



Robotics Lab Pilot Planning and Implementation Guidance

The <u>Middle Grades (7-8) Robotics Lab Pilot</u> is an innovative effort blending mathematics and technology to provide exposure to beginning concepts in robotics and computational thinking through hands-on learning. The pilot will engage participating students in explorations and applications of robotics utilizing structured online <u>resources</u> and <u>reconfigurable modular robots</u>.

Contact information

Name, Title and Role	Email	Phone
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Planning checklist

April-June 2024	June 2024	August 2024
 □ Each school site should identify two teachers to participate in training and implementation. Send these names to STEM@la.gov. □ Ensure technology requirements are met and ready for next school year including initiation of data sharing agreements. □ Schedule at least one section of the Robotics Lab pilot when creating the 2024-2025 master schedule. 	☐ Teachers attend two day in-person training during the last week of June ☐ Each school site receives Linkbots, materials, and licenses.	☐ Schedule students in at least one section of the Robotics Lab pilot for the full year. ☐ Prepare time in schedules for teachers to attend monthly Community of Practice sessions to be held after school hours ranging from 1-2 hours. (Schedule forthcoming with specific dates and times) ☐ Send available dates and times for school site visits in either the fall or spring semester to liz.wrzesinski@la.gov





Materials

Each school site will receive (16) sixteen Linkbots and (2) activity mats to be used in the pilot class. The site will also receive 2 teacher licenses for 2-8 classes with up to 40 students each.

*Please note that if the school site fails to uphold the agreed upon assurances within the application, these materials are property of the Department and we reserve the right to ask for them to be returned.

Technology requirements

The hardware (Linkbots) can be controlled with Windows, Mac OS X, or Chromebook machines with additional <u>free software</u> installed. School sites should coordinate with their own technology departments to ensure that the software is downloaded onto computers and accessible to students. Once teacher licenses have been received, schools may consider including the log-ins for this program along with others utilizing the school system's existing single sign on solution, such as Clever.

Professional learning for teachers

Each school site will send two teachers to attend a two day **in-person training**. There will be two training sessions offered, June 24-25 at the University of Louisiana at Lafayette (104 E University Ave, Lafayette, LA 70504) or June 27-28 at Louisiana Tech University (201 Mayfield Ave, Ruston, LA 71272). During the training, teachers will have a chance to examine the materials and navigate best practices for implementation. Teachers will be supported during implementation through monthly Community of Practice sessions to be held after school hours ranging from 1-2 hours beginning in September.

Scheduling

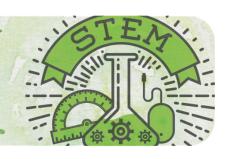
Schools should include the Robotics Lab Pilot within the master schedule and may use **course code 61107** COMPUTER/TECHNOLOGY ELECTIVE; 7TH AND 8TH GRADE. Class sizes may vary, but typically should be between 16 and 20 students. Smaller class sizes will allow students a one to one ratio using the Linkbots, but students may participate using a two to one ratio. The class roster should include students reflective of the population within the school to ensure broad and expanded access to STEM for all students.

Data Collection

As a reminder, teachers and students will be asked to complete a short pre and post survey related to attitudes about STEM and mathematics.







Implementation

Participating schools have agreed to offer at least one section of this course to grade 7, grade 8, or a combination of grade 7 and 8 students. To assist with planning, a scope and sequence guidance document for each grade level will be available soon.

Before Your First Lesson

Prior to teaching your first lesson, we suggest that you read over the <u>Instructor's Guide</u> including the section titled <u>"Teaching You First Class"</u>.

*You must be signed in to your account to access these documents.