



Learning Catalytics Implementation Guide

1. What is Learning Catalytics (LC)?

Learning Catalytics is an interactive classroom tool that allows instructors to hear from EVERY student when it matters most. Instructors ask a variety of questions that help students recall ideas, apply concepts, and develop critical-thinking skills. Students answer using their smartphones, tablets, or laptops, and instructors monitor the responses and adjust their teaching approach based on what the students do—or do not—understand. Instructors can also set up peer-to-peer learning groups and are able to use real-time analytics to address student misconceptions the moment they occur.

Response types and how you can use them:

INSTRUCTOR-LED SYNCHRONOUS

Students respond individually to questions as they are delivered, one at a time, typically in class or online with an instructor present.

This response type emulates the way an instructor might use clickers or other response systems and encourages students to actively engage in class. Instructors can view student responses in real time, which enables them to understand what students do and do not know and allows for just-in-time teaching adjustments. A seating map identifies students and groups them based on the instructors' criteria for

further problem solving and discussion. This makes for an engaging classroom experience and gives instructors an unprecedented view of class performance.

Students answer questions individually, during class, in the order delivered.

The session is started and stopped manually in real time. The instructor can deliver any question again, and display or hide any student responses.

AUTOMATED SYNCHRONOUS

Students respond individually to questions as they are delivered, one at a time, in an automated format, typically outside of class at a set time when an instructor is not present.

This response type is designed to deliver the benefits of peer discussion to students in online or hybrid classes. As these questions are delivered on a timed basis, by default, the first question will start after five minutes, to give students time to log on. The instructor can also manage the amount of time students have to join a session before the first question is delivered. There is auto timing and auto pacing throughout the module. Students are presented with a countdown timer to help them know how much time they have left to enter their response. If between 30-70% of students have responded with the correct answer, then they are grouped for discussion. During discussion, students have a text chat to discuss their responses before entering their second response. With this response type, the instructor specifies a window of time for the module to be available..

Students answer questions individually, during an automated online session scheduled by the instructor, in the order they are listed in the module.

The session is started and stopped at a scheduled start or stop time, and responses are monitored to determine whether to generate group chat sessions for peer instruction, when to deliver the next question, and when to end the session.

SELF-PACED

Students respond individually to questions in any order, typically outside of class. This response type allows students access to a full set of questions they can answer at their own pace and in any order. This can be used in class for quizzes or worksheets. The instructor can also specify a window of time for the module to be available, so it works well outside of the classroom as well (e.g. for a homework assignment). For in-class quizzes, instructors can view student responses to automatically scored questions on the seat map if their Learning Catalytics course is associated with a seat map. This helps them gauge how well students have understood the material. Instructors can also set a start and end time for these quizzes for students to work at a time that suits them, inside or outside the classroom depending on how long the instructor allows the quiz to be open. Both in class and outside of class, students can access and change their responses at any time up until the session is stopped—either manually, when the instructor clicks the “Stop Session” button, or automatically, based on the “End At” value. Students can only see answers/feedback after the session has ended.

Students answer questions individually, typically outside of class, in any order.

The sessions are started and stopped manually or by scheduling.

SELF-TEST

Students respond individually to questions in any order and receive feedback on each of their responses, typically outside of class. This response type is identical to Self-Paced, except that students receive right/wrong feedback on their responses immediately after submitting. Instructors should use this response type for homework, quizzes, or other module response types, such as an Instructor-Led Synchronous Module or a Team-Based Assessment that they would like their students to get immediate feedback on. This response type can also be used to differentiate instruction. For example: When teaching a particular topic where students would find themselves at very different skill levels (some students still needing a lot of practice with the basics while others are deathly bored by the basics and in need of a challenge), then create a Self-Test module with questions of increasing difficulty and open it up to students. Tell them that the easy questions are at the front, the harder questions are at the end, and they can start anywhere they choose. The instructor's view reflects real-time performance, so you can see what problems students are attempting and what the common errors are for each one.

Students answer questions individually, typically outside of class, in any order, and receive feedback for all responses.

The sessions are started and stopped manually or by scheduling.

TEAM-BASED ASSESSMENT

Students respond individually to all questions in the module and then gather in their groups to respond to those questions as a team. This response type allows students to respond individually to all the questions in each module, in any order. Then the students will gather into their teams and respond to the same questions. This model is based on the “**Readiness Assurance Testing**” from Team-Based Learning™ Collaborative. The teams can be assembled in two ways: the instructor creates permanent teams for the course using the Teams button, or students can form teams and enter a “team name” when they join in the class session.

When a team member submits the team's answers, all team members see answer feedback. If you have enabled multiple attempts in the module settings, the team can submit another answer (generally for fewer points).

Students answer questions individually, either before or during class, in any order, and then again as a team during class. During the team round, students must come to a consensus response to each question.

Sessions are started and stopped manually, including starting the individual and team rounds.

2. Let's get started

There are three phases for implementing Learning Catalytics: Plan, Implement, and Evaluate.

Phase 1: Plan seeks to identify your desired outcomes and goals, identify and select the features within Learning Catalytics to integrate into the course, determine how each feature contributes to the overall course average, and define how you plan to measure and evaluate the success of the implementation.

Phase 2: Implement is where you learn about the implementation resources available and how you can utilize them to effectively integrate the product into the course. In this phase, you customize the product features to create assignments and configure the gradebook to align with your desired outcomes and goals. You also customize resources to help students get started successfully.

Phase 3: Evaluate is where you analyze student performance and predict future success, interpret the student performance data to determine if intervention strategies are needed, and devise strategies to address any performance issues. Depending on what the data tells you, you may decide to revise the course. This phase also includes analyzing the end-of-term course and learner data to correlate results with learner outcomes and course goals.

To help you identify your desired outcomes and goals, we've created a guide you can use to help you get started.

10 STEPS TO A SUCCESSFUL IMPLEMENTATION

Plan



- 1 Define the goals and outcomes you have for using online learning technologies in your classroom.
- 2 Select features and assets that align with your goals, syllabus, and assessment plan.
- 3 Identify how you will measure your success.

Implement



- 4 Take advantage of professional development and training opportunities to improve learner outcomes.
- 5 Customize the course to best meet your goals and outcomes.
- 6 Use onboarding resources to set your students up for success.

Evaluate



- 7 Monitor student performance throughout the term.
- 8 Improve student performance by using communication tools and other intervention methods.
- 9 Be open to making revisions during the term to improve the course's effectiveness.
- 10 Review data to measure success and plan course revisions.

Retrace your steps for another successful term if you're teaching this course again.

A couple things to consider before integrating:

- Make sure your classroom has good connectivity so all students can be online simultaneously via wi-fi or cell providers.
- Consider students' access to web-enabled devices such as smartphones, tablets, or laptops.
- Identify a plan for using Learning Catalytics in a way that best works for you and your students.

Integration and Setup

The Learning Catalytics interface varies slightly, depending on whether you access Learning Catalytics from within a Mastering or MyLab course or by signing in directly at learningcatalytics.com.

Learning Catalytics can be integrated through your MyLab or Mastering courses. When you use the

full integration and link out to Learning Catalytics, you also create a course in Learning Catalytics that automatically syncs with your Mastering Table of Contents/19 or MyLab course. You can also have Learning Catalytics send student scores back to the Mastering or MyLab Gradebook.

Additional Resources

- [MyLab Quick Start Guide](#)
- [Mastering Quick Start Guide](#)
- [Learning Catalytics Video Help YouTube Playlist](#)
- [Learning Catalytics Ask Pearson Get Started Page](#)
- [Learning Catalytics Help Page](#)

In addition, refer to the [Learning Catalytics User Stories](#) to become familiar with what Learning Catalytics can do and how professors use it.

Important

If you use Learning Catalytics integrated with Mastering or select MyLabs: Refer to the product-specific guides and documentation for information about the integration. In particular, it is very important to understand how you and your students access Learning Catalytics and how grade transfer works (if applicable).

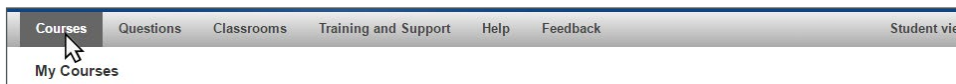
The Courses area lists all of your Learning Catalytics courses. If you use Mastering or select MyLab courses with Learning Catalytics integration, then courses are created automatically when you enter Learning Catalytics through Mastering or the MyLab product. Within each course, you can create multiple modules. You can copy modules between your courses.

Note

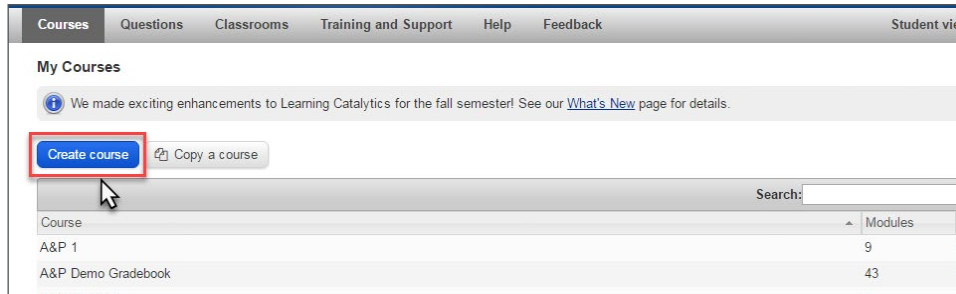
The directions below apply only to users of Learning Catalytics as a standalone resource. If you use Mastering or select MyLab courses integrated with Learning Catalytics, then the Learning Catalytics course is created automatically when you cross over from the Mastering or MyLab course to Learning Catalytics from the link on the Course Home page.

Step-by-Step Instructions: Create Course

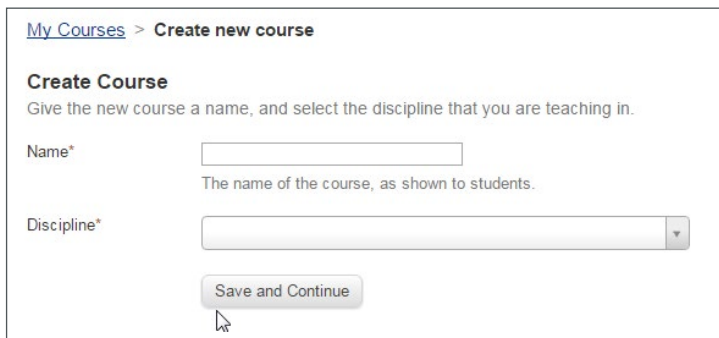
1. Click **Courses** in the Learning Catalytics menu bar. You see the list of your courses.



2. Click **Create course**.



3. Name your course, which students see. Select a discipline from the drop down. Click **Save and Continue**.

A screenshot of the 'Create new course' form. The form has a title 'Create Course' and a subtitle 'Give the new course a name, and select the discipline that you are teaching in.' There are two input fields: 'Name*' and 'Discipline*'. The 'Name*' field has a text input box and a hint 'The name of the course, as shown to students.' The 'Discipline*' field has a dropdown menu. A 'Save and Continue' button is at the bottom.

[My Courses](#) > **Create new course**

Create Course

Give the new course a name, and select the discipline that you are teaching in.

Name*
The name of the course, as shown to students.

Discipline*

4. Edit any of the default settings you would like to change, and then click **Save**. Please see the best practices for course settings below for recommendations. You can always edit course settings later as well.

[My Courses](#) > [Demo Course](#) > **Settings**

General Information

Name*
The name of the course, as shown to students.

End Date
The date when the course ends (enter as YYYY-MM-DD or click to select date).

Discipline*

Classroom
The seating map for the classroom where the course will be taught. [+ Create new classroom](#)

Settings

Allow review after hours
Allow students to review all of the questions and answers in your delivered modules after this much time has elapsed since the start of the session.

Enable "I dont understand" button and real-time graph
If checked, students will have access to a button at all times where they can indicate when they are understanding or not.

Enable automatic pacing
If checked, Learning Catalytics will automatically manage the timing of question delivery, and automatically group students based on question results. (We recommend that new users keep this feature turned off initially.)

Default Grouping Settings
These settings apply to both Automated Synchronous modules and Instructor-Led Synchronous modules when automatic pacing is turned on.

Lower bound for grouping
e.g., 30 for 30%

Upper bound for grouping
e.g., 70 for 70%

Default group size
Students should be placed into groups of size...

Default group indicator
Group students based on their...

Default group comparison
Group students when the indicators (above) are...

Default group tolerance
Only group students that are sitting...

LMS Integration

Consumer Key

Shared Secret

Configuration URL [? What's this?](#)

Launch URL

Take Aways

Learning Catalytics transforms your class into an active and engaging environment that enables you to watch your students grow and learn in real time, so that you can provide targeted support where and when your students need it most.

Educators across the country have leveraged the power of Learning Catalytics to help their students learn more effectively. [Check out their success stories.](#)