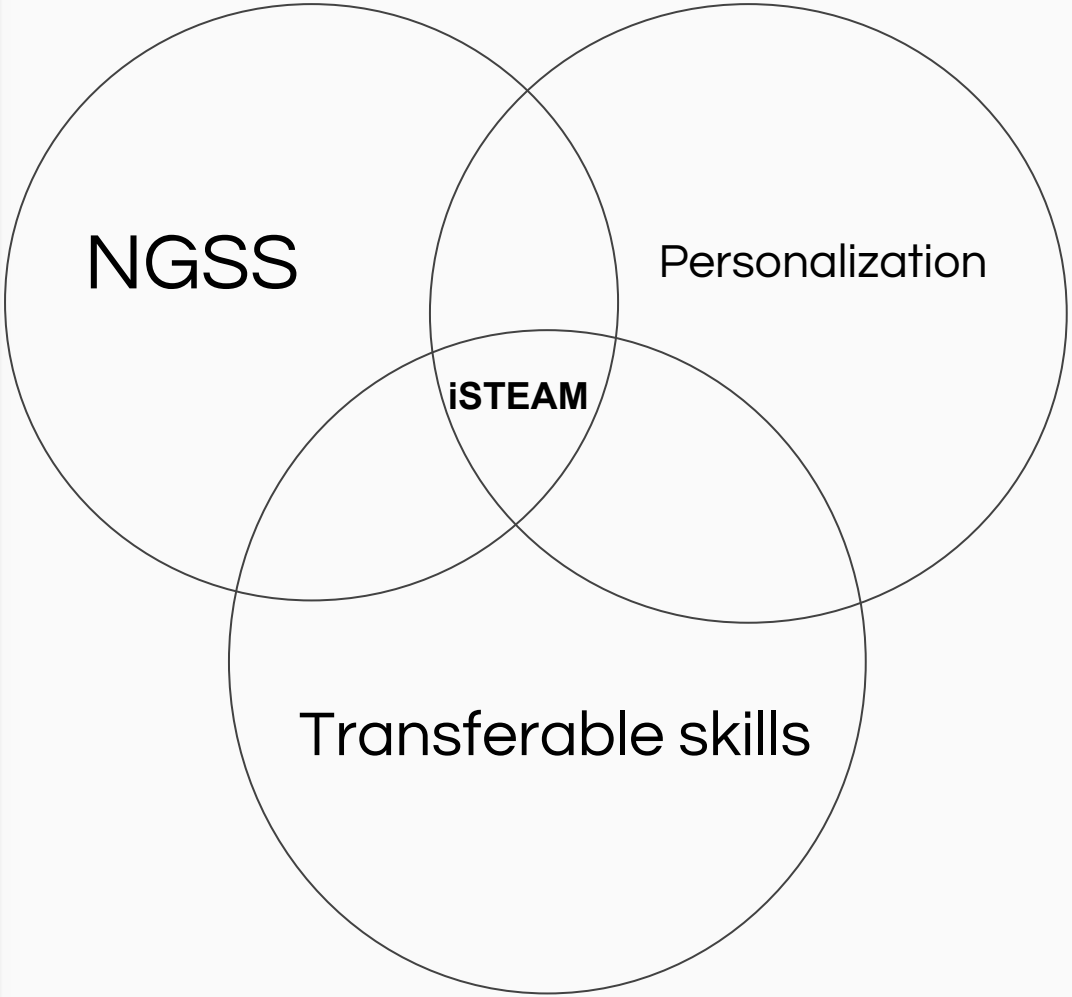
MBS iSTEAM

Presentation to the Colchester School Board

How we got here

- Teacher -led initiative, based on technology integration and the “genius hour” model
- Introduction to “Transferable Skills,” “Personalization,” and the Next Gen Science Standards
- What are the intersections? How can these ideas be implemented school-wide with guiding principles?

Making the edges touch

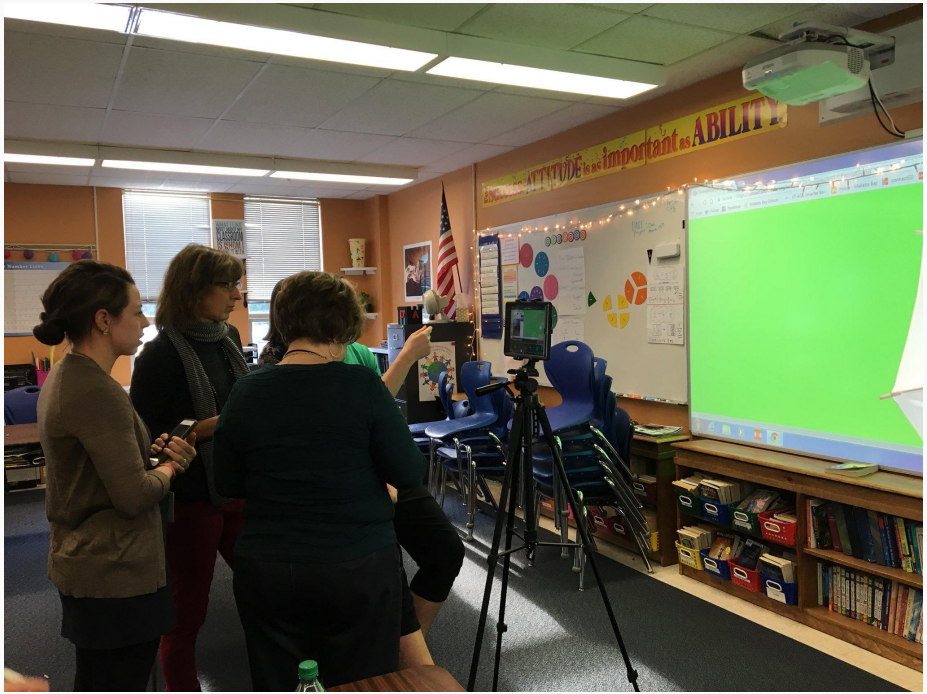


iSTEAM (innovation, science, technology, engineering, art, math) provides every Malletts Bay School student with an opportunity to participate in activities that are authentic, engaging, complex and creative. Working with colleagues and their students, teachers determine the nature of the opportunities and the amount of time devoted to iSTEAM. Through these unique learning opportunities, students exercise collaboration, communication, perseverance and problem solving skills. iSTEAM projects might be hands-on, self-directed, or whole class activities. The purpose is for students to explore interesting ideas - and to encourage risk-taking, embrace 'failures' and share creative breakthroughs.

Our statement of purpose

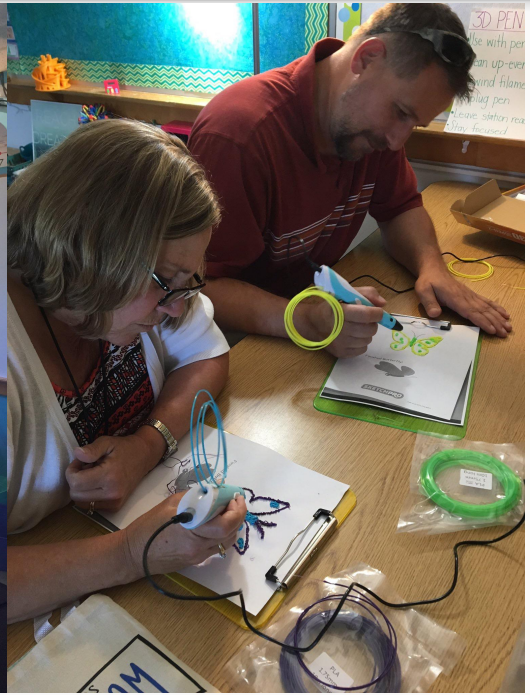
Implementation

- Teacher led
- Kick off during August in-service
- 8 faculty meetings
- ½ in-service day
- Supported with building budget funds
- Sustained with a supportive website iSTEAM training site



Topics

- Invention literacy and design thinking
- Coding
- Robots
- Circuits
- CAD and 3D printing
- Movie making
- Die cuts
- Makey Makey



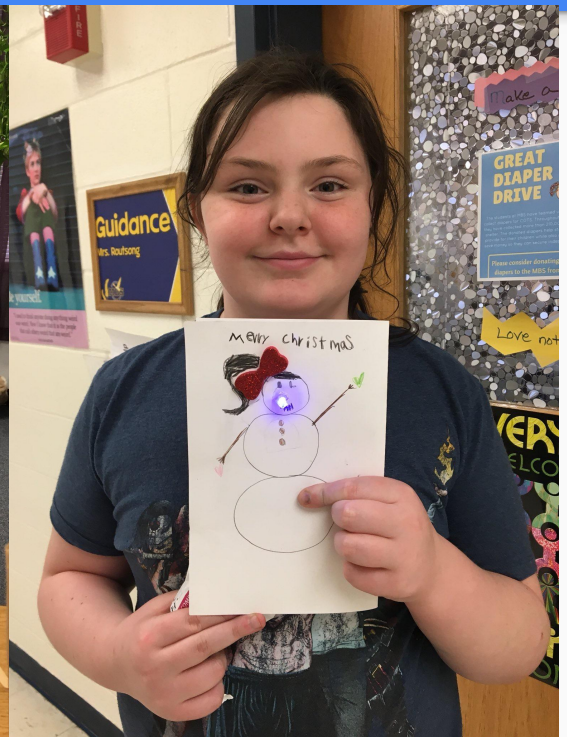
Successes

- Unique implementation in each community
- Opportunities for peer mentorship
- High levels of engagement
- A chance to “shine” for some students
- Clear connections to math and science, particularly engineering
- Problem solving and passion
- Faculty openness, sharing, and fun

Challenges

- Time
- Sharing materials
- Managing materials
- Separate wings

Going forward



- Continued investment in time and resources
- More explicit connections to NGSS and EE
- More opportunities to share across communities

Questions?