

By Erich Thurow, Chairman D200 Education Foundation

Some of the grants are at or close to the maximum amount of \$1,000, however the majority of grants provided by the District 200 Education foundation are closer to the average for this year of \$342. Many, like the one I'm featuring today from Northwood Middle School, are well below the average. Clearly the dollar amount of the grant request does not equate with the value of the project and some projects, like the MaKey MaKey project are just bananas!

The project gets its name from Make + Key. This is a creative exploration of circuits and involves students creating an online piano using bananas (yes the fruit) and alligator clips. The bananas are hooked up to a computer and each plays a different note on the keyboard. This technology is part of an invention tool kit created by two graduate students at MIT called MaKey MaKey kits. The purpose is to turn everyday objects that conduct electricity into touchpads that can be connected to the Internet.

Northwood media specialist Melinda Parrent wrote the grant proposal in order to start a NMS library "makerspace." Ms Parrent explained, "A makerspace is a place where students can create, collaborate, innovate and problem-solve—in short—make." She added that the Maker Movement has become well-known at Northwood through Maker Fairies, where makers share what they create.

"The Northwood Middle School library makerspace gives students hands-on engaging experiences with STEAM -- Science, Technology, Engineering, Art, and Math -- as they move from consumer to creator," said Ms. Parrent. "Students are inspired to problem-solve and use failure to reach success. They take what they have learned from various subjects to imagine, repurpose and invent."

While Northwood's newly created makerspace is sparsely stocked, Ms. Parrent envisions it to eventually include more technology and possibly a 3-D printer. Low and no-tech supplies such as cardboard, plastic, metal, gears, wood, and batteries will also be added over time. The library makerspace is available to all students who find time to create during lunch, the last period of the day, or when their other schoolwork is completed.

MaKey MaKey gives students the opportunity to learn coding (computer programming) as well as designing and programming their own computer games. They use the Makey Makeys to create controllers; a natural extension activity. Ms Parrent pointed out to us that students become so involved that some continue to work on coding at home and one of her students has told her that after experimenting with MaKey MaKey and coding, he wants to attend the Massachusetts Institute of Technology. I'd say that makes the \$110 grant we provided money well spent!

This is just one of the 80 projects the Education Foundation funded in whole or in part this year. Once again I would like to thank the volunteers on the Foundation, the staff and the administration of District 200 for all they do to make funding possible for worthwhile projects like this.