

Applications of self-directed learning:

Where have you seen examples of these principles?

What applications of these principles do you see for your teaching?

Pearls on Educational Principles Self-Directed Learning

Pearls on Educational Principles:

- Present an influential idea in education
- Suggest examples of its use
- Give an opportunity to apply the idea to your teaching

Principles
to Guide
Teaching
Practice in
Medical
Education

Office of Research and Development in Medical Education

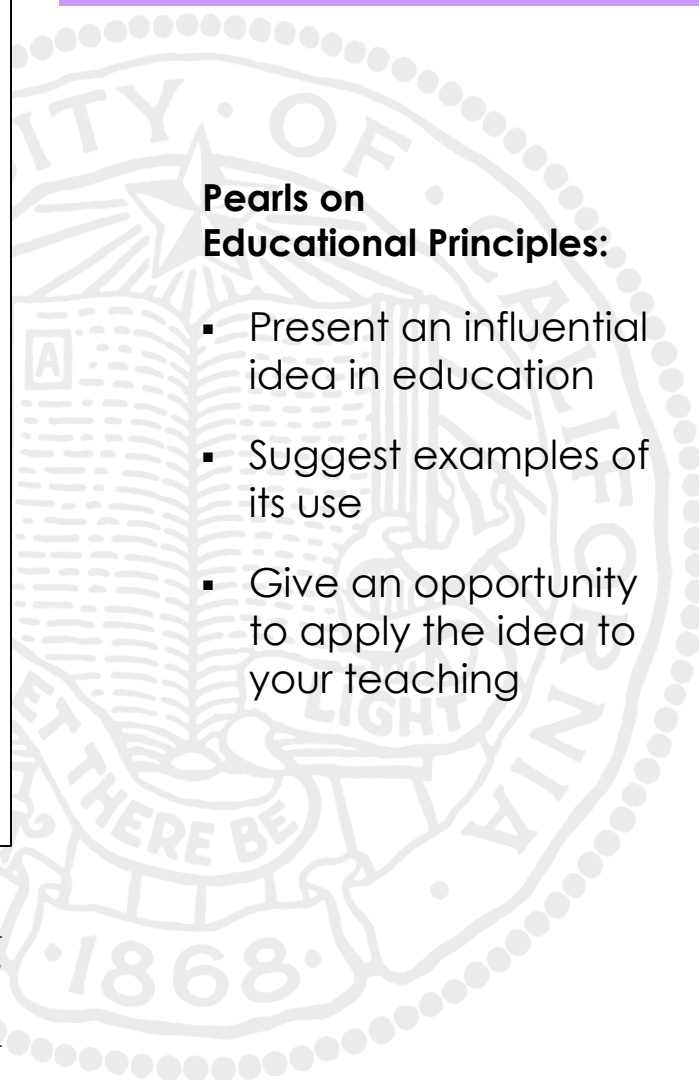
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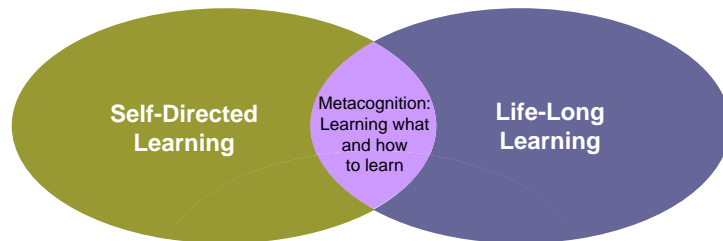


Self-Directed Learning

as explained by
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The idea:

Self-directed learning, a long-standing concept in the education literature, is relatively new to medical education journals. In an oft-cited 1975 paper, Malcolm Knowles described it as a process where individuals take the initiative to diagnose their learning needs, formulate learning goals, identify resources, choose and implement learning strategies, and, finally, evaluate their learning. Another term appearing in the literature is “life-long learning,” most recently popularized by accrediting organizations with requirements for maintenance of certification and continuing education. The terms are often used in a way that makes them seem interchangeable, but the underlying constructs are different. While authors discussing life-long learning may mean “self-directed life-long learning,” the term “life-long learning” does not connote the self-motivation and metacognitive skills associated with self-monitoring and self-regulation that are key to the concept of self-directed learning.



The distinction is particularly important for medical educators, since education researchers increasingly argue that medical education should focus on **the acquisition and assessment of metacognitive skills**. In the current era of rapidly expanding knowledge, yesterday's best practice may be obsolete tomorrow. In such a climate, physicians must recognize what they don't know and decide when to look something up or to consult a colleague. Medical schools should focus on producing life-long, self-directed learners proficient in diagnosing and addressing their own learning gaps, rather than solely encouraging knowledge and skill acquisition in learners. Emphasis on self-directed learning is the reason learning plans and portfolios have gained traction in recent years.

The examples:

At UCSF, the medical school has implemented a **portfolio process with the explicit goal of encouraging self-directed learning**. In this process, students:

- write critical reflections on their progress towards a specific competency
- integrate both external feedback and self-assessment
- link to the milestones for each competency and each level of learning
- create learning plans with specific action steps, based on the reflection
- discuss learning plans with a mentor

The medical education literature describes similar learning activities from medical school and GME curricula elsewhere, although many are not explicitly linked to self-directed learning.

Reference:

Mazmanian P. and Feldman M. Theory is needed to improve education, assessment and policy in self-directed learning. Medical education, 2011, 45(4), 324-6.