



***Creative Verve: the Collusion of Metaphor and the Scientific Mind***

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This curriculum unit is recommended for:  
IBMYP Visual Art, years 4-5; Visual Art Intermediate, grade 10

**Keywords:** energy, art, science, metaphor, scientific thinking, photovoltaic, ecological footprint, confection, parallelism, figurative, temporal, dye-sensitized solar cells

**Teaching Standards:** See [Appendix 1](#) for teaching standards addressed in this unit.

**Synopsis:** This curriculum unit will make a significant contribution to visual art courses while revealing to students some inter-disciplinary connections to earth and environmental science. In this unit students will investigate concerns of global energy and learn about the challenges currently facing our world related to rapidly changing energy resources. Students will consider how the use of visual metaphors is important to creative scientific thinking and how they are used to convey complex ideas related to energy consumption. Students will investigate their personal energy use based on lifestyle as they determine their Ecological Footprint on the Earth and analyze ways that changes in their own lifestyle can help in creating less demand on energy resources. Considering the relationships between visual images and creative scientific thinking, students will interpret their personal energy use through the use of visual metaphor and various approaches to the visual design of information. This unit includes a lesson in drawing the human figure that students will apply in creating energy self-portraits. This unit supports students' understandings of the various perspectives through which art can be appreciated in the context of time, place, geographic conditions and environmental concerns. In a science related hands-on activity, students will experience the transfer of solar energy through the creation of small dye sensitized solar cells using easily available lab materials.

*I plan to teach this unit during the coming year to 46 students in IBMYP Visual Art, Beginning and Intermediate.*

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