Joel Rose, Founder, School of One in New York City

Civic Caucus, 8301 Creekside Circle #920, Bloomington, MN 55437

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Notes of the discussion

Present: Verne Johnson (chair), Paul Gilje, Dan Loritz, Tim McDonald, Jim Olson (phone)

A. Welcome and introductions - Joel Rose is the founder and former chief executive officer of the School of One in the New York City Department of Education. Named one of Time's top 50 inventions of 2009, the School of One blends live, online, and collaborative instruction to provide students with learning that is personalized to their academic needs, interests, and ways of learning. Mr. Rose joined the Department of Education in 2006 and has since served as chief executive for human capital and as chief of staff to Deputy Chancellor Christopher Cerf. Mr. Rose has been involved in education for more than 15 years, first as a Teach For America corps member in Houston and later as a senior executive at Edison Schools. He earned a bachelor's degree in political science from Tufts University, a law degree from the University of Miami School of Law, and graduated from the Broad Urban Superintendents Academy.

Additional details regarding the School of One may be found on its website: Schoolofone.org.

B. Discussion

Rose opened the discussion by describing a recent move he has made from New York City public schools to a new non-profit he started to help bring the concepts embedded within School of One to other locations. The name of the new organization will be unveiled at the official launch later this fall.

The mission of School of One is to personalize learning.

Rose said that the common model of school today with a teacher in a room with 28 students has its roots back in a trip Horace Mann made to Prussia in the 1800's, where he saw these kinds of "batch-process" institutions.

U. S. public schools, once the envy of every nation, cruised along for many years with a reputation as the world's best. Conditions have changed and our schools are no longer as highly esteemed. What

the system was doing was working well for the elite, Rose said, but giving limited exposure to reading and math for those going into factory jobs. The system no longer suits the needs of the present day as we ask more of our public education system.

"We need to create a system where when students graduate ready for the world as it is today and for college," Rose said, and we're just not going to get there with the same "factory" model that Horace Mann saw when he went to Prussia.

Personalization comes through a program with multiple modalities.

The School of One model is based on the belief that inside a classroom there is a tremendous amount of variability, Rose said. If we're really serious about meeting students' varying needs, he emphasized, it is advantageous to blend live, teacher-led instruction with collaborative learning among students, independent learning with books or software, and learning with online teachers, all in one location. They call these different styles of learning "modalities". Rose advocates, "by combining modalities into one environment you can personalize learning."

In a traditional model, Rose pointed out, there may be five math teachers teaching five things, or one thing if they're on the same page - but if you integrate multiple modalities of instruction into one environment then it allows each teacher to accommodate different learning styles and technology can be used to personalize each student's experience.

At present Rose's multiple modalities approach is used only to teach mathematics. When asked if the model is applicable to other subjects, Rose answered that finds it difficult to believe that teacher-led instruction to 28 students is the best way to approach any subject. When they expand into other areas-which he said won't be for some years-running multiple modalities will likely be central to the model.

Staging: Start with a math program after school.

When the school startup team began implementing the concept of multiple modalities, Rose said, they began with one subject (math) in one grade (7^{th}) in one school, after regular school hours. Once they had successfully developed a process with this limited approach, they expanded to a whole-school program.

He continued, "If you're a student you may be used to having history in room 302, English in room 205, then you go to math in room 106. But now with our program, instead of going to math class in room 106 you go to the math lab...we knocked down walls from rooms 101-106."

When a person enters the School of One they see workstations with names of New York landmarks. At some stations students are learning from teachers, at some they learn online from computer software, and at some they learn in groups from online instructors.

When students enter they look at a screen in the room and see where they are supposed to be. They may start in 'Staten Island' with Mr. Smith, then move on to 'Bronx Zoo' with online programs, and then take an assessment to see how much they've learned. The school takes that data and configures the student's agenda for the next day from that.

The role of teachers evolves.

When starting the program they drew from existing teachers in the school, Rose said. Their most recent surveys show that students are very happy with the program, and anecdotally teachers appear to be as well.

To help teachers become acclimated to the unusual environment, School of One has provided two weeks of professional development before they start in this kind of classroom and has made sure to have someone on site to help assess the data and provide coaching. It usually takes about 6 weeks, Rose said, for a teacher to become comfortable. "It's a fairly intuitive approach. Teachers tell us this is actually a more natural way of getting students to learn.

"In a school, about 20 percent of teachers say this is the greatest thing ever and they would never go back to a traditional approach. Then there are 10-20 percent that say they don't like this way of teaching. Everyone else will gravitate toward wherever the leadership is."

The teachers have also said that there is a lot more time to spend on instruction because the assessment is taken off their backs and put on to the technology platform. And they have reported having more energy at the end of the day because they have technology driving the organizational structure, telling the students what their assignments are, so the teacher doesn't need to be the authoritarian figure.

Student behavior improves when content is matched to their level.

In response to a question, Rose said they have found the program works well for students that are not well motivated by math as it is traditionally taught. One of the reasons why students act out, he argued, is that they're getting content that's perhaps 2-3 years beyond their competency level so they feel stupid, and that often leads to misbehavior.

"But here they're met wherever they are academically so it's easier to engage them. In traditional schools often we've got kids at a 5^{th} grade level getting a 7^{th} grade textbook, and they dig a hole deeper and deeper each day in frustration. Instead we say that we'll meet you at your 5^{th} grade level and give you what you need to move you to the next level."

Old classroom design is an impediment to bringing technology into schools.

Efforts to integrate technology have basically been amounted to "cascading" computers into the existing model of school instead of integrating them, Rose said. He recalled the first time computers were brought to his room as a young teacher: "They brought three in, put them in the back of room. It was just one more thing I had to manage and it only made my life more difficult."

Living within the budget.

A participant asked how they afford to run this personalized, technology-heavy program. "We have to do this in the confines of the existing budget. We are allocated $1500 per student to teach math; we're within that."

The greatest savings comes in time and effectiveness.

The best savings in this model, Rose said, come not in fewer dollars spent but in much more learning progress in a given amount of time. Right now, he figured, there are millions of kids sitting in classrooms not ready to learn what is being taught, or learning something they already know, or are being taught in a way that causes them to "zone out". In the past 10 minutes we might have lost a total of 10 minutes times millions of students. Technology can help us make more efficient use of the limited time we have with students.

States need to place bets on school entrepreneurs.

It's very hard for districts to do any research and development, Rose said, because they're too busy running operations. There are exceptions, but states can help spark R&D efforts by being the engines of innovation. States can create innovation zones; they can do more to cultivate model innovators.

What we really need are people willing to engage in wagering on new ventures. Whether it be foundations or governments, we need them to start betting on good ideas.

He said that if he were advising the governor he would counsel setting up two funds: one to fund the designers and providers and another to fund incentives for school districts to be early adopters.

The barrier to this in the past has been less the result of structure and more due to lack of imagination, Rose contended. If new and effective ways of improving learning can be developed then early adopters will come along.

Performance

Data, both hard numbers and anecdotal evidence, suggest that Rose's wager on the School of One is paying off. The school's first report showed that the students who came to School of One had advanced an extra one-half to two-thirds of a year beyond the district average.

The school has also made a strong economic argument for its focus. The compelling reason to adopt this new approach is not just that every student needs and deserves individual attention, Rose said, but also that resources should be allocated where they can have the greatest return. It's very difficult for one person to do all the things that technology can. Technology can pinpoint what concepts a student has or hasn't picked up, Rose said, and do it for large numbers of students in a fraction of the time required by a teacher.

He also shared an anecdote of seeing a girl with headphones on working online at the school. She had been disturbing students in other classes but was more quiet and focused in the School of One. He interrupted her to ask how she liked the program. "It's not too hard, it's not too easy, don't change anything," she said, and put her headphones on again. That's the way the model is supposed to work, Rose said-meeting students exactly where they are.

Next steps for replication

The city has put out a request for proposals asking organizations to help run School of One and move it in to up to four other schools. Rose said his organization will apply for that opportunity.

"We'd like to see a world one day where states, instead of adopting textbooks, approve model providers"-i.e., the organizations that knit together the products and services for new schools and programs. "With those options as resources schools could then be allowed to choose which providers they want to work with."

C. Conclusion

Minnesota is seen as the father of the chartering movement, Rose said in closing, and he thinks that multiple learning models will be the next big thing in education. "We need states to be on the leading edge of these developments, and maybe Minnesota is the state to do that. It's a nonpartisan issue. What we need are states that want to figure out how to nurture these new ideas and then ultimately move them into traditional public schools, he added, since those schools continue to house the majority of students."