

## 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.