The Maker Movement in Schools

What is iQ: smartparent?

Emmy Award-winning iQ: smartparent is a multimedia television and web series designed for parents that will empower them with new knowledge, tools, and abilities to successfully guide their children through the changing landscape of digital media and technology. It is a growing community of caregivers, national experts, educators, and parent bloggers who want to understand the opportunities and challenges of media as it relates to the development of their children. *iQ: smartparent* was created by WQED Multimedia in 2012.

About this Episode

Just as the Maker Movement is transforming our culture, it's having a major impact in our schools. Join us for this episode of iQ: smartparent where we examine the Maker Movement's impact in the classroom.

Discussion Questions

- 1. Who is the maker movement for? Could this work in your child's school?
- 2. Does your school have a maker classroom or a makerspace? If so, does your child seem to enjoy it and learn from it? Why or why not?
- 3. Can you see your child benefiting from a "maker" class? What aspects of the movement seem helpful for your child's learning?
- 4. Do you see your child benefiting from more hands-on, creative learning? What subjects do you think would benefit most from a maker approach to learning?

About the Guests



Adam Nye is the Director of City as our Campus, who helps to integrate community resources into the learning experiences of students at Winchester Thurston School. He assists teachers in partnering and collaborating with various community resources throughout Pittsburgh, including museums, artists, and makerspaces,. Adam has a B.S. in Education and Public Policy from Pennsylvania

State University, and received a Masters of Education from the University of Pittsburgh. Adam's work has focused on embedding informal learning experiences in formal schooling. As the Associate Director of Education at the Thinkery (Austin Children's Museum), he created a new educator empowerment program that equipped educators with skills to incorporate modern technology into their daily practice. Adam also served as the MAKESHOP Manager at Children's Museum of Pittsburgh. In this role, he helped to implement the MAKESHOP program and supported the growth of an initiative to prepare educators with maker skills.





Graig Marx is a science teacher at Winchester Thurston School and is the chair of the Science Department. He also serves as STEM Cooridinator. In his six years at the school, he has worked to increase the use of project-based learning and engineering projects. The Maker Movement has influenced his teaching of a high-level, product-based, engineering course and the creation of Makerspaces throughout the campus. Graig specializes in the use of 3D printers to create unique, original, student-designed work. These progressive changes recently were validated when Graig was announced as the recipient

of the 2015 Carnegie Science Award in the High School Educator category.



David Nassar is a mathematics and computer science teacher at Winchester Thurston School and is the chair of the Computer Science Department. In his seven years at the school, he has developed the computer science curriculum to include integrated computer science in Lower School, required computer science courses and electives in the Middle School and nine separate Computer Science courses in the Upper School. In all of the courses he teaches at Winchester Thurston, he strives to get students to understand how computer science can help them solve problems through application of

knowledge in a wide array of other disciplines. Upper School level one courses of Computer Science for Math and Science, Computer Science for Art and Music, and Computer Science for the Humanities highlight Nassar's integrated approach to computer science education.



As Deputy Director, Lisa Regalla directs Maker Ed's mission to scale and disseminate making as a change-agent for learning. By developing partnerships with educators, organizations, researchers and the broader community, Lisa helps build and support a growing network committed to broadening participation in making. Prior to Maker Ed, Lisa worked at Twin Cities Public Television developing educational content that was presented on television, in person, in print, and on the web as part of the Emmy-Award winning series, SciGirls and DragonflyTV: Nano. Lisa

also spent several years working at the Museum of Science, Boston and the Da Vinci Science Center in PA. As the manager of several national outreach programs throughout her career, she has conducted extensive professional development workshops in gender equity and inquiry-based approaches to STEM. Lisa received both a BS in Chemistry and a BA in Theater from Lehigh University before earning her PhD in Chemistry from the University of Florida.

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Online Resources

The Modern Kids' Guide to Crafting, Coding, Composing, and More https://www.commonsensemedia.org/quide/digital-creativity-quide

Summer Learning Guide: Tinkering and Tech

https://www.commonsensemedia.org/guide/summer-learning-guide#Tinkering--Tech-1524581

DIY Learning: How Teens Are Teaching Themselves

https://www.commonsensemedia.org/blog/diy-learning-how-teens-are-teaching-themselves

14 Tools to Turn Game Obsessed Kids Into Genuine Game Designers

www.commonsensemedia.org/blog/14-tools-to-turn-game-obsessed-kids-into-genuine-gamedesigners

Building and Making Apps, Games, and Sites

https://www.commonsensemedia.org/lists/building-and-making-apps-games-and-websites

Apps, Games, and Sites That Promote 21st Century Skills

www.commonsensemedia.org/lists/apps-games-and-websites-that-promote-21st-century-skills

Tech Creation Learning Tools for Kids

https://www.commonsensemedia.org/lists/tech-creation-learning-tools-for-kids

Create Online: Sites to Spark Kids' Creativity

https://www.commonsensemedia.org/lists/create-online-sites-to-spark-kids-creativity

STEM Apps, TV, and More for Science, Tech, Engineering, and Math

https://www.commonsensemedia.org/lists/stem-apps-tv-and-more-for-science-techengineering-and-math

Best Creative Apps

https://www.commonsensemedia.org/lists/best-creative-apps

Apps, Games, and Sites for Inventing

https://www.commonsensemedia.org/lists/apps-games-and-websites-for-inventing

Creating Space for "Maker Moments"

https://www.commonsense.org/education/blog/creating-space-for-maker-moments

Curious about classroom Makerspaces? Here's how to get started.

http://thecornerstoneforteachers.com/2015/09/makerspaces.html

KitHub

https://kithub.cc/

The Maker Movement and the Classroom

http://www.edudemic.com/maker-movement-classroom/



How the Maker Movement is Transforming Education www.weareteachers.com/making-matters-how-the-maker-movement-is-transforming-education/

Questions To Ask About Ed-Tech At Your Kids' School www.npr.org/sections/ed/2015/03/19/393820845/questions-to-ask-about-ed-tech-at-your-kids-school

What is the Maker Movement and Why Should I Care? http://www.scholastic.com/browse/article.jsp?id=3758336

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