Husky Highschool Hacks

Project Goal
In an attempt to improve the quality of education for high school students, we are proposing a series of hackathons—short events that pose students with challenges that they can form groups to solve—designed to increase student engagement, collaboration, and excitement in the classroom curriculum. Our mission is simple: leverage the engaging, exciting value of hackathons to provide a platform for mentorship, collaborative skill development, and fun for local Boston Public High School students.

Community Partner
The initial application of our Service Research methodology and hackathon series will be at the Edward M. Kennedy Academy for Health Careers (EMK), a Boston Public High School with a campus adjacent to Northeastern. As our project matures and participation by the Northeastern community grows, we hope to bring a refined methodology to other Boston Public High Schools.

Methods
The main tools of our project methodology will be surveys, distributed before and after hackathons, that will attempt to evaluate learning outcomes. The surveys will consist of open-ended questions designed to provide both quantitative and qualitative data on the benefits and shortcomings of hackathons as a method of learning engagement. Survey questions will attempt to measure temporal changes in student enthusiasm, collaborative involvement, curriculum engagement, and overall understanding of the material. Surveys will be provided to students in hackathons and in traditional classroom formats in order to provide a basis for comparison.

Results (so far)
Results so far are qualitative but there are some valuable takeaways from the two hackathons we have run:

1. Students like to compete with each other
2. Guidelines should give a task to students but not provide them with details on how to complete this task
3. Groups of friends work well together
4. The underlying task should be simple (“stop an egg from breaking” is a great example)

Next Steps
We have run two hackathons so far, so our next steps are to:

1. Run a computer science related event after giving students background knowledge in the prior weeks
2. Run another sciences-based event
3. Collect further data on how we can improve the process in the future
4. Collect new and innovative ideas for future hackathons

Acknowledgements
We would like to thank our community partners at EMK, especially Isabella Daou, for giving us the opportunity to bring our project to their students. We would also like to thank the Office of Undergraduate Research and Fellowships, in particular Dr. Jennifer Lieb, for their continuous support throughout the year.

Image References:
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