Untitled Document Page 1 of 1

## **Characteristics of Good Learning Issues**

## from Hal White\*, adapted and edited by Phill Conrad

"...once you have learned to ask questions - relevant and appropriate and substantial questions - you have learned how to learn and no one can keep you from learning what ever you want or need to know."

Neil Postman & Charles Weingartner (1969) in **Teaching as a Subversive Activity.** 

"Knowledge is power" (<u>Bacon</u>). All of us have vast areas of ignorance and we will never come close to knowing more than a very small fraction of what there is to know. This is particularly true in the field of software development; new languages, techniques, models, terminlogy, acronyms and buzzwords appear faster than any of us can keep up with. The humorist <u>Ashleigh Brilliant</u> summed it up:

"There has been an alarming increase in the number of things I know nothing about."

Nevertheless, being aware of what we don't know is also a type of power.

When we have problems to solve, knowing what we don't know enables us to focus our learning where it counts. The more adept we become at *defining* what we need to know, the easier it is to quickly locate needed information so that we solve problems more effectively.

Most of us are reluctant to reveal our ignorance. Who wants to look "stupid?" A major tenet of <u>problem-based learning</u> is that learning occurs when we are in a supportive environment—one in which we can comfortably identify our knowledge gaps, and do something about them, working together to achieve understanding. In problem-based learning, our knowledge gaps become our *learning issues*.

In short, learning issues, are what Donald Rumsfeld called the "known unknowns".

Our skill in defining learning issues is important. It directly the depth of understanding we can achieve.

## What are the characteristics of a good learning issue?

- 1. Presented in the form of a **question** or **series of questions**.
  - 2. **Focused** so that it seeks specific information.
  - 3. Constructed so that it asks an **answerable** question.
  - 4. Pursues information that is **relevant** to the problem.
- 5. Goes beyond superficial knowledge to probe **conceptual** issues.
- 6. Often set in a **context** that provides direction. **Why** is the question important?

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