Exploring 7 Principles of Learning and Their Impact on Teaching

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Exploring 7 Principles of Learning and Their Impact on Teaching

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Briefly set the context for “learner-centered” teaching

Present our 7 principles of learning

Discuss instructional strategies that support each principle and can be used in the design of courses, classroom pedagogy, and learning experiences
Objectives for the Session

By the end of this morning’s session, participants should be able to

- Describe three or four principles of learning to a colleague
- Provide a concrete strategy that puts each principle into practice
Why a “learner-centered” approach?

Learning results from what the student does and thinks and only from what the student does and thinks. The teacher can advance learning only by influencing what the student does to learn.  (Herb Simon, 2001)
The Principles
1. Students’ prior knowledge can help or hinder learning.

**HELPs Learning**

- When
- Activated
- Sufficient
- Appropriate
- AND
- Accurate

**Prior Knowledge**

- When
- Inactive
- Insufficient
- Inappropriate
- OR
- Inaccurate

**Hinders Learning**

How can we determine what students already know?

How can we use that information in our teaching?
2. How students organize knowledge influences how they learn and apply what they know.
Knowledge organizations vary in terms of the relationships among individual pieces of knowledge.

How can we get students to reveal their organizational structures?

How can we use that information in our teaching?
3. Students’ motivation determines, directs, and sustains what they do to learn.

How can we figure out what motivates students?
How can we use that information in our teaching?
4. To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.
As students gain competence within a domain, they first gain and then lose conscious awareness of the skills they are exercising.

How can we monitor the development of mastery?
How can we teach to promote mastery?
5. **Goal-directed practice coupled with targeted feedback enhances the quality of students’ learning.**

   How can we provide targeted feedback within the constraints we have?

   How can we promote practice within the constraints students have?
6. Students’ current level of development interacts with the social, emotional, and intellectual climate of the course to impact learning.

How can we create classroom environments that take into account students’ development and enhance learning?
7. To become self-directed learners, students must learn to monitor and adjust their approaches to learning.

How can we promote the development of self-directed learners?
Recap: Our 7 Principles of Learning

1. Prior knowledge
2. Organization of knowledge
3. Motivation
4. Development of mastery
5. Practice and feedback
6. The whole student
7. Metacognition
Remember that . . .

It’s not teaching that causes learning. Attempts by the learner to perform cause learning, dependent upon the quality of feedback and opportunities to use it.

(Grant Wiggins, 1993)