

Drawing for Understanding in Field Science

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Design Challenges

Field Identification – A composition that includes all physical markers necessary for identification of organism with special emphasis on defining characteristics.

Visual Metaphor – A symbolic or metaphoric rendering of some aspect of the organism's structure, function, role, or relationship; an empathetic/personal experience or understanding of the organism or idea.

Visual Mnemonic – In-the-moment visual notes that help us to focus on what we are observing and reflect on/remember what we experienced.

Comparative Illustration – A comparison of particular features from two or more organisms that highlights their similarities or differences in structure, function, adaptation, or role.

Sequential Illustration – A visual representation of an unfolding process that explores the directionality, pace, and nature of the process.

Mapping and Cataloging – An aerial view of a space detailing the various organisms within that space, their concentrations and/or the paths by which the organisms travel through that space.

Contextual Illustration – An illustration of a particular organism that includes information about their habitat and other organisms which are in close relationship to the subject (food sources, predators, symbionts, dependents...) providing a “window” onto the life of the subject

Anatomical Illustration – A diagrammatic illustration that clearly delineates the component parts/structure of an organism – laying them flat and simultaneously in order to highlight connections/relationship of parts to the whole system.

Process Diagram – A simplified drawing schematic that is designed to explain the relationship of parts or a complex process of cause and effect.

Tree or Web Design – A diagram that describes the interconnectedness, sequence, or relationship between a variety of related organisms.

Information Gathering – A layered illustration prompted by questions and curiosity that brings together information and ideas from a wide variety of sources including first-hand experience and secondary source information, questions and speculations, objective analysis and emotional/personal impressions.

Procedural Illustration – A sequence of written and drawn information that breaks down steps for completing a multi step process and supports recognition, understanding, and reflection on guiding markers or confirmation points along the way to completion.

Charts and Timelines – A graphic representation of information that includes multiple vectors complex inter-related information along multiple vectors