



Using Drawing for Learning in Life Sciences Classrooms

Course Syllabus

Course Description

The purpose of this professional development course is to introduce the drawing-to-learn as a learning framework that can support life science learning when implemented with intention and direction. Effective drawing activities frame drawing as a learning process to incorporate observation and communication. Educators will be guided through designing and implementing drawing activities that fit their needs, class level, and learning goals. Educators and students need no prior drawing experience. From mind maps to observational drawings, this course will introduce various, adaptable drawing activities with suggestions for modification.

This course enhances classroom teaching effectiveness and supports improved student outcomes by introducing new knowledge in the drawing-to-learn framework as an evidence-based strategy to enhance life science instruction through visual activities that promote observation, critical thinking, and conceptual understanding.

Course Objectives

At the end of this course you should be able to:

1. Describe at least two benefits of the drawing-to-learn framework for life science classrooms.
2. Identify and explain three key features of an effective drawing activity.
3. List and categorize four different ways drawing can be used across topics, learning objectives, and learning levels.
4. Create an observational drawing using at least three basic techniques introduced in the module.
5. Compare and contrast three methods of using drawing for formal, informal, and self-assessment.
6. Develop and share a complete drawing activity tailored to a specific learning unit or topic.

Modules

- Module 1: How can drawing benefit your life science classroom?, Quiz 1
- Module 2: What does an effective drawing activity look like?, Quiz 2
- Module 3: How can you use drawing in your learning experiences?, Quiz 3
- Module 4: Basic steps for drawing from observation, Quiz 4
- Module 5: How can drawing be used for assessment?, Quiz 5
- Module 6: Designing Directed Drawing Activities, Quiz 6

Grading



Each quiz must be passed at an 80% or higher (three attempts allowed).

Format

This is a self-paced, asynchronous (no required live meetings) course. Throughout the PD course, you will find it helpful to take notes along the way to assist with the quizzes. Within each module, you will find reflection assessments that are not graded but will help in your journey through the course. There is an interactive forum in the course to help you connect with peers and instructors, share ideas, and collaborate on best practices throughout your learning journey.