

Introducing LabXchange

www.labxchange.org learn@labxchange.org

LabXchange is a free science education platform created at Harvard University with support from the Amgen Foundation. The platform lets you browse vetted science content from sources around the world, remix our library content with your own private content, and share your ideas with a small group or a broader community. This article provides a brief overview of the platform, but the best way to understand LabXchange is to explore it yourself!

Why was LabXchange created?

At LabXchange, we believe that students everywhere deserve equal opportunities to prepare for and excel in science. Yet due to economic and geographic limitations, millions of students worldwide lack opportunities to engage meaningfully in the scientific process, which has led to significant gaps in scientific literacy and in diversity across scientific fields.

The LabXchange platform was created to give students around the world the best possible science learning experience, and to provide the opportunity to better understand the role of science in society. This includes access to skills-based science education resources, personalized instruction, next-generation virtual lab experiences, and networking opportunities across the global scientific community.

What can I do with LabXchange?

The LabXchange platform provides a variety of tools to support the learning, teaching and practice of science. Through the LabXchange platform, you can:



- Learn about a new topic and see how science applies to real world issues by browsing <u>content in the library</u>
- Create your own content through your dashboard
- Remix content into your own learning pathways to support all learners
- Share content with learners by creating a class

- Connect with a community of educators and scientists through discussion boards and mentoring opportunities
- Develop professional skills...and more!

By providing a repository of high quality content with which to build differentiated learning pathways, and by leveraging social learning, LabXchange allows users to engage in design, iteration, and problem-solving, while supporting individual exploration and challenge. These tools can not only personalize the learning experience for students, but can also save time and provide opportunities for collaboration for educators at the department, school and district level.

LabXchange can be used to support school districts at each level, from individual students to educators to schools to the entire district.

How can I use LabXchange for online learning?

LabXchange offers features that can help mitigate some of the challenges of online learning and maximize the benefits of a remote learning experience. LabXchange provides the ability to personalize the learning experience for individual students by creating customized pathways, allowing for flexibility and support in asynchronous learning. Educators can deliver pathways through a private class and make use of the discussion board feature to engage all learners and facilitate regular communication.

Below are some suggested ways to use LabXchange to help maximize in-person time with students:

- Prepare students for an in-class experience (flipped classroom model)
- Practice or develop skills, such as laboratory techniques
- Provide customized support on a topic for individual learners
- Create opportunities to apply or extend course topics
- Supplement or replace in-class experience for asyncrhonous learning or absences

The LabXchange Educator Dashboard offers several ways to share content and design learning experiences for groups of users. Through your dashboard, you can create content and save favorite content to a private library for easy reference. You can also create a class, monitor student progress and manage mentees if you offer mentorship.

The LabXchange Learner Dashboard offers features for sharing content and participating in learning experiences, including classes and mentorship. Like educators, learners can create content and save favorite content to a private library.

We look forward to hearing your ideas about how to use LabXchange to enhance online learning.