



FORUM SUMMARY BRIEF - Remake Learning: A Networked Approach to Education for the 21st Century

AYPF Capitol Hill Forum
November 6, 2017

Background

In Pittsburgh, Pennsylvania, and the surrounding areas, [Remake Learning](#) is working to create engaging and relevant learning opportunities for all students in a thoughtful and equitable fashion. A [network](#) of more than 500 individuals, schools, universities, libraries, startups, nonprofits, museums, and others, Remake Learning works to collaborate across these sectors to bring innovative practices and programs to youth that leverage technology, art, and the learning sciences. Through their community-based approach, Remake Learning's partners work to provide all learners with opportunities to develop their interests, work collaboratively, solve real-world problems, and prepare for a changing labor market. In the face of unprecedented social and technological change, Remake Learning is focused on creating pathways to help young people follow their passions and thrive.

On November 6, 2017, the American Youth Policy Forum (AYPF) and Remake Learning convened [a Capitol Hill forum](#) to discuss this unique community-based approach to innovative learning in greater depth. The panel of experts included:

- **Gregg Behr**, Executive Director, Grable Foundation; Co-chair, Remake Learning Council
- **Mary Murrin**, Social Investment Team Lead, Chevron USA; Co-chair, Remake Learning Council
- **Dr. Bart Rocco**, Superintendent, Elizabeth Forward School District
- **Jane Werner**, Executive Director, Children's Museum of Pittsburgh

The forum also served as the release of Remake Learning's [impact evaluation report](#) that was conducted using ten years of data. Findings demonstrate positive indicators such as increases in test scores, reductions in dropout rates, and increases in summer learning. This report provided a data-driven affirmation for the presentations and discussions to follow.

Panelist Presentations

Betsy Brand, Executive Director of AYPF, opened the event with a brief overview of Remake Learning. She described it as "a grassroots, community based, collaborative, organic network" that focuses on improving educational opportunities for youth in Pittsburgh and surrounding communities in West Virginia and Ohio. Their mission is centered around allowing young people to develop their own interests, work in new and different settings, and explore future career paths. Brand then introduced the panelists, who elaborated on their connection to Remake Learning and the work they do to support the network's mission.

[Gregg Behr](#), Executive Director, Grable Foundation; Co-chair, Remake Learning Council

Behr explained that the need to rethink and remake learning is an issue with which the nation is wrestling. The youth of today, he emphasized, are fundamentally different from past generations and will be asked to do things that are fundamentally different from anything that has been done before. He stated, for example, that “today’s kids won’t be tasked with building cars, they’ll design the computers that will drive them.” Behr argued that we need an education system that reflects this. The way that we learn and the way that we educate, in other words, should not be static, but instead must express the changing needs of youth as upcoming

*“Today’s kids won’t be tasked with building cars,
they’ll design the computers that will drive them.”*
– Gregg Behr

workers, learners, and citizens. Instead of operating in isolation, Behr stated that [in 2007](#), a cross sector group in Pittsburgh began to coalesce and collectively think about ways to remake learning and embrace a more modern learning framework to support youth. This expanded to become what is now known as the Remake Learning Network, with a membership of over 500 individuals and organizations spanning a range of sectors from museums and schools to businesses and STEM-based groups. Behr noted that this converging of various stakeholders is what allows the network to work so collaboratively and holistically on advancing “[engaging, relevant, and equitable learning practices](#)” to best support youth in the face of major technological and social changes. He explained that Remake Learning seeks to create genuine learning pathways for all youth based on what “lights them up” and keeps them most engaged in their own learning. This has changed the landscape of Pittsburgh’s learning environment to create much more collaborative, cross-sector partnerships between classrooms and organizations as well as businesses focused on STEM, STEAM (science, technology, engineering, arts, and mathematics), maker learning, and other innovative practices. Behr also mentioned that Remake Learning recognizes the importance of engaging families in this process to show them the way that learning is changing and the reasons behind this, so they can best support their own children in this changing landscape. To close out his presentation, Behr brought up Fred Rogers of the iconic “Mister Rogers’ Neighborhood,” who was from Pittsburgh. He explained that in creating his popular children’s television show, Mister Rogers disrupted the way that learning and education had been thought of to that point. Remake Learning is seeking to be a disruptor in today’s educational landscape in order to push the system to change with the rest of society to best provide youth with the resources, support, and opportunity they need to be successful in life.

[Dr. Bart Rocco](#), Superintendent, Elizabeth Forward School District

Dr. Rocco began with the story of how the [Elizabeth Forward School District](#) initially became involved with Remake Learning. The district is rural and relatively small and gradually began to lose more and more students to private schools and dropouts. During the 2010 school year, Dr. Rocco realized that major changes needed to be made to innovate learning in the district and keep students engaged. In short, they needed to figure out a way to “reengineer and reenergize the district’s schools.” This is what initially inspired Dr. Rocco to reach out to Gregg Behr and consider how Remake Learning could serve as a foundation for these major changes. Following this, Dr. Rocco created a district advisory board and began reaching out to groups involved in higher education, philanthropy, STEM, and related sectors as a means of creating a collaborative community with which to approach the challenge of innovating in Elizabeth Forward. Based off of the Remake Learning support and principles, there were a number of drastic changes that Dr. Rocco and his peers began to implement. The first was related to learning and the fact that students are taught in “silos of learning.” Math, English, History, and any other subject are taught in

isolation from one another, and this is something that Dr. Rocco emphasized must be disrupted. One way Elizabeth Forward did this was by “reaching outside of the traditional school” to allow leaders in various sectors to come into the classroom and share their knowledge. This allowed for more STEM to be integrated into the learning experience in a new and engaging way. Partnerships with various organizations and businesses also helped to innovate the school’s learning practices and opportunities for students. For example, all students in the district [receive iPads](#) and access to the internet, Dr. Rocco explained. This has served as a way to promote equity and “open children’s worlds.” Spaces within the schools themselves were also reimagined to allow for the creation of multimedia centers, various labs, and STEM centers. Dr. Rocco specifically mentioned one middle school that has its own [energy lab](#) and a

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high school that has a lab specifically for girls interested in STEM. Dr. Rocco ended by noting that the Elizabeth Forward School District’s rebranding has impacted the success of their schools and made students excited about their own learning. The district

now shares innovative practices with other districts and has received a number of recognitions. He explained, “we’re changing the dynamic of our schools, and without this connection to Remake Learning, what we’ve done would not have been possible.”

[Jane Werner](#), Executive Director, Children’s Museum of Pittsburgh

Werner gave a brief overview of the [Children’s Museum of Pittsburgh](#) and its connection to Remake Learning. This began in 2004, when the museum underwent a major expansion. The redesigned museum had a focus on providing “innovative museum experiences that inspire joy, creativity, and curiosity.” [Over 300,000](#) people visit the museum each year, Werner explained, and that number is only growing. Thus, the Children’s Museum serves as a great “notion of what a museum can be.” Besides simply expanding its spaces, Werner also emphasized that the Children’s Museum wanted to fully rethink the role of people in museums. They sought to engage with various partners in order to have greater impact and focus on a wider range of issues. After their reopening, the museum rented out spaces to partners such as the Teacher’s Warehouse, the [Toonseum](#), [Allies for Children](#), and 2 Headstart classes from Pittsburgh Public Schools to allow them to work together in a closer, more collaborative setting. She explained that “the notion was, if we could all work together, we could do more things for kids, and we could do more things that were really important.” The Remake Learning Network, Werner pointed out, connected many different people to the museum, particularly those that they would not have normally partnered. This allowed them to create numerous

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innovative programs in partnership with other individuals and organizations. For example, Werner explained that in 2009, the Museum became interested in the [maker movement](#), something that Remake Learning has [focused on explicitly](#). With a starting sum of \$5000, they began to [integrate aspects](#) of this movement into their programming. Along with many of their partners, they are now associated with over 100 makerspaces in schools [across the US](#) that have been crowdfunded. Werner ended by describing the Children’s Museum’s latest project, Museum Lab. They are working with partners to explore how “the informal world of museums can influence the formal world of classrooms.” It is slated to open in 2019 and, when it does, it will help create the “largest cultural campus for children in the United States.”

Mary Murrin, Social Investment Team Lead, Chevron USA; Co-chair, Remake Learning Council

Murrin explained that Chevron opened a business unit outside of Pittsburgh in 2011 as a result of the Marcellus Shale development. [Chevron's Social Investment](#) team has a number of objectives when they enter into a new area, and these include [listening to the issues](#) that each community faces and finding out how people or groups in the area are working to address them. Murrin made a point to emphasize that Chevron believes in a triple-bottom line theory. This concept goes beyond the traditional binary approach to financial profits and losses to measure a company's success. Instead, they look at how successful they are in terms of social and environmental factors as well. In this region, Murrin noted that the major problem Chevron decided to focus on was a significant gap in the number of qualified and skilled individuals to fulfill increasing energy and manufacturing jobs. The team saw [STEM education](#) as a pathway to help address this issue and felt that specific attention was needed in helping both youth and their families understand the value of STEM education. Murrin explained that the first step Chevron took to address this was to create the [Appalachia Partnership Initiative](#). They invested \$20 million in seed funding with a number of organizations, including the Grable Foundation, and saw value in participating in the Remake Learning Network. Together, she stated, they focus on supporting projects with strong leadership and aligned objectives. They then conducted a study in 17 rural regions in the area to see how communities there understood STEM education and the value of it as a legitimate pathway for youth. They found that parents of young people were more committed to their children attending college as opposed to understanding STEM pathways to multiple opportunities, including training for the workforce. One of many challenges, then, is to educate families about career pathways that may not require a college

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degree and to build awareness of the many alternate pathways STEM learning can lead. This is where Murrin noted that "Remake Learning really resonated with us," because they understood the value of STEM pathways. She summarized their shared understanding that "you have got to start young, you've got to create that engagement and enthusiasm for making, creating, problem solving. But also show that there are many, many pathways to get to what

you want to be when you grow up." Aside from helping the Social Investment Team raise awareness about the value of STEM pathways, Remake Learning has also played a significant role in convening thought leaders to help Chevron. They have done this mainly by highlighting what work was already being done to address the lack of STEM workers to fulfill jobs in this region, what work still needs to be done, what organizations are experiencing successes, and who is being most impacted by these objectives. In addition, Chevron is working with Remake Learning to expand into rural communities by replicating what's working in urban and suburban areas in rural communities and vice versa.

Moderated Panel Discussion

How did the Remake Learning Network partners come together in the first place, and what has allowed them to be successful since then?

Behr began by emphasizing that it is the relationships and partnerships between people that has allowed Remake Learning to work. It was necessary, he explained, for them to invest in people and to foster conversations among their partners that would allow them to build trust. Additionally, although the

network is comprised of people and groups from many different backgrounds and focuses, they all share the common goals of advancing innovation and equity for youth. Dr. Rocco continued by noting that across the network there are no egos. Even though Remake Learning brings many people to the table, they are all unified because of their focus on youth and this creates a level of respect that allows for open collaboration. Werner then noted that Remake Learning's leadership has done a great job of "stirring the pot a little bit" in a way that has brought people together who may not have been in contact otherwise.

What are some of the skills that Remake Learning is focused on teaching youth, and how do these skills relate to the needs of the changing workforce in the region?

Murrin first expanded on the idea that the workforce is changing, noting that it is moving towards jobs that do not even exist yet. Existing industries such as manufacturing are changing rapidly, often now requiring skills such as coding that were not needed in the past. As a result, she explained that Remake Learning must keep up with this changing ecosystem and help both youth and their families understand that learning is continuous. Thus, students should recognize that they do not need to "make finite decisions" about their future because they can always go back to school or train to learn different skills. Dr. Rocco then talked about the maker movement and the potential it has to teach skill sets that could allow students to move straight into certain careers. He noted that expanding career pathways courses and programs for careers that do not require college will necessitate communication with youth and their families about the value in these career choices. He explained that introducing such career pathway options to youth as early as elementary school could allow for the creation of more targeted guidance plans as they move through the rest of their schooling. Werner then pushed back a little on the explicit focus on workforce development and STEM and postulated about whether such a focus is pushing out areas such as the social sciences and humanities and what the effect of this would be. She wondered whether "we have been sacrificing social and emotional learning for the focus on STEM, and are there better ways to set up kids to have a good life in all aspects?" Although, she argued, workforce development is certainly important and there needs to be an overall emphasis on helping youth lead a good life no matter what path they choose.

How do Remake Learning partners use data to measure the impact of their programs?

Behr began by pointing to the impact study, which captures data and results on ten years of community organizing around learning. He explained that there is a major push to go beyond the traditional measures of testing such as reading and math scores, and that the network is working towards this in a collaborative and intentional way. Dr. Rocco echoed this sentiment by noting that although standardized tests tend to be seen as "the end all be all" of measuring proficiency and effectiveness, there are many additional indicators, such as increases in attendance and decreases in discipline, that they have used to help measure students' learning and engagement. While such data is more difficult to define, he emphasized that it is still important and says a lot about the value this learning community places on assessing their more holistic approach to education. In the Elizabeth Forward District, for example, they have seen improved test scores, but also have teachers and other stakeholders working to create innovative ways to measure social and emotional impacts. Werner explained that the Children's Museum recently hired several staff to provide data and measure impacts, while Murrin stated that Chevron works with the RAND Corporation to look at economic indicator reports every year. In 2020, RAND will release a major outcomes report on the Social Investment Team's work.

To what extent, if any, have federal programs helped the Remake Learning Network, and are there specific policies that have helped or hindered in the advancing of their mission?

Behr noted that Remake Learning has benefitted from federal money in the shape of both large and small grants. Federal funding often goes to their Research and Development sector, which works to encourage more private investment and financial matching. Dr. Rocco then explained that public schools themselves receive very little federal funding and therefore work a lot with universities to get NSF grants. Murrin focused on legislation that supports apprenticeships and the opportunity this gives more high school students to secure such an experience. To finish, Werner stated that the Children’s Museum has also worked with universities as well as the Institute of Museum and Library Services to obtain research and funding.

Audience Q&A

How does Remake Learning connect to the idea of following one’s passions?

Behr began by explaining that “so much of the future of learning is about connecting with kid’s interests.” That means going further than recognizing what a young person’s interests are by providing him or her with as much support as possible to pursue and foster that. He emphasized that this is what Remake Learning is ultimately about: tapping into a young person’s passions and interests. Behr continued by saying that the extensive number of network members ensures that youth are able to learn anywhere, anytime.

How have teachers reacted to the “breaking down of silos” between disciplines?

Dr. Rocco explained that throughout the district teachers are overwhelmingly “on board” with the teaching and learning innovations because they see the positive effect it has on students. He noted that if anything, it is the structure of schools that inhibits them from doing the activities and programs that they would like to do. Dr. Rocco went on to discuss that school personnel along with students need to think about reimagining the structure of schools, the way that schedules work, and the way that the physical school is set up. He shared his prediction that soon there will be a widespread shift in education where much more of a young person’s learning will be personalized and driven by his or her interests. Overall, he explained that it is important for all stakeholders to communicate and “be at the table” in order to effectively and equitably address youth voice and the reimagining of schools.

Are there ways in which you see the Remake Learning work that Chevron is doing contributing to the environmental sustainability tier of the triple bottom down theory?

Murrin explained that several university campuses in the region are focused on environmental issues, such as those relating to pollinators and indigenous species in the region. Remake Learning has allowed the Social Investment Team to make a number of connections with personnel working on these issues. She noted that now, there are a number of engineers on the Chevron team who are thinking of the best ways to replant access roads and other areas of the region affected by Chevron’s work in a way that can best serve the environmental needs of the communities. She continued to state that they hope to one day set up a partnership with local schools wherein children can be in charge of the replanting process.

Given that many educators did not grow up in this type of learning background, what does Remake Learning offer in terms of professional development?

Behr noted that much of the Grable Foundation's grant money to support Remake Learning has been focused on supporting extensive professional development opportunities for adults. They try to take adults from varied aspects of the youth serving ecosystem and put them in unique learning environments to learn together and from one another. Specifically, he stated that there are 19 professional development programs in the region just on maker-centered learning. There are a number of STEM focused programs, summer institutes, afternoon happy hours, and additional arranged meetings for adult educators of all backgrounds to network and learn from each other. Thus, they are being mindful about how they reimagine the trainings and supports for teachers and other adults involved in the education system.

Is Remake Learning tracking the metrics and following youth as they pursue postsecondary career and education pathways?

Dr. Rocco explained that gathering this type of data is incredibly challenging. However, he noted that even in just the past four years, there have been a number of students who have shared their stories and the way that Remake Learning's programs impacted them. Dr. Rocco did agree that they need to figure out a way to collect more quantified data on such reports, but as for right now, any information is in the form of stories from the perspective of youth after they begin on their postsecondary pathway.