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# Choosing the Source of Personal Teaching Principles

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# Principle

- “A comprehensive and fundamental law, doctrine, or assumption”

(Merriam Webster’s Dictionary)

- “an adopted rule or method for application in action: a working principle for general use.”

(Dictionary.com)

- “the ultimate source, origin, or cause of something”

(YourDictionary.com)

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# Teaching Principles

Personal guidelines for making teaching decisions.



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# The Most Common Source of Teaching Principles

## A Pedagogy of Observation

“When we teach, we engage in two closely related, but distinct, activities. First, we *design the course* by gathering information and making a number of decisions about the way the course will be taught. Second, we engage in *teacher-student interactions* as we implement the course we have designed.”

What do students observe?

Source: Fink, L.D. (2003).



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# Principles for Learning Activity and Instructional Design (PLAID)

Source information:

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= PLAID:

1. ?

# Principles for Learning Activity and Instructional Design (PLAID)

## Source information:

- *Observations during most of my undergraduate experience.*
- *Observations of many previous professors.*

## = PLAID:

1. When I need to cover a lot of information efficiently I should rely on class lectures. Students can then *learn* the information in labs or recitation sections, and with homework assignments.



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# Important findings from research in the learning sciences

Drawn from:

- *Applying the Science of Learning*
- *How People Learn*



# Principles drawn from adult learning theories

- Participation of learners in naming what is to be learned.
- Safety in environment and process.
- A sound relationship between teacher and learner.
- Careful attention to sequence of content and reinforcement.
- Action with reflection or learning by doing.
- Respect for learners as subjects of their own learning.
- Cognitive, affective, and psychomotor aspects.
- Clear roles and role development.
- Engagement of learners in what they are learning.
- Immediate applicability of learning.
- Teamwork: using small groups.
- Accountability: how do they know they know.

**Source:** Vella, J. (1994). Learning to Listen: Learning to Teach.

# Applying the Science of Learning to the University and Beyond

- Practice at retrieval promotes long-term retention.
- Varying the conditions results in better learning.
- Re-presenting information in alternative formats enhances learning.
- Learning depends on prior knowledge.
- Learning is influenced by our ideas about learning.
- Experience alone is a poor teacher.
- Lectures don't promote deep understanding.
- The act of remembering enhances the ability to remember.
- Understanding a few things well beats understanding a lot superficially when it comes to retention.
- How learning occurs determines how and when knowledge may be recalled.

Source: Halpern, D. & Hake, M. (2003). *Change*.



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# Key findings in *How People Learn*

- Students come to the classroom with preconceptions that must be engaged or they will leave with the same conceptions.
- Competence results from: (a) a base of factual knowledge; (b) knowledge built in context of a conceptual framework; and (c) knowledge organized for retrieval.
- A metacognitive approach makes for better learning and better learners.

**Source:** *National Research Council. (2000). How People Learn: Brain, Mind, Experience, and School.*

# Principles for Learning Activity and Instructional Design (PLAID)

## Source information:

- Learning is influenced by our ideas about learning.

Source: Halpern, D. & Hakel, M. (2003). *Change*.

## = PLAID:

1. Take a little time to explain why group activity can help students achieve desired learning objectives. Be somewhat transparent regarding decisions that affect students' learning.

## Source information:

- Students come to the classroom with preconceptions that must be engaged or they will leave with the same conceptions.

Source: National Research Council. (2000). *How People Learn*.

## = PLAID:

1. Use knowledge probes to find out what students already know or think about a topic. Small groups can be safe and comfortable environments for discussing different perspectives and/or understanding of particular topics.

# Principles for Learning Activity and Instructional Design (PLAID)

- Source information:
- Experience alone is a poor teacher.

**Source:** Halpern, D. & Hakel, M. (2003). *Change*.

- *“We do not learn from our experience, we learn from processing our experience.”*

**Source:** John Dewey, cited in *Small Group Instruction in Higher Education*. (2003)

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