**Ben Ostermeier (BO):** Okay, well hello everyone listening, I am sitting here, today is March 19, 2019. I am talking to Jay Gillen about his experiences in the Algebra Project, particularly in Baltimore. So, hi Jay, how are you today?

Jay Gillen (JG): I'm doing fine, thank you Ben.

BO: Alright so, let's start with, how did you first get involved in the Algebra Project?

**JG:** I first got involved back in 1995, I had attended a workshop at National Council of Teachers of Mathematics, where I heard a little bit about the Algebra Project curriculum, and it was intriguing to me, and I did a little research, and I thought, "Wow this comes out of Civil Rights work, which was pretty successful, so they knew what they were talking about in terms of Civil Rights, maybe they know what they're talking about in terms of math," and I was helping to found a community school, middle school, in Baltimore, really the first public school controlled by the community for many years. And we were trying to find a math curriculum that was suitable for the almost entirely African American population of the school, and so we were interested in the Algebra Project having historical roots in the African American community.

**BO:** Okay, so is that essentially how the Baltimore Algebra Project got started, or did that come a little later?

**JG:** Well, no, actually I didn't know it at the time, but at the same time as I was attending that workshop and then trying to figure out how to get trained in the pedagogy and curriculum, it turned out that at a school in West Baltimore, a former SNCC worker, Betty Garman Robinson, had invited Bob Moses to come and talk with teachers to see if they'd be interested in using the Algebra Project curriculum at that school. So that was really how the Algebra Project got started in Baltimore. I was answering a question specifically about how I got connected.

**BO**: Sure, sure. Okay so, can you, sorry, so as part of the founding of... so what role exactly did you play in the founding of the Baltimore Algebra Project then?

**JG:** Well, not a direct one, I was, as I became interested in getting the training and using the curriculum as a classroom math teacher, the Algebra Project office in Cambridge, Massachusetts, it was probably Ben Moynihan said, "Well, you know, there are some people working on setting up an Algebra Project board in Baltimore, and you're going to have to go to that community-based group to get your, you know, sort of, be able to enter into the training process, rather than going through us." So that was my first sort of tip off that the Algebra Project did not like centralized stuff and were much more interested in community building. So, I reached out to Betty Robinson, and then

got to meet the people who were, I think who really should be described as the people who were founding the Baltimore Algebra Project, so that was in 1995. And, they said, "Yeah we've had a couple teachers who've been trained, and if you'd like to go to Cambridge for the two-week residential training in the middle school curriculum, you know, we support you doing that." And so that was really, I was kinda dovetailing with the people who had already started work in the school in West Baltimore. We were developing our community-based school in East Baltimore at the time.

**BO:** Okay, so how has the Baltimore Algebra Project evolved since then, since you first got involved?

**JG:** When I was teaching in the late 90s, I got trained in '95, I started teaching that fall, the Algebra Project curriculum that fall with sixth graders, and at the same time the Algebra Project curriculum was being used at the other school, West Baltimore, the whole country was really beginning to go through a period that moved from, well that moved into, the extreme test-based teaching that we have now. And so in both schools, the Algebra Project kinda got squeezed out, because, this has happened I think in many places around the country, because the approach, pedagogical approach that we use is to go very deeply into core concepts, and to try to make sure that the classroom community is empowered to develop its own culture and approach to mathematics that sort of evolves when you're doing math the way the Algebra Project does math. And that approach doesn't lend itself to sort of guarterly, standardized testing or test preparation, and so our school gradually was kind of, forced by the central office to eliminate the Algebra Project curriculum and adopt the standard curriculum that was being used across the city. So that was sort of from '95 to about 2000, but what happened was that there was a batch of students in those early years who really got a full dose of Algebra Project math and community building, and because our school was community based, we continued to bump into these students when they were in high school, local high schools, and just talking to them, it turned out what they really needed was employment, that they were doing okay in school, but they were having trouble materially, you know, making ends meet, their families were having trouble. And so we said, "Well, you have some pretty good math skills, and we know that middle schoolers need a lot of help, so what if we set up a little fund to pay you to be math tutors, we could get somebody to put some money into that." And so, there was a group of five or six of my former students who were in high school who said, "Yeah we'd like to try that." And we raised 15 thousand dollars, I think it was, in 2001, and they started working, teaching in their former middle school, where I was still a math teacher. And it was all community based, so everybody was very local. And it was exciting to them, and to the school, and to the kids getting help, that these 15, 16-year-old students were making pretty good money tutoring math. So, we expanded that the next year, and the group took on really the management of their own program, where it became a student-led,

student-organized enterprise to kind of develop math after- school activities, and it grew from just the one school to I think by 2005 or 2006 there were about seven schools where we had hired young people to be teaching math after school, all pretty much self-organized by the young people with this Algebra Project SNCC-like philosophy.

**BO:** Very cool, so, talk to me about the writing of your 2014 book, Educating for Insurgency. What inspired you to write the book, and how does it relate to your work with the Baltimore Algebra Project?

**JG:** Well, during the 2000s, we were able to watch what happened as a pretty autonomous group of young people developed their own culture around mathematics and math teaching, and one of the things that happened was that they became highly politicized. And the immediate reason for that was that they had developed a contract with the school system to do this math tutoring. And I think it was at about 25 or 30 thousand dollars in 2003, and there was a budget crisis in the school system, and the school system said, "Well, we can't afford to pay you anymore, and so we're going to eliminate this contract." And the young people were angry, because they had a contract, and all of a sudden it was being nullified. So they started to do research into, you know, why was there this budget crisis, they did research into what they could do about it, they developed alliances with adult groups and other youth groups, and they created a presence in the Baltimore political scene, that really couldn't be ignored, and so they ended up getting their contract restored, actually over the next few years it grew from 25 thousand to 150 thousand dollars, and that just would not have happened if they hadn't done things like, you know, organize student strikes, and die-ins at the State Board of Education, and a variety of protest tactics. But it also wouldn't have happened, I think, if they hadn't been doing math, and this is really kind of Bob Moses and the Algebra Project concept of earned insurgency, that it's not enough to protest with justice on your side, in a democracy you need to be able to persuade people that they have a reason to listen to you because you've developed some kind of a track record making a demand on yourself. And so the fact that they were doing math gave them a kind of credibility that was very difficult for the authorities to destroy. You know, so when they were using these disruptive protest tactics, typically what happens is people say, "Oh well the young people are out of line, they are just being disrespectful, or they are not understanding how the system works." But these are young people who are putting in extra time to get good at their geometry and to understand, you know, how quadratic functions operate, and they're trying to teach those ideas to their peers. So, it's difficult to say that they're just kind of flying by the seat of their pants and don't really care about anything except making trouble. So the authority that they earned through a focus on mathematics and peer teaching allowed them to acquire political power. And the book is really designed to explain how young people exercise political power in disorganized ways all the time, and that the disruption in schools across the country happens

because young people just don't do the things that adults say they want them to do, and it's pretty easy for students to screw up the adults' reform plans by simply not doing what they're asked. And almost every reform plan would work perfectly if the students just, you know, did what they were told. But that's not how it works, so that's disorganized political power, and what the Baltimore Algebra Project was demonstrating, in sort of, roughly 2003 to when I wrote the book, was what student political power could look like when it was organized around peer math education and the Algebra Project pedagogical approach.

**BO:** Okay, well, great, and how is your interdisciplinary background, and by that I mean, essentially background in English and the humanities, influenced your perspective on your work with the Algebra Project and how does that background help shape your understanding of your role in a classroom?

**JG:** One of the most important things about the Algebra Project approach to math, is that we see mathematics as a language that emerges from communities. And it's an unusual language, and it's structured in a way that ordinary languages of communities are not structured. It has particular formal rules that are unique. But it's still a language, so it's designed to do what languages do, which is to express ideas and to communicate between people, and I think that that the background that I had in studying how language works in poetry and in prose helped a lot for me to get that that's what the Algebra Project's trying to do . It's trying to help young people come up with another tool for expressing themselves and for communicating with each other. And, so I tried, currently in the school that I'm teaching at, try as much possible to remind the students that art and math aren't really two completely separate activities, that they're both forms of expression that rely on symbolic representation, and that rely on agreements in a community about what makes sense and what doesn't make sense. So I think that a lot of the difficulty we have with math teaching in the country is that we treat math as an abstract set of manipulations that use meaningless marks on the page, and that's very alienating. The Algebra Project really tries to get young people to see that math is a way of talking about experiences that we have with each other in the natural world.

**BO:** Okay, and then how did your three sons start working with the Algebra Project, and what roles did they play?

**JG:** Yeah, well, my oldest son, Paul, was one of the first students in the middle school that received the Algebra Project curriculum after I got that training in '95, and he actually never officially worked for the Algebra Project, you know, he kind of was a little bit ahead of the curve of the people who were starting that in terms of his age. But he always played a pretty big in role in working with, in doing math at the high school where these other kids were, and his math teacher actually, at the school, Thomas

Nikundiwe, was when Paul was in high school, became really interested in the Algebra Project through Paul, and Thomas eventually became one of the main organizers of the Baltimore Algebra Project from 2003 on. So Paul then went into a career in math teaching, and he's now the department head of mathematics at the school where we first started the tutoring program. And his younger brother, Mischa, was also doing the Algebra Project curriculum in middle school, and he became one of the paid tutors in the organization in, I guess, it would have been around 2002, 2003, and he was actually one of the people who was involved in some of the protests that, right at that time when there was that budget crisis in 2003. I remember him sitting in in the chief executive officer's office and getting a call from security there, that "What was he doing up there." [laughs]. And his, the youngest brother of those three, Sammy was a tutee, so was getting helped by some of these high school students when he was in middle school, and when he got to high school he decided he wanted to be a tutor too. He started doing that, and he also got involved in the politics and the protest movement, and he shared in that at that time.

**BO:** Okay, and what have you found most rewarding in working with the Algebra Project?

**JG**: We've had about, well, more than a thousand young people go through the process of actually being paid employees in the Baltimore Algebra Project. It's entirely youth-run, at this point, since 2009, so ten years now it's been, there hasn't been anybody older than 24 having anything to do with the operations of the project. And so they've been employing each other, so it's been more than a thousand young people. And I would say that um, the most rewarding thing is being able to be involved in the lives of young people who are self-determining in so many ways. So they're able to make a significant dent in their material need through the paid employment, they have a remarkable political structure internally, they meet every Friday as a group to determine how the organization is gonna run and what it's gonna do. That Friday meeting after school, it's being going on for, you know, more than 15 years now, every Friday. So that's political organization. They have a tremendously intense social and emotional connection with each other and have passed on that culture of using mathematics as an organizing tool for economic and political power, and they've passed it on from generation to generation, so the initial people are now in their 30s, the people running the organization now are in their late teens, and they've managed to create the tradition internally, that actually is satisfying enough that they've kept the thing alive this long. So I would say that the satisfying thing is to see that it isn't just a dream or some type of idealistic wish that young people can organize themselves in a way to get their needs met. They actually do, and they have done it, and they continue to do, and it's very rewarding to that that's not only possible, but actual, as well.

**BO:** And then conversely, what has been your greatest challenge in working with the Algebra Project and how did you deal with that challenge?

**JG:** Well the greatest challenge has been that the, this culture that is so rewarding to see develop is antithetical to the culture of schools. And so schools can't tolerate young people actually being organized to meet their own needs. And the most concrete of example of that was between 2009 and 2013. There was a principal at one of the high schools who let us come in and take a cohort of students on an Algebra Project cohort model, so twenty students that she wanted us to take for four years to do their math with them, and the program was decimated in the fourth year, so we went through three years. The fourth year there was a change in principals and the new principal messed the program up. But even so, the graduation was 80% for the students that we started with in 9th grade. We got them graduated four years later, compared to 17%, one seven, of other students who started in the same year, and mostly left. We had asked the students we started, we asked the principal, give us the lowest performing students by math test scores. That's the group of students we want to work with. And this group had created, just in three years, had created an incredible culture. We did it by having, I was the teacher of record, but we had four co-teachers working with me who were either graduates or dropouts from the same school but had been involved in the Algebra Project after-school work. And so they were co-teaching in the classroom, we had an incredible youth-centered community, really powerful, the kids doing great math work and great political work in the community. And the new principal and the school system decided that, forget the success, forget the data, they were gonna kill the program, because they didn't like the power that the young students had accrued. So the most frustrating thing is how the work that the Algebra Project does, it really is insurgent. It really does have the effect of undermining the racist and oppressive structures of schooling. And just, you know, that's a hard, a hard pill to swallow, that schools can be that bad for our kids. But I'm afraid it's the truth.

**BO:** Yeah, and the last question I had prepared is, how do you see the National Alliance and its member organizations challenging your aforementioned educational inequity and living up to the promise of We the People?

**JG:** Well, the solution to the problem of the schools not fitting the students is for the schools to change, and the way they're gonna change is that the students lead an insurgency that forces them to change. So that's of course by analogy with the work of the Student Nonviolent Coordinating Committee and the Mississippi Freedom Democratic Party, and that history of civil rights that the Algebra Project comes out of, that young people start something that it becomes impossible to stop. So the question is, how to develop the core group of young people who are going to be clear enough, and well organized enough, that they can make demands on the larger society that will

actually be impossible to ignore. And the Algebra Project offer to, the Alliance's answer to that question, how do you generate that group of young people is, well you generate that group in math classrooms. So it's a bit of a chicken and egg question, you've got to secure the location in the math classrooms in order to develop the base of young people who can then make demands on the school systems to change the way they do business. And part of how that's gonna happen is the story of the Baltimore Algebra Project that there's actually interplay between what's happening out of school and in school. And it's the same story with YPP, the Young People's Project, that young people are going to be able to develop their culture and their base outside of schools, and then somehow we have to figure out how to get that paired up with math teachers and math classrooms inside of schools so that the political power can form in a strong enough way. The Alliance's role is to make both those things happen, to make the stuff outside of school sustainable so that groups like the Baltimore Algebra Project, the Young People's Project, other out of school groups, can be developing cultures, and then to make connections to math classroom inside of schools and inside of school systems, that can actually welcome that outside of school energy, rather than resisting it. So that's what I see the Alliance doing.

**BO:** Yeah, alright well that's all the questions that I had prepared, but is there anything else you wanted to say about, you know, your role or the Baltimore Algebra Project, or the broader topic of educational insurgency?

**JG:** Yeah, I guess I would just like to say that the, one of the things that came out of the, not just the Baltimore work but some of the national organizing our students have done, is something called the National Student Bill of Rights. That's a list of things the young people across the country say they need in order to be successful in school. And it's not just things for inside the schools. It's also stuff for outside the school. And of those things, so, you know, it's not only curriculum, it's culturally responsive. It's not just, you know, school buildings that have heat and water, it's also stable housing and decent transportation, and the most important one to me: employment. So young people in Baltimore and across the country know that they need to have cash, year round, to get their material needs met so that they can concentrate on school and on learning, and it's a pretty straight forward syllogism, that just is difficult for middle class people and policy makers to understand that if you don't know where you're going to get your next meal, or you don't know if you're going to keep your phone turned on, you're going to prioritize those things over spending a lot of hours studying for your geometry test. We try to make it so that that doesn't have to be a choice, so that studying for your geometry tests can be a part of your paid employment, so that the necessity for young people to earn money is acknowledged as part of the right to an education. So young people are very, very clear about this, that they need some cash in order to be successful in school. It's not just summer jobs, it's year-round jobs, and it's not just jobs at McDonald's or a mall,

you know, two hours bus ride away. It's jobs that are close by and that are connected to your intellectual existence. So I think that if we don't address the youth employment issue at the same time as we're addressing the academic issue, we're never gonna solve the problem of schools, and we have to listen to the young people because they're really clear about this fact.

**BO:** Yeah, well thank you so much, Jay for taking the time to talk to me, this has been a fascinating conversation, and, well said, is all that I have to say to that, so, you have anything else you want to say, sorry?

JG: I would probably go on for another few hours, so

**BO:** Oh well, that's totally fair, I'm sure that there's a lot to be said about this.

JG: Thank you very much, Ben, I appreciate it.

BO: Yeah, well thank you.