

What's in a question? Effective Questioning Strategies.

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Why Ask Questions?

- **Questions allow us to :**
 - ... **access information**
 - ... **analyze information**
 - ... **draw sound conclusions**
- **Good questions stimulate thinking and creativity**

Asking Questions

- The goal is to *have the questions reside with the learner*
- “The ability to think - to be a lifelong seeker and integrator of new knowledge - is based on the ability to ask and consider important questions.” (Richetti & Sheerin, 1999)

Types of Questions

- ❑ **Closed Questions**

- ...have a limited number of acceptable responses or “right answers”

- ❑ **Open Questions**

- ... those that can be explored further

Closed Questions

- **Fact-based, or based on previously-learned information**
- **Promote limited discussion and interaction**
- **May be factual recall; may require convergent thinking (more analytical)**

Types of Closed Questions

- **Memory Recall**
 - Useful in checking information retention and determining the knowledge base of the participants.
 - Example: According to the Surgeon General, what is the ideal blood pressure range for 45-year-old man? A 45-year-old woman?

Types of Closed Questions

- **Convergent (a.k.a., Synthesis/Analysis)**
 - Represents the analysis of given or remembered data...
 - Focuses on solving a problem or putting several pieces of data together...the learner has to reason, using given or remembered data.
 - The participant becomes a problem solver in which the task is to apply the proper operations at the proper time.
 - Example: “What aspects of wetlands make them susceptible to non-point pollutants?”

Open Questions

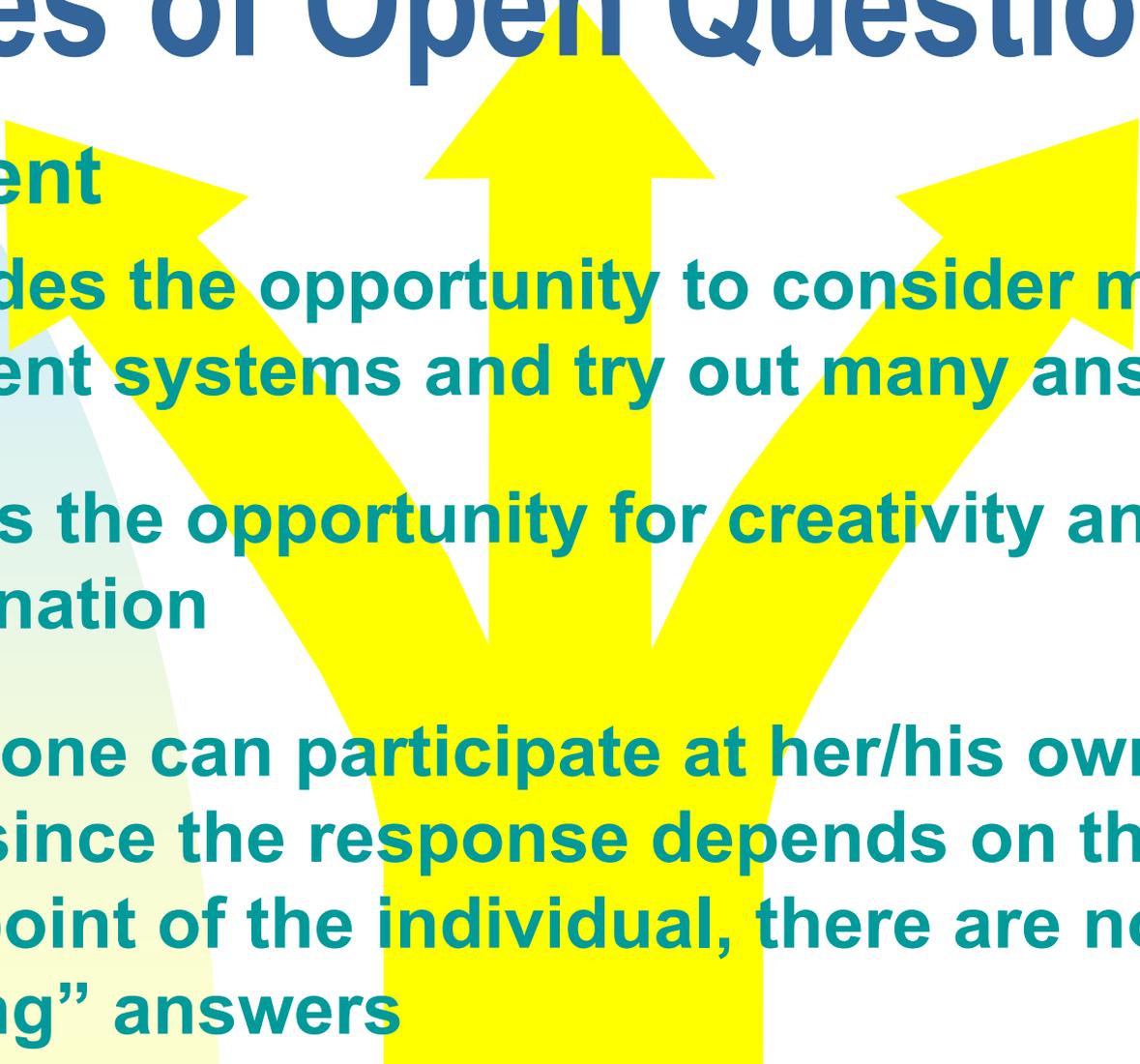
- Those that promote discussion and interaction
- Do not have a single “right” answer
- Stimulate learner thinking and encourage ideas, speculation, and the formation of hypotheses...
 - allow learners to generate their own questions (REMEMBER: have the questions reside with the learner)

Types of Open Questions

- **Evaluative**

- **Asks the learner to use judgement, value, and choice, and is characterized by its judgmental quality**
- **Example: “Discuss some things you think need to be done to improve environmental literacy in California?”**

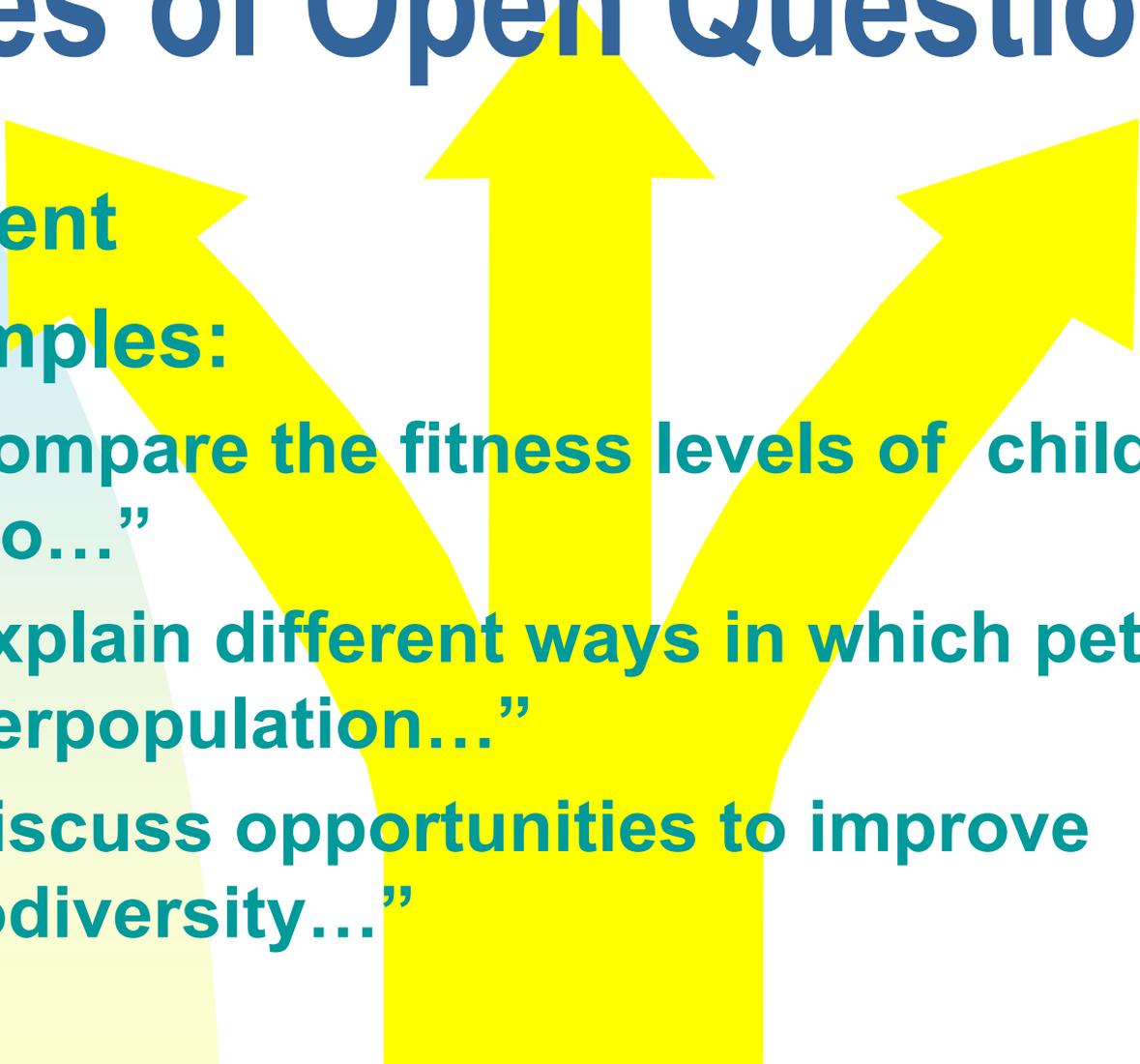
Types of Open Questions



- **Divergent**

- Provides the opportunity to consider many different systems and try out many answers
- Allows the opportunity for creativity and imagination
- Everyone can participate at her/his own level and, since the response depends on the viewpoint of the individual, there are no “wrong” answers

Types of Open Questions



- **Divergent**

- **Examples:**

- **“Compare the fitness levels of children who...”**
- **“Explain different ways in which pet overpopulation...”**
- **“Discuss opportunities to improve biodiversity...”**

How Do I Know if My Questions are Open or Closed?

- **Check your vocabulary:**
 - Questions that begin with *who*, *what*, *when*, *where*, and *name*, and sometimes *how* and *why* tend to be closed questions.
 - Questions that use the terms *discuss*, *interpret*, *explain*, *evaluate*, *compare*, *if*, or *what if*, are indicative of questions that can be explored further.

Question Variety

- **What's the benefit of asking closed questions? When are they appropriate?**
- **What skills do open questions help students develop?**

“...and listen to the Sounds of Silence.”

- Paul Simon

- Misconception: The more questions I ask, the more curious the students will be. Actuality: The more questions a teacher asks, the fewer students ask.
- Misconception: If students don't respond immediately, ask another question. Avoid that *uncomfortable* silence. Actuality: **Wait time** is important. Student confidence increases; the number of questions students ask increases.