

#### HISTORICAL PERSPECTIVE

Things Educational

# Virtuous cycles of learning (VCoL) and the +7 skills

All of Lectica's learning tools are designed to leverage and support VCoL+7—the virtuous cycle of learning and its +7 skills.

### **LECTICA Live**

**Virtuous Cycles of Learning (VCoL)** is a cycle of goal setting, information seeking, application, and reflection.



#### Its +7 skills include:

- 1) reflectivity,
- 2) awareness,
- 3) seeking and evaluating information,
- 4) making connections,
- 5) applying knowledge,
- 6) seeking and working with feedback, and
- 7) recognizing and overcoming built-in biases.



#### HISTORICAL PERSPECTIVE

Things Educational

#### **Overview**

Unlike conventional study skills—which are designed primarily to help students learn factual information well enough to pass academic tests—VCoLs are designed to build the knowledge, deep understanding, and skills we need to navigate the complexity and ambiguity of our lives.

VCoLs engage the whole learner. By this, we mean that they engage learners emotionally, physically, and intellectually, leveraging both conscious and unconscious mental processes. They ensure that new knowledge is integrated into existing knowledge in a way that makes it useful and "sticky."

When people work with our assessments, they're not only building knowledge, they're also nurturing the dispositions and skills **required for a lifetime of learning and development**.

#### The +7 Skills

All VCoLs, in addition to integrating new information and ideas into our mental networks, also support the development of several fundamental life skills. We call these +7 skills. Here are some of the forms of VCoLing that foster their development.

- 1) Awareness of self, others, and the environment
- 2) Skills for making connections between ideas, information, emotions, perspectives, and evidence
- 3) Skills for seeking and evaluating information, evidence, and perspectives
- 4) Skills for applying what we know in real-world contexts
- 5) Reflectivity—a cultivated habit of reflecting on outcomes, information, emotions, or events
- 6) Skills for seeking and making use of feedback
- Awareness of cognitive and behavioral biases and skills for avoiding them



### HISTORICAL PERSPECTIVE

Things Educational



### 1—Self and other Awareness

Awareness micro-VCoLing structured around practices that involve...

- observing and documenting thoughts, feelings, or behavior
- self-evaluation
- practicing non-judgmental openness to experience
- meditation
- mindfulness in everyday life
- somatic practices, like yoga
- coherence practices, like HeartMath



### HISTORICAL PERSPECTIVE

Things Educational



### 2—Making Connections

Connection micro-VCoLing structured around practices that involve...

- brainstorming
- Minto Pyramid problem solving
- polarity thinking (or both / and thinking)
- mind mapping
- causal loop diagramming (or other systems mapping approaches)
- building relational databases



### HISTORICAL PERSPECTIVE

Things Educational



### 3—Seeking and Evaluating Information

Seeking & Evaluating micro-VCoLing structured around practices that involve...

- active listening
- deep listening (Kramer)
- seeking clarification
- "library" research
- critical thinking
- action inquiry (particularly second-person action inquiry)
- the scientific method



### HISTORICAL PERSPECTIVE

Things Educational



### 4—Applying Knowledge

Application micro-VCoLing structured around practices that involve...

- action learning
- project-based learning
- developing action plans or development plans
- rehearsing—reducing risk by trying out new knowledge in hypothetical situations
- writing or critical discourse—using new knowledge to improve an argument or message



### HISTORICAL PERSPECTIVE

Things Educational



### 5—Reflectivity

Reflectivity micro-VCoLing structured around practices that involve...

- making sure that learning goals are "just right"
- embedding learning in real life, as a part of everyday activities
- not punishing learners for making mistakes—helping them see mistakes as a source of useful information
- ensuring that every learning cycle, no matter how small, ends with goal setting



### HISTORICAL PERSPECTIVE

Things Educational



### 6—Seeking Feedback

Feedback micro-VCoLing structured around practices that involve...

- openness to feedback
- awareness of your own defensiveness
- feedback seeking skills (like helping others feel comfortable providing you with feedback)
- skills for evaluating and incorporating feedback
- second-person action inquiry
- participation in focus groups
- customer or employee surveys



#### HISTORICAL PERSPECTIVE

Things Educational



### 7—Coping with Cognitive and Behavioral Biases

De-biasing micro-VCoLing structured around practices that involve...

- cultivating humility—recognizing the ubiquity of human fallibility
- building critical thinking skills
- regularly seeking feedback
- tackling common cognitive biases, one at a time (e.g., conservation bias, bandwagon effect, stereotyping, or attribution bias)

### To support optimal learning with VcoL

- 1) Determine the current level of a learner's knowledge and skills.
- 2) Find out what they are most interested in learning.
- 3) Help them select learning goals that are in their Goldilocks Zone (the range in which a learning task is just challenging enough to support optimal learning).
- 4) Show them how to achieve these goals with everyday VCoLing (especially micro-VCoLing).
- 5) Embed at least one +7 skill in every VCoL.



### HISTORICAL PERSPECTIVE

Things Educational

6) Understand that real learning—learning that changes the way we think and behave—takes time (and benefits greatly from an environment in which ongoing learning, application, and reflection are actively supported).

### **Related Articles**

Learning the way our brains are designed to learn

by Theo Dawson. Feb 29, 2020

https://theo-dawson.medium.com/vcol-in-action-learning-the-way-our-brains-were-designed-to-learn-2c01782a4d14