

## Welcome Module

Welcome and thank you for participating in the Let's Do Chemistry Train-the-Trainer Pilot Workshop! Because this is a pilot national professional development project, we're grateful for your input and flexibility. This document provides a short overview of what the workshop is and what you'll be doing. If you have questions about the workshop, you can email Emily Hostetler at [ehostetler@mos.org](mailto:ehostetler@mos.org) or David Sittenfeld at [dsittenfeld@mos.org](mailto:dsittenfeld@mos.org).



## About the workshop

This workshop is the culminating activity of a collaborative project, called [ChemAttitudes](#), that was led by the [Museum of Science, Boston](#), the [American Chemical Society](#) and the [National Informal STEM Education Network](#) (NISE Net). The ChemAttitudes project responded to a National Academies report called *Effective Chemistry Communication in Informal Environments*, which noted that chemistry is one of the least represented of the major disciplines in science museums.

A primary deliverable of the ChemAttitudes project was to develop a **learning framework** for the design and facilitation of informal hands-on activities that will help to stimulate **interest** in chemistry, demonstrate its **relevance**, and promote a sense of **self-efficacy** in people who learn about it. The framework was developed using a process called design-based research, in which researchers assessed the effectiveness of design and facilitation strategies for hands-on chemistry activities with public audiences and made iterative revisions to the framework.

The goal of this workshop is to share this new framework with members of the chemistry community (people like you!) who train others to facilitate informal chemistry activities, so that the framework will be more broadly used. You will practice doing this by applying the framework to an activity you find relevant to your chemistry outreach work and share the ways that you do so with other workshop participants. We look forward to learning from all of you.

## Overview of the train-the-trainer pilot workshop

In this workshop, you and a cohort of fellow participants will be learning about the framework in **four modules**:

- The first module will focus on the design of activities to include **chemistry content**.
- The second module will focus on designing **structure and format** for hands-on activities.
- The third module will focus on **facilitation** of these hands-on activities.
- The fourth and final module will focus on **designing a training**.

Each module will include two components:

- **Individual preparatory work** that you will complete on your own time. For the first three modules, you will familiarize yourself with a particular framework strategy and

apply it to the design and/or facilitation of an activity of your choosing. In the final module, you will design a training on the facilitation of hands-on activities. Throughout the workshop, you'll be making changes to your hands-on activity, corresponding with other participants in the Slack channel, and completing worksheets that document the changes you'll be making.

- **Group discussion** in which you will share what you have done in your preparatory work and what you have learned. The group discussion is an opportunity to learn together with other participants using Zoom. During these group discussions, you will view and discuss videos of facilitated activities and present iterations of the activity you are adapting using the framework, so that others can learn from you and provide feedback.

### What you need to do in this first week

Your work in this first week will utilize the materials in the Welcome Module. All workshop modules and their resources will be accessible at <https://www.nisenet.org/lets-do-chemistry-train-trainer-workshops>. Here's what we're expecting you to do in advance of next week:

1. **Read this letter!** Good start!
2. **Watch the Let's Do Chemistry! Changing Attitudes about Chemistry project video.** This video will help you understand more about our previous work on the ChemAttitudes project.
3. **Watch the Research Introduction video.** This video provides an overview of the ChemAttitudes design-based research process and project questions.
4. **Watch An Example of the Framework in Action video.** In this video Patti Galvan from the Office for Science Outreach at the American Chemical Society talks about her work applying the research framework to hands-on activities.
5. **Read the Introduction to Selecting a Practice Activity handout.** This will help you get started on selecting an activity that you will adapt based on the framework you will be learning about throughout the workshop.
6. **Check out the Additional Resources.** Also, if you haven't joined our "LDC Workshop" Slack group and introduced yourself, please do so by [clicking here](#).

Thank you! Next week, we will send you the materials for you to prepare for the first module on chemistry content. We look forward to seeing you on our first session on May 22<sup>nd</sup>.