

Abstract Submitted
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InterLACE: Interactive Learning and Collaboration Environment¹ GARY GARBER, Boston University Academy — A growing body of research has shown two things: (1) collaborative design-based inquiry activities show remarkable gains in students' understanding of science and (2) such activities are largely absent in the classroom because they can be challenging to implement. In order to rectify the current situation, the Interactive Learning and Collaboration Environment, or InterLACE, project seeks to design a suite of technological tools that facilitates class-wide collaborative sense-making. To that end, we have created an idea aggregation tool that enables students to upload their verbal and pictorial representations of science concepts to a Web-based platform that can then display these artifacts on a centrally located screen, thus encouraging discussion and debate among the students in an iterative process, which will not only help refine their thinking but also grant them ownership of the learning process. InterLACE is part of a multi-year program in which a dozen high school physics teachers are collaborating with researchers at Tufts University to develop these classroom educational technology tools for promoting inquiry-based education. By participating in the technology-design project, teachers are experiencing the inquiry process as well as developing tools that will facilitate using inquiry-based methods in their classrooms.

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