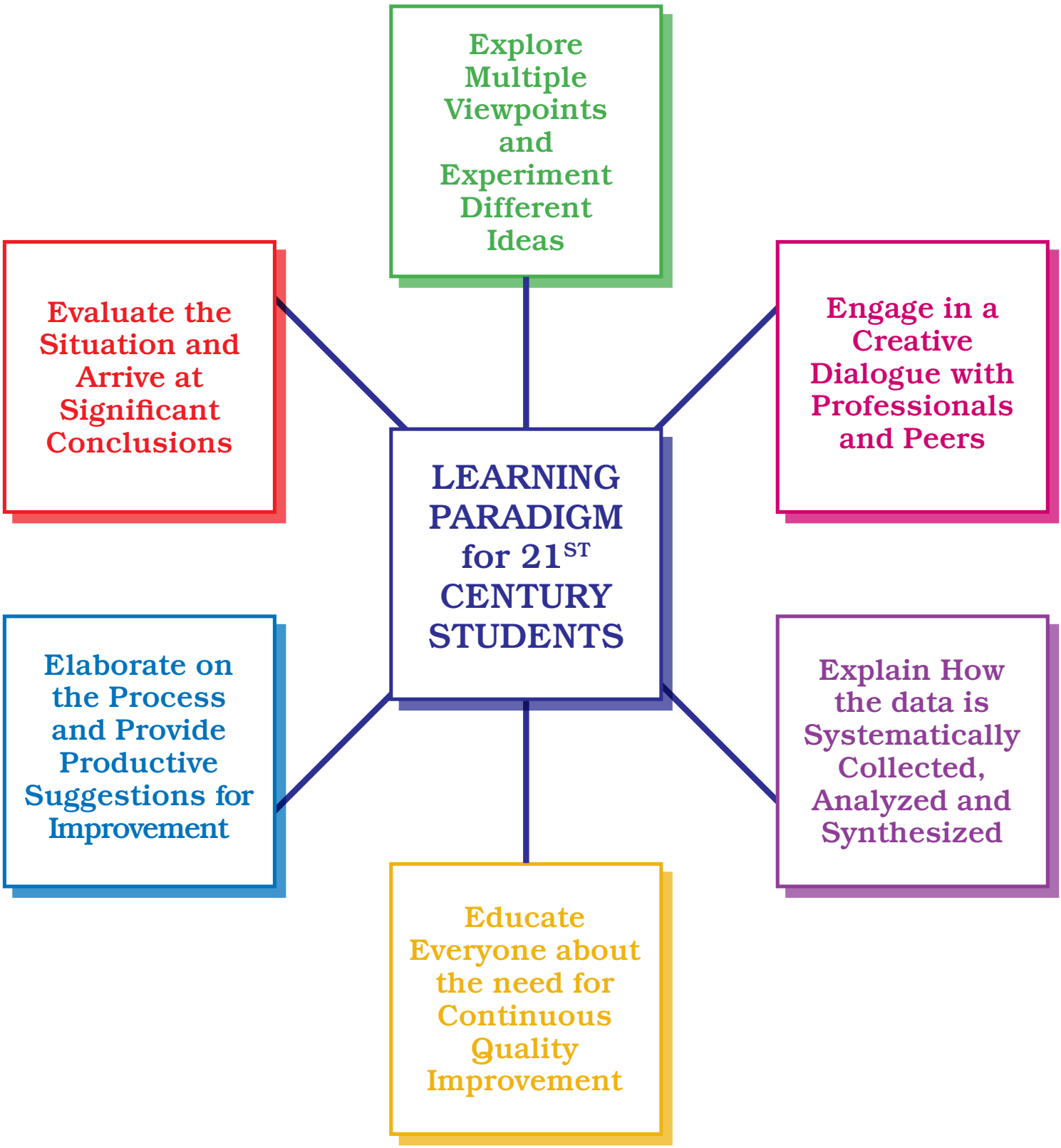
Good practice in accentuating performance in undergraduate education:

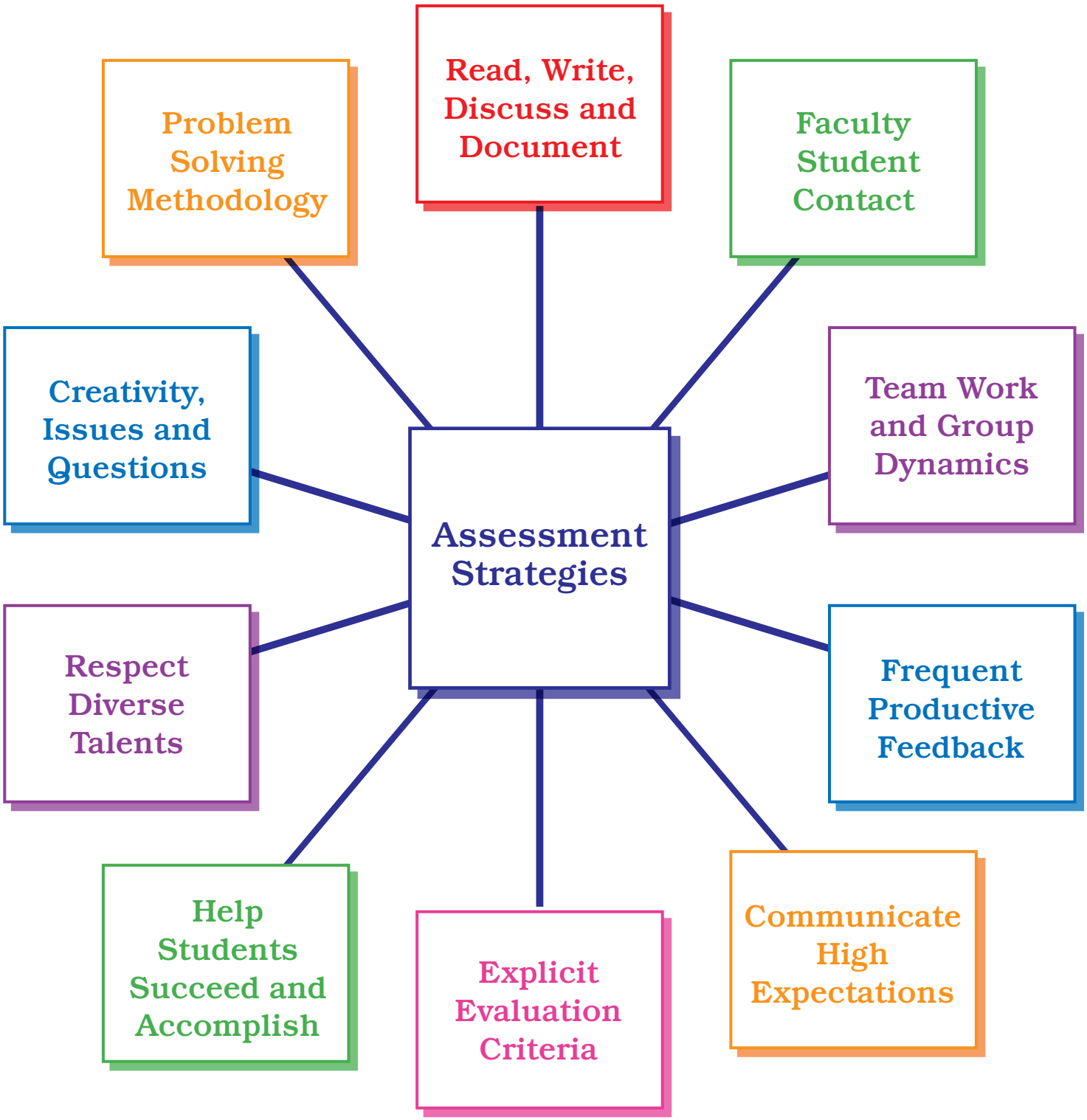
1. Encourages frequent contact between students and instructor.
2. Develops reciprocity and cooperation among students and peers.
3. Encourages and promotes the creation of an active learning environment.
4. Gives prompt productive, informative feedback the students can use.
5. Emphasizes creativity, critical thinking and efficient time on task.
6. Communicates high expectations and sets attainable realistic goals.
7. Respects diverse talents and accommodates multiple ways of learning.

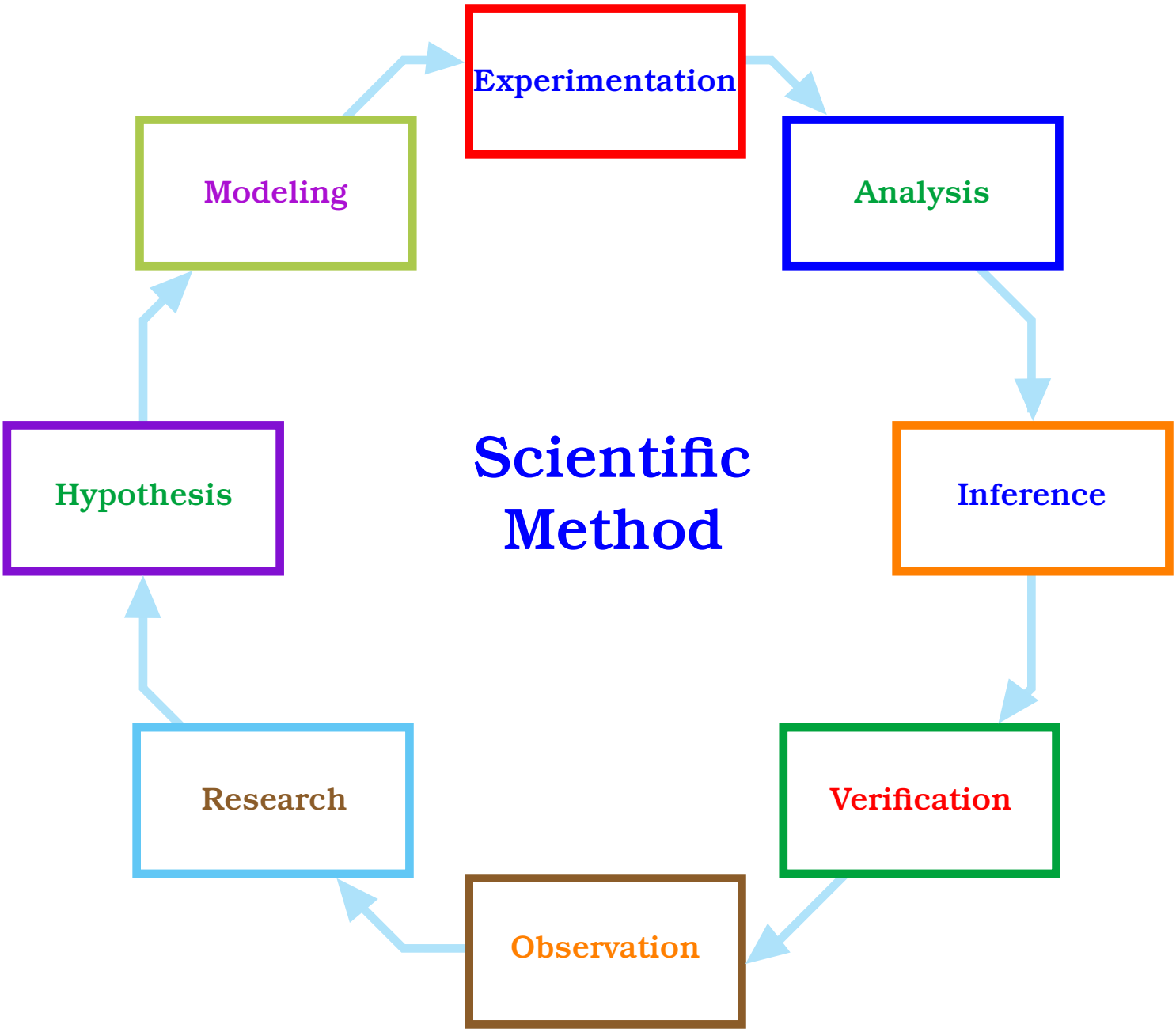
Reference : Paul, Richard, Critical Thinking: How to Prepare Students for a Rapidly Changing World, 1993. "Seven Principles" The Johnson Foundation, Post Office Box 547, Racine, WI 53401-0547, Susan Poulsen Krogh, editor.

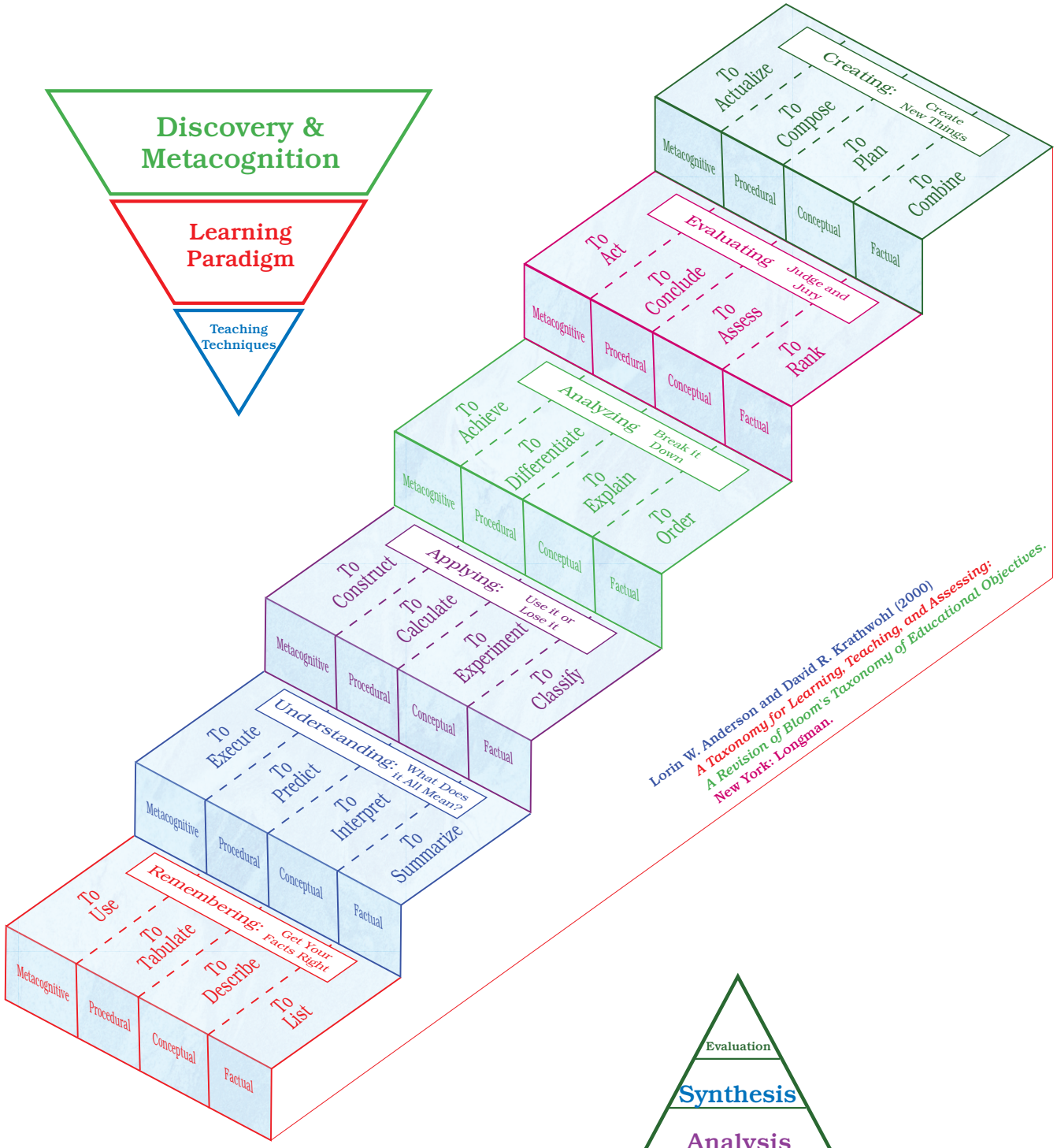

Approve Assessment Assignment
Select W.S.U. Rubric
Summarize and Analyze Data
Synthesize What Data is Exhibiting
Generate Informative Graphs
Support from Literature Survey
Draw Significant Conclusions
Continuous Improvement
Procedure Followed by the Author

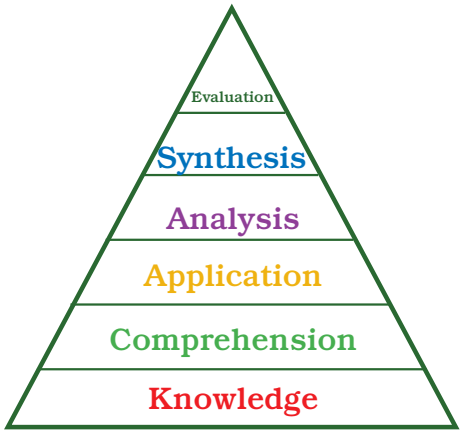

ASSESSMENT
Works Best When it is Ongoing and not Episodic
Illuminates Questions that People Care About
Promotes Dynamic Change and Instills Improvement
Educators Meet Responsibilities to Students
Understanding of Learning is Multidimensional
Student Learning Begins with Educational Values
Provides Needed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


Explore Multiple Viewpoints and Experiment Different Ideas
Evaluate the Situation and Arrive at Significant Conclusions
Engage in a Creative Dialogue with Professionals and Peers
LEARNING PARADIGM for 21ST CENTURY STUDENTS
Elaborate on the Process and Provide Productive Suggestions for Improvement
Explain How the data is Systematically Collected, Analyzed and Synthesized
Educate Everyone about the need for Continuous Quality Improvement

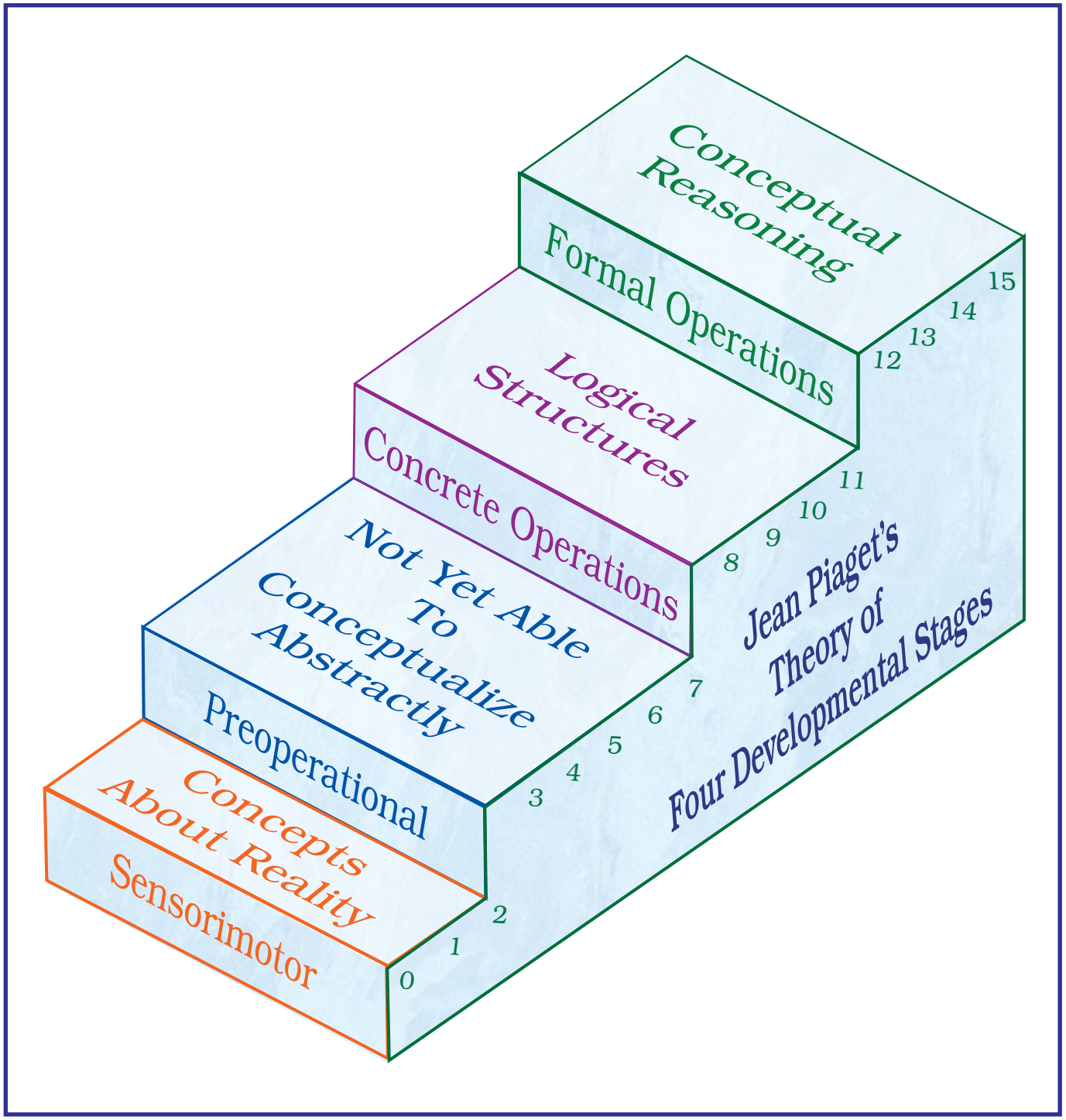

Assessment Strategies
Read, Write, Discuss and Document
Faculty Student Contact
Team Work and Group Dynamics
Frequent Productive Feedback
Communicate High Expectations
Explicit Evaluation Criteria
Help Students Succeed and Accomplish
Respect Diverse Talents
Creativity, Issues and Questions
Problem Solving Methodology


Scientific Method
Experimentation
Analysis
Inference
Verification
Observation
Research
Hypothesis
Modeling



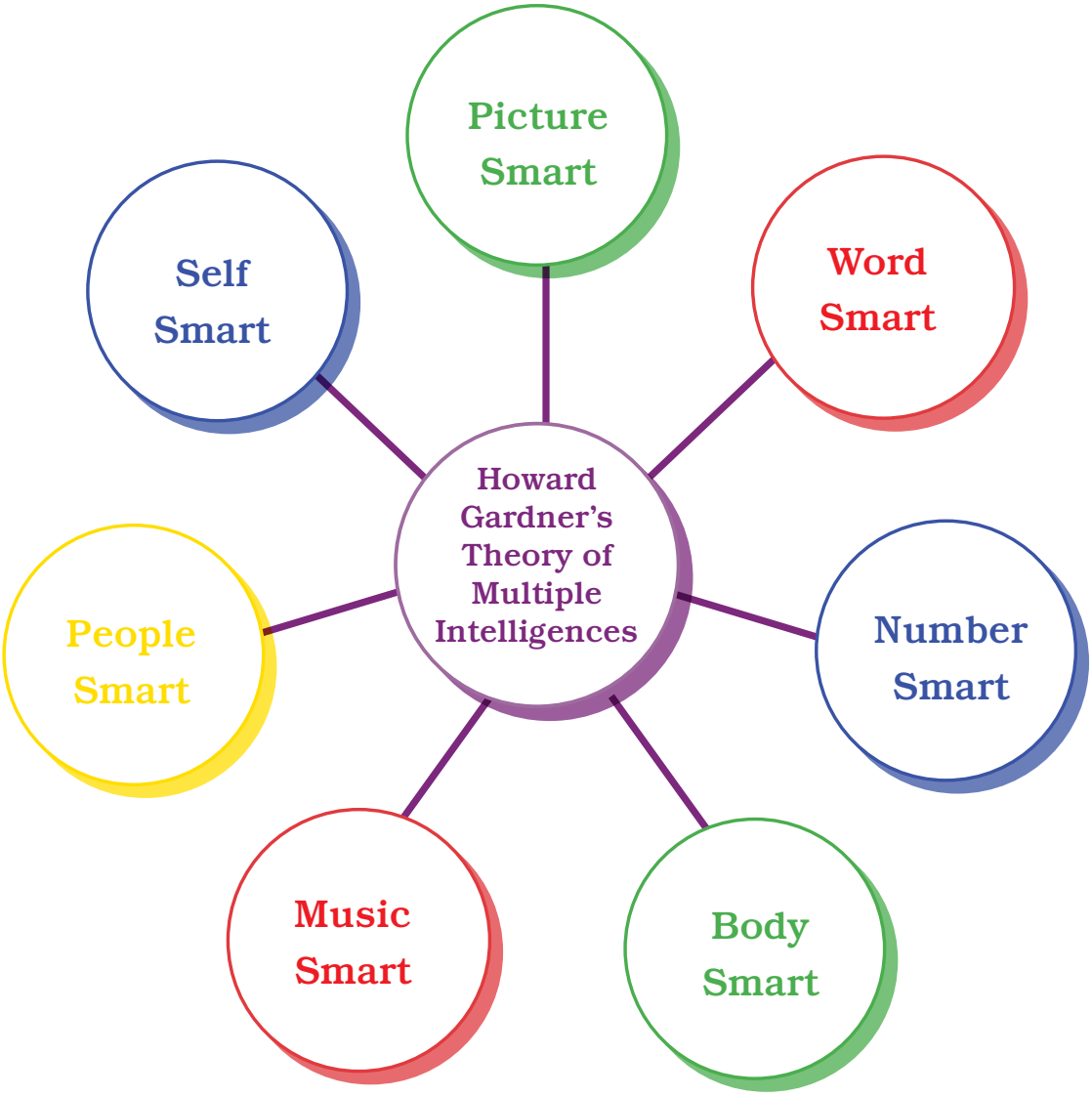


BLOOM'S TAXONOMY ORIGINAL



Jean Piaget 1896-1980

Swiss psychologist, known for his research in developmental psychology. Piaget theorized that cognitive development proceeds in four genetically determined stages that always follow the same sequential order.



Possibility of adding these three

- Naturalist Intelligence
- Spatial Intelligence
- Existential Intelligence