Life Science (LS3) Heredity

Instructor: Pauline Allaire-Adams
Location: William James College

10 PDPs (upon completion of project)

This workshop has been designed to give K-8 teachers who teach science a deeper understanding of the content in the area of Heredity. Participants will explore scientific vocabulary associated with each standard and learn ways to introduce these terms to their students using a variety of resources including technology. The instructor will model effective ways to teach science vocabulary while the participants learn or re-learn the content in these areas. Participants will walk away with a deeper understanding of the science content and critical thinking skills associated with the new 2016 MA STE standards. After completing this workshop, teachers should feel confident about their understanding of the content and better equipped to teach these standards to students. Topics of exploration include:

- Providing evidence to explain that traits are inherited from parents and can vary within a group of organisms
- Distinguishing between inherited characteristics and ones influenced by the environment
- Developing a model to show the various ways in which proteins can be affected by structural changes to genes
- Comparing and contrasting asexual and sexual reproduction
- Illustrating that chromosomes contain genes that determine proteins which in turn affect an individual’s traits
- Explaining how having chromosome pairs promotes genetic variation in sexually reproducing organisms.

Intended Audience: K-8 Elementary Teachers, Science Teachers, Departments Heads, STE Curriculum Leaders

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