

LOOPS Teacher’s Software Manual



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Overview

The Concord Consortium LOOPS software system is designed to involve you as a teacher in your students' classwork as they progress through an online activity in real time.

Portal Guide

Log into the website: <http://loops.dev.concord.org>

Enter your Username and Password.



[Home](#) [About](#) [Portal](#)

[Home](#) [Activities](#) [About](#) [Getting Started](#) [FAQ](#) [Requirements](#) [Support](#)

Already Signed Up?

Username

Password

[I don't know my password!](#)

First Time Here?

- [Sign up as a Student](#)
- [Sign up as a Teacher](#)

Just Want to Try the Units?

- [View our unit previews](#)



IMPORTANT! Before running our software and activities, please view our [Technical Notes and Requirements section](#).

Then you will arrive at the **Home** screen, shown below. First, use the pull-down under **My Classes** to select the correct class. Then, click the “two-person” icon to go to the reports page.



LOOPS







Informing Learning With Feedback

Home About Portal



[Home](#) [Activities](#) [About](#) [Getting Started](#) [FAQ](#) [Requirements](#) [Support](#)

Welcome, **Generic Teacher** [Sign out?](#) | **Probe Interface:** [Vernier Go!Link](#)

My Classes [Add a new class](#)

Teacher, Generic — LOOPS Demo Class - Fall 2011-Spring 2012      

My Students [Add a new student](#) [Manage consent](#)

Dial, Crocker (crockerd)  

My Archived Classes

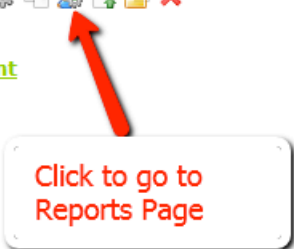
No classes found

My Archived Students

No students found

My Info [Change this information](#)

Name: Generic Teacher











Class Activity Selection Screen

Using the icons in the header of this table, you can launch the activities from the teacher's point-of-view. Usually, you will want to launch the **In-Class Report**. This shows the whole activity that students see, plus extra windows that show student work as they submit answers.

The **After-Class Report** is simply a large table of all students' work unconnected to the actual activity.

Report for LOOPS Demo Class - Fall 2011-Spring 2012

Student	Motion Pre-Test	Missing Manual	Modeling Motion	Modeling Motion (Spring 2012)	Making Measurements	Telling Stories	Motion Post-Test	Space Rescue
Dial. Crocker								

In-Class Report (points to Motion Pre-Test icon)

After-Class Report (points to Missing Manual icon)

In-Class Report

The **In-Class Report** looks just like the activity that students work on except for the features indicated in the image. These features are described below.

The screenshot shows the LOOPS interface. On the left is a sidebar with a 'Modeling Motion' table. The main content area is titled 'Motion with Models and Graphs' and features a photo of a dog and instructional text. A navigation bar at the bottom includes a compass icon and a 'Project' button. Red callout boxes with arrows point to specific UI elements.

Modeling Motion	
1. Motion with Models and ...	0 / 9
2. Dog Walks Make Graphs	2 / 9
3. Walking the Dog	1 / 9
4. Graphs Make Dog Walks	1 / 9
5. A Happier End	1 / 9
6. The End	0 / 9

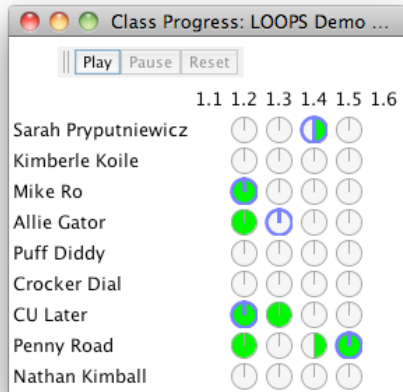
Brings up Class Progress window

Indicates number of students on this page out of the total.

Brings up Student Work Window. Pie-Chart button indicates percentage of work submitted.

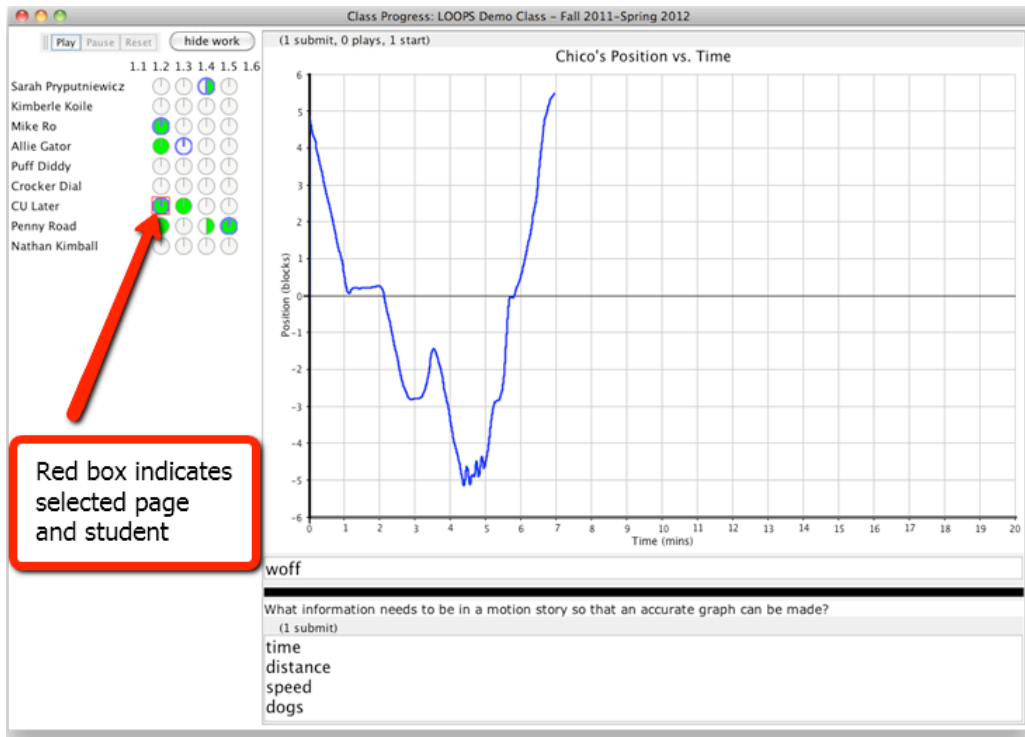
Displays current page on the Public Display

Class Progress Window



This window shows a table of all students in the selected class and the steps in the activity.

- Blue circles indicate the present page where students are working.
- Green color indicates the proportion of questions that have submitted answers.
- To see the history of students' progress through the activity, click **Play**.
- By clicking any circle, the student's submitted work will be displayed to the right, as show below.



Student Work Window

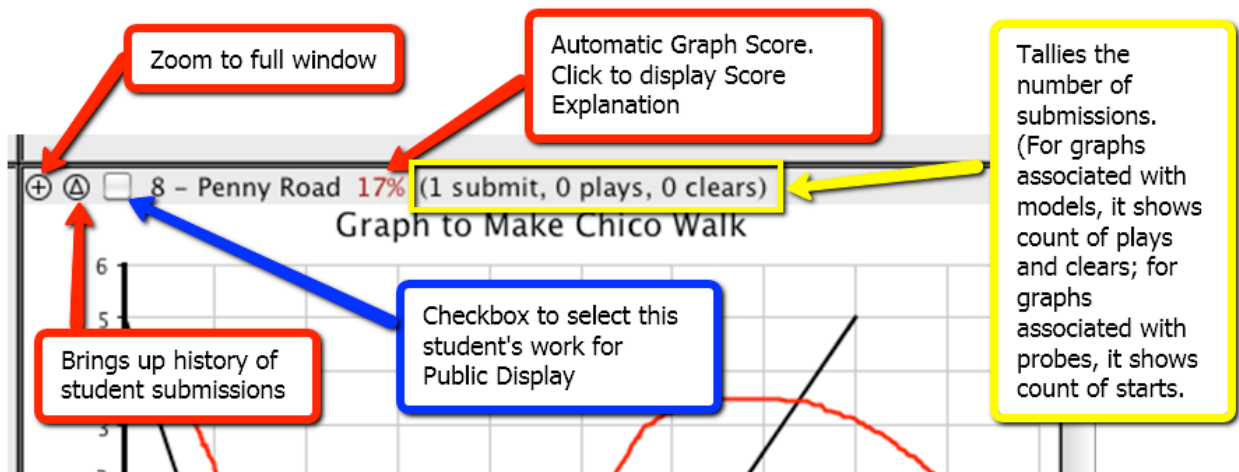
All student submissions appear in a single window. This window may be closed or left open as you select work on different pages of the activity.

The screenshot displays the 'Student work - Activity 1, Step 4' window. At the top, there are tabs for 'Pick N (1)' and 'Poll (1)'. The main area is divided into a grid of graphing tasks. The top-left task, '0 - Example', shows a red line graph titled 'Graph to Make Chico Walk' with 'Position (blocks)' on the y-axis (ranging from -6 to 6) and 'Time' on the x-axis (ranging from 0 to 10). Below the graph is a text description: 'Chico is going to Park and Angie's house. The steepest line is when he travels from his house to the Park, when he travels 5 blocks in 2 minutes or 2.5 blocks per minute.' A red callout box points to this graph with the text: 'When the graph is automatically scored, an example graph appears'. The top-right task, '0 - Example (Graph Composite)', shows a cyan line graph with the same axes and title. A red callout box points to it with the text: 'Graph Composite overlays all submitted answers on a single graph'. The bottom-left task, '1 - Sarah Pryputniewicz 100% (5 submits, 0 plays, 1 clear)', shows a red line graph. The bottom-right task, '2 - Kimberlie Koile 0% (0 submits, 0 plays, 0 clears)', is currently empty. At the bottom of the window, there are control buttons: 'Require answer', 'Show names', 'Overlay example', 'Select all', 'Deselect all', 'Opaqu labels', 'Show scoring: None', and 'Show segments'. On the right side, there are 'Public Display: 12/31/69 19:00:00', 'Student Work: 2/14/12 9:43:47', and 'Save & Project' buttons. A red callout box at the bottom points to the control area with the text: 'See explanation of these controls in next graphic.'

Individual Student Submission Header

There are many controls on this window. They are, from left to right:

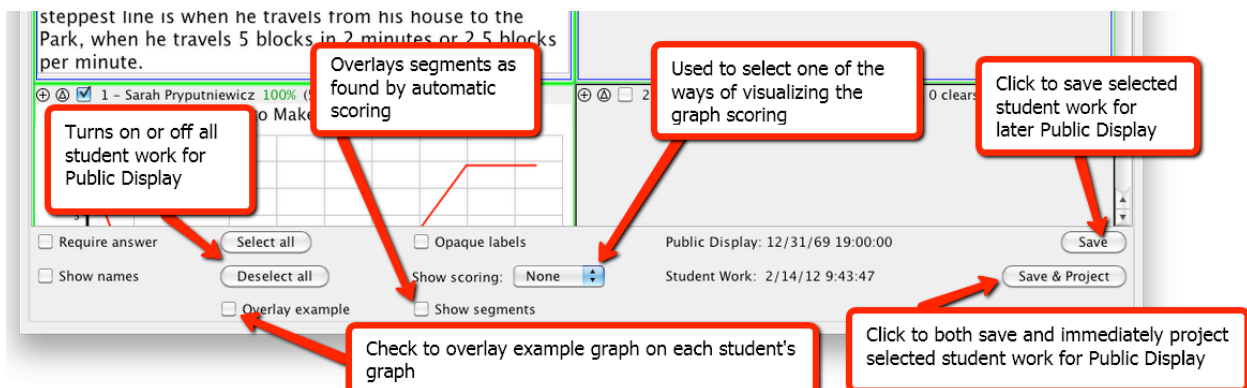
- Zoom button
- Submission history button
- Selection checkbox (checked work appears in Public Display)
- Student number and name
- Automatic graph score
- Tallies of student activity with the question (Number of submits, and additional information for questions with graphs)



Student Work Window Controls

The controls at the bottom of the Student Work window affect the display of all views of student work. They are listed below from left to right. The most commonly used controls are highlighted on the graphic.

- **Require answer**, when selected, will restrict Public Displays on student machines until individual students have submitted an answer (not recommended for usual situations).
- **Show names**, when selected, will place student names on student work projected on the Public Display.
- **Select / Deselect** buttons turns on or off all checkboxes that control the display of student work.
- **Overlay example** checkbox turns on or off the example graph overlay on student graphs
- **Show segments** checkbox shows how the computer interpreted the segments drawn by students
- **Opaque labels**, when selected, places an opaque background on labels place on graphs.
- **Show scoring** drop-down box selects one of the methods of visualizing how the graphs were auto-scored.
- **Save** pushes the currently selected student work to the history sidebar of the Public Display for later projection.
- **Save & Project** saves the currently selected student work to the history sidebar and immediately projects it.



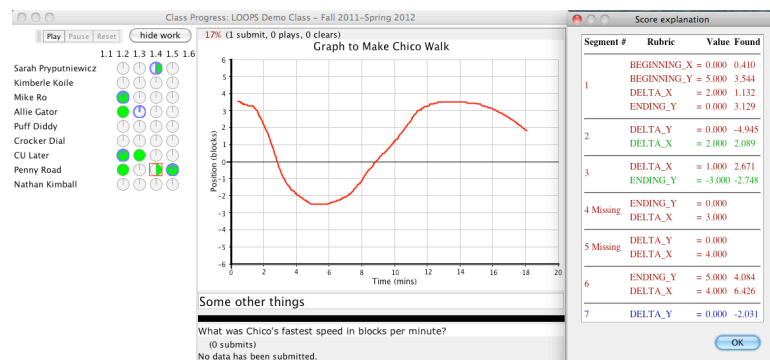
Graph Score Explanation Window

When you click on the graph score in the Student Work window, you see the following pop-up. Graphs that are scored are scored against an author-provided rubric. The rubric is defined in terms of a piecewise linear segmentation. It provides flexibility so that if a graphing story has room for interpretation, the rubric can accommodate it. The rubric can also define graph segments relatively, so that errors made at the beginning of a graph do not necessarily result in all segments being wrong.

The Graph Score Explanation window shows the expected values and those that were found. Green text show correct values. Incorrect values are shown in red. Optional segments are shown in blue. Extra segments are shown in orange.

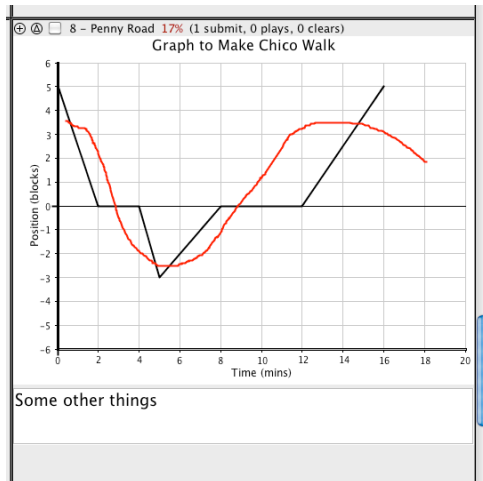
Segment #	Rubric	Value Found
1	BEGINNING_X = 0.000	0.000
	BEGINNING_Y = 5.000	4.976
	DELTA_X = 2.000	1.988
	ENDING_Y = 0.000	0.028
2	DELTA_X = 2.000	1.988
	DELTA_Y = 0.000	-0.057
3	DELTA_X = 1.000	1.077
	ENDING_Y = -3.000	-2.815
4	ENDING_Y = 0.000	-0.028
	DELTA_X = 3.000	2.940
5	DELTA_Y = 0.000	0.057
	DELTA_X = 4.000	4.017
6	ENDING_Y = 5.000	4.863
	DELTA_X = 4.000	3.975
7 Extra	STARTING_X	15.983
	STARTING_Y	4.863
	ENDING_X	18.882
	ENDING_Y	4.863

The Graph Score Explanation window can also be accessed through the Class Progress window by clicking a student's graph score.



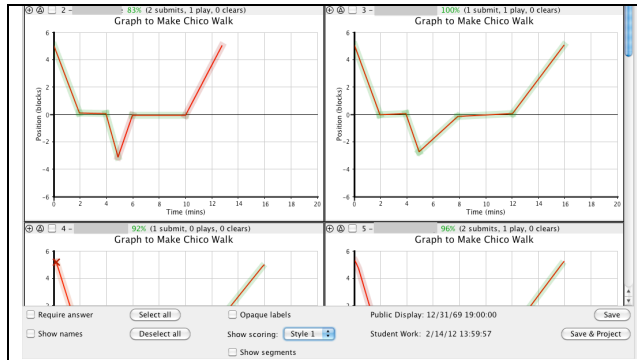
Graph Scoring Visualization

We have experimented with different ways to visualize the correctness of students' graphing work. Perhaps the simplest way is to show the example graph on the student graph; you can do this by clicking on **Overlay example**. The example graph is shown in black and students' work is shown in color.

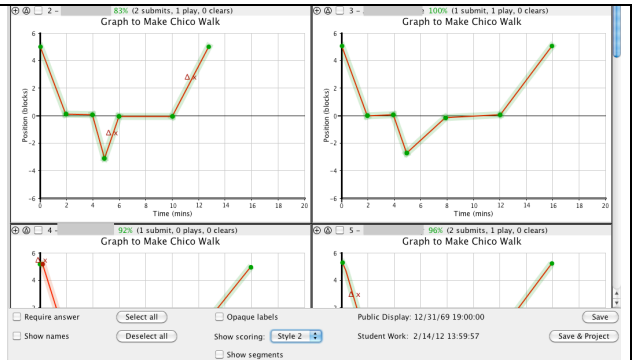


Other methods of visualizing graph scoring are on the next page.

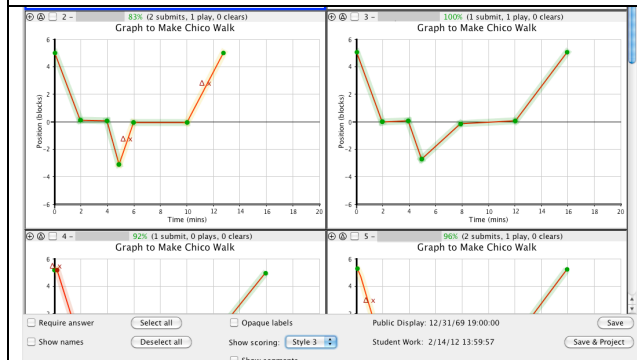
Other visual ways of showing graph scoring are selected using Show scoring dropdown. Four methods are shown below.



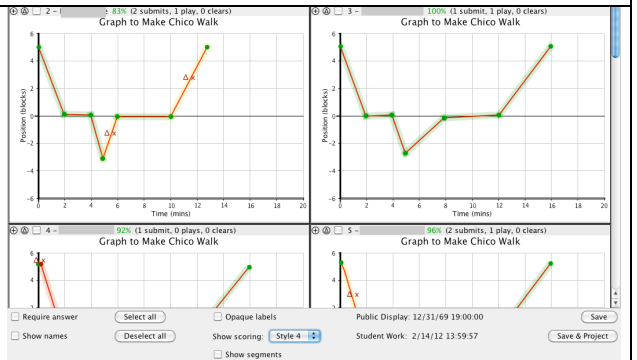
Style 1: Show Green for completely correct segments and red for segments that don't completely meet rubric criteria.



Style 2: Shows dots for segment endpoints, with green for correct and red for incorrect. Segments that do not meet any rubric criteria are red. Partially correct segments display annotations that indicate the error.



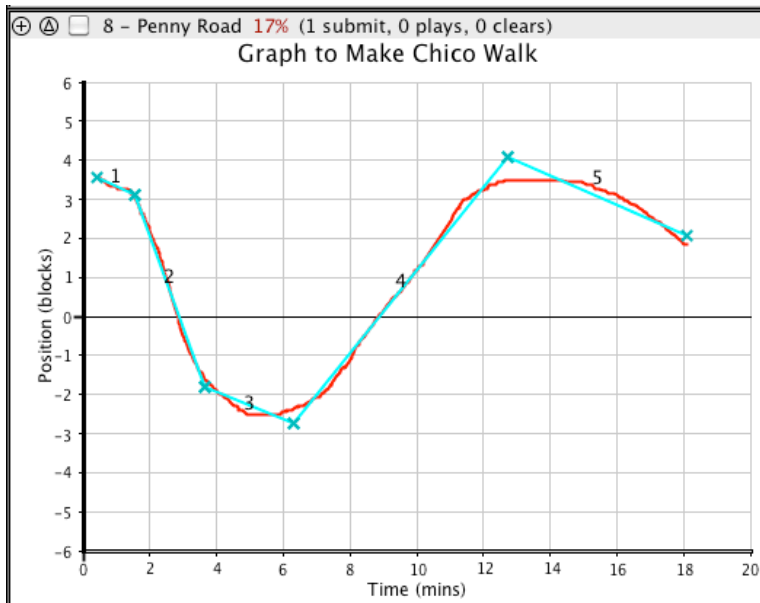
Style 3: Same as Style 2 except partially correct segments are shaded yellow.



Style 4: Same as Style 3 except optional segments are colored blue.

Graph Segmentation

The graph scoring algorithm starts by dividing the graph into segments. This is simple to do if the graph is drawn by clicking endpoints. This is the preferred method of drawing graphs. When a graph is drawn by hand, it is segmented using a segmentation algorithm which may not divide the segments in the best way. The results of the segmentation algorithm can be seen by clicking **Show segments**. An example of a graph drawn by hand and the results of the segmentation algorithm is shown below.



After-Class Report

To view all of a class' answers in an activity run the After-Class Report. This is simply a table showing students' names in the rows and answers to the activity questions in the columns.

This report has links to other reports. Clicking on the history link for any student shows a history of all submissions in chronological order. If you are interested in the submission history for a particular question, you can click the numbered link in the **Submits** column for that question. Logged data for the number of starts, plays, and clears for graph type questions are also provided.

Missing Manual : Generic Teacher - LOOPS Demo Class - Fall 2011-Spring 2012

[Public display history](#)

Student	Describe what you did to make this graph.	Submits: TryItOutGraph	Submits: S
Crocker Dial (history)	N/A	1	1
Puff Diddy (history)	I moved back and forth in front of the probe and then made a Batman head. 2	2	2

