

Resources for high-quality, informal STEM programming | January 14, 2017



2016 STEM Grantee Spotlight

Northland Preparatory Academy | Maker Mondays

Congratulations to 2016 STEM Grantee, **Northland Preparatory Academy**! Funding supported the development of a new Maker Mondays program where youth create, make and innovate. Youth in the first cohort, for example, were challenged with making a device - a trebuchet or launcher - to sling a piece of candy across a courtyard. They learned about the design process foundational to their upcoming individual projects. They sketched, researched, built models, ran trials, redesigned and finally participated in a launching expo. After the launching session, youth shared ideas of how to enhance or problem solve issues with the different designs. This was one of many exciting, hands-on projects that Maker Mondays brings to these middle school youth. Keep up the great work!



[Check out the 2016 STEM Grantees](#)

Preparing Youth for STEM Jobs That Don't Yet Exist

Ayah Bdeir, creator of **littleBits**, believes that quality STEM learning programs do not "just prepare students for certain types of careers - we have to enable them to adapt to whatever new careers emerge." The technology industry is changing rapidly and we cannot predict exactly what it will look like in the years ahead. Bdeir advocates for a more adaptive, "invention-based learning" style that hones youth creativity and critical thinking skills. It's amazing what youth can invent when given the tools and freedom to do so.



[Read more about invention-based learning](#)

ExploraVision Competition

The ExploraVision competition engages the next generation in real world problem solving with a strong emphasis on STEM. Youth select a current technology, research it, envision what it might look like in 20 years, and describe the development steps, pros & cons, and obstacles. Past winners have envisioned technologies ranging from a hand-held food allergen detector to a new device to help people who have lost limbs regain movement in real time. Deadline to submit projects is February 6!



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