How Micro-School Networks Expand Learning Options

Technology has the potential to decentralize K-12 education and make it more learner-directed, upending a top-down system in favor of individual autonomy and self-determination. But the technology can't do this alone. It requires a learning environment that fosters creativity and curiosity, using digital platforms and supportive adults to facilitate exploration and discovery. The entrepreneurial educators at Prenda, an Arizona-based network of micro-schools, think they have uncovered the right mix of powerful technology and warm, nurturing learning spaces that could help to transform education. Like many education innovations, Prenda began with a parent who was looking for something better for his child.

Like many education innovations, Prenda began with a parent who was looking for something better for his child. A graduate of the Massachusetts Institute of Technology, Kelly Smith sold his software company in 2013 and moved back to his hometown of Mesa, Arizona, where he began hosting weekly, after school computer coding clubs for his eight-year-old son and other children at the local public library. The enthusiasm for these clubs swelled, and before long Smith was supporting code clubs in libraries across the country, reaching over 10,000 children in 30 states. "The energy of these code clubs was astonishing," Smith recalls.

Smith estimates that he personally worked with about 2,000 children during his time of running the code clubs and he was increasingly fascinated by his observations about how people learn. "Learning is a very different thing when a human being wants to learn something than when a human being doesn't want to learn something," says Smith.

I would watch these kids come to the club complaining about how much they hated school and how they were bad at math and then I would see them figure something out in computer programming that was much harder than anything their teacher would ask them to do.

He began to see the importance of free will and choice in learning. Smith continues:

My experience and my kids' experience in traditional education is that it was things done to you against your will. You may do fine, some kids do fine, but you're not really going to learn unless you choose to learn. There is this agency, this humanity, at the bottom of it. It may

sound fluffy but it's a profound insight.

The Micro-School Movement

Smith started to wonder what would happen if school were like his coding clubs, fostering agency and eagerness for learning, without coercion. In January 2018, he launched Prenda to create the type of school he envisioned. Prenda is part of the larger micro-school movement, an educational shift occurring over the past decade in which entrepreneurs and parents create intimate, mixed-age learning spaces, often in homes or local organizations.

A blend between homeschooling and private schooling, micro-schools retain the curriculum freedom and schedule flexibility characteristic of homeschooling, while relying on paid teachers to facilitate the classroom experience. Micro-schools are typically a fraction of the cost of a private school and educate no more than 10 to 15 students at a time. Prenda, for example, caps enrollment at about 10 students per classroom with one teacher, or "guide" as they call them, and costs \$5,000 per child per year.

Prenda began in Smith's home with seven children spanning kindergarten to eighth grade, with a focus on self-directed learning tied to mastery in core academic subjects. As the children's excitement for learning grew and more parents became interested in Prenda, Smith built an integrated software platform to support and scale his emerging model. The software emphasizes three broad, daily categories of interaction and introspection: Conquer, Collaborate and Create. In Conquer mode, the learners set daily goals for mastery in basic skills, such as reading, writing, math, and other core subjects.

The students use various online learning programs, including Khan Academy, No Red Ink and Mystery Science to build competency, and the Prenda software helps to track their progress against their personal goals. In Create mode, the learners work on individual projects, while Collaborate mode emphasizes group projects, Socratic group discussions, and critical thinking and reasoning skills in core subject areas. The Prenda software buttresses these activities by offering resources and a structured framework for the guides, as well as tools and transparency for students and parents.

Today, Prenda micro-schools operate in 80 locations throughout Arizona, serving about 550 children. Smith expects to expand Prenda beyond the state, and double its enrollment, within the next year. He attributes Prenda's massive growth over the past few months to the rising number of parents who are looking for alternatives to conventional schooling. Smith says:

It turns out that there are a lot of parents who are asking: Is the traditional approach to education going to do it for my child? Maybe

their kid is doing fine, getting good grades, but in their eyes parents see the love of learning draining out of them.

Most of these parents are not interested in full-time homeschooling or some other unconventional path, says Smith, but the Prenda micro-school model offers the best of schooling and homeschooling. According to Smith:

I think the real reason we have been able to scale so quickly is that we are able to offer something that parents have been looking for.

Prenda San Carlos School

Some of those parents include members of the San Carlos Apache Indian Reservation in Arizona. Located in a rural section of the state, the education options available to the children on the reservation are limited. The reservation's public schools consistently receive "F" ratings with the Arizona Department of Education, and student proficiency scores are strikingly poor, despite annual per-pupil spending of nearly \$17,000 in 2018, or about 70 percent more funding per pupil than Arizona's average of \$9,900.

Two private, religious schools on the reservation provide alternative options for some Apache children, but most families have no choice but to send their children to the failing public schools or leave the reservation. "Arizona is leading the way in school choice and charter schools," explains Cota. "It's crucial we keep this going." For Jeremiah Cota, a tribal member, this was unacceptable. In August he helped to launch two Prenda classrooms on the San Carlos reservation using borrowed church space. The school currently serves 22 students, with the goal of expanding to meet mounting parent demand.

Cota, who grew up on an Arizona Apache reservation, says that many parents in tribal communities are frustrated by their limited options. At an information session he hosted at the San Carlos reservation before opening Prenda, more than 200 parents showed up, concerned mostly about ongoing bullying and safety issues in the public schools. They were also frustrated by a lack of academic rigor and a curriculum that lacked cultural relevancy. "Parents thought their only other option was to send their children off the reservation, but we can do this here in our community," says Cota.

We can have ownership. We can have a world-class education that's culturally appropriate, that's within our own context.

The flexibility of the Prenda model allows for both academic rigor and a culturally appropriate education. For example, daily individual and group projects at the Prenda San Carlos School involve bringing in guest speakers from the reservation or doing hands-on exploration of the tribal lands. "We are very connected to our land, our wildlife, and we want to continue to teach children how to preserve and protect our land," says Cota.

Prenda's accessibility and expansion have been abetted by Arizona's robust climate of education choice. For instance, many of the children participating in the Prenda San Carlos School use funds available to them through Arizona's Empowerment Scholarship Account, an education savings account (ESA) available to many tribal members, as well as other eligible children throughout the state. For Prenda students who are not eligible for an ESA in Arizona, they are able to access Prenda through the state's Sequoia Charter School network, which supports hybrid learning models.

"Arizona is leading the way in school choice and charter schools," explains Cota. "It's crucial we keep this going. Without this flexibility, we couldn't do this." He is optimistic about the growth and replicability of the Prenda model to serve many more students, including those who have historically had limited access to education choices. "It gives hope and empowerment to these communities," says Cota.