

**Nell Cobb (NC):** All right, so the first question is, how did you get involved with the Algebra Project?

**Ben Ostermeier (BO):** Correct, yes.

**NC:** So, in 1994 to 1992, I'm sorry, to '94 I was the director of the Chicago Algebra Project, and under that with teachers and five hundred elementary schools, we had pretty close to all five hundred that we would work in, and some of those schools were also middle schools. We also worked with the Math and Science Academy, and Math and Science Academy was housed at IIT, and they gave us access to teacher leaders. So I think we had about six teacher leaders, and these were the coaches, that would be considered coaches today, that would go into schools to help with professional development or the elementary and middle school teachers. And so this was in Chicago, right?

**BO:** Okay!

**NC:** The other part of that was the community based organization, and in Chicago, that's the way our Algebra Project came. It was bottom up as opposed to top down, so it was introduced by workshops, that was conducted by Bob Moses to parents and the Austin area, that's the West Side, and then the South Side areas, and a number of other areas. I think it was also North Side, we had people on the board of directors that represent all parts of Chicago, and that's the other part of that in particular, we called it CAP (Chicago Algebra Project). We had a point of directors for which B.J. Walker was president before, and we had additional people. One person that was most important was the coordinator for math, and that was Dorothy Strong. She was on our board as well in addition to the, I think he was a professor at that time at Northwestern, Charles Payne. And we had a professor from the University of Illinois, Doug Gills, and the staff consisted of me, the executive director. I had an administrative assistant, and we had a community piece to coordinate for the organizations that we worked with. So, with CAP we started with community based organizations and they made a demand to get the program into the schools. And in the time it was sixth grade...so sixth through eighth grade, actually, it was, but that was a transition curriculum to transition to algebra. We held professional development sessions where Bob and Bill Crombie came in and did the workshops for our teachers in the summer, and sometimes during the year for follow up. In addition to our teacher leaders and my staff going in.

**BO:** Okay!

**NC:** So, okay, so I did that for two years, and the next one is organizing Algebra Project professional development?

**BO:** Yeah. How did that work?

**NC:** Institutes. Yeah. So that's the next one you want to-?

**BO:** Yeah, so tell me about your experiences involving organizing Algebra Project professional development institutes.

**NC:** For professional development I was asked to actually coordinate professional development for the project, and that came, let me see, when did I do that? Oh, gosh. So I know in, let me see. Oh, I got to think think about this, I'm sorry.

**BO:** No, it's all good. It's all good.

**NC:** I thought I had those things. So, I must've started that in, like, 2000, I think?

**BO:** Okay.

**NC:** And that's when--

[call cuts off]

**BO:** Hi.

**NC:** Hi, Ben, I'm sorry.

**BO:** No, it's all good. It's all good. So let's just--

**NC:** Should this call be better?

**BO:** Yeah, it should be.

**NC:** Okay

**BO:** So let's just start over with that question, how about.

**NC:** Okay. So it's serious organizing the Algebra Project professional development--so, now I got to compete with the plane from outside.

**BO:** It's all good, I can't hear anything. So...

**NC:** Okay. So, I think it was around the time that the Algebra Project received the IMD grant, and Bob asked me to coordinate the professional development portion of that IMD grant so that was the materials development grant--the instructional materials development grant--that they received from NSF. And so, he, Bob and the writers of that grant, wrote in the teacher resource material group, and it was called the TRM, and the function of that group was to get teachers who were using the materials to actually develop additional materials with and in

alignment to the mathematicians module. So, with Dr. Budzban it was Road Coloring and Race Against Time, and then with Bob and some other people it was Trip Lines--

**BO:** Okay.

**NC:** And then we had some other modules that teachers worked on as well. So these were teachers who were using a material, geometry, that Dr. Henderson did his own teacher resource material, but this group actually went through the materials just to make sure that it was teacher and student friendly. So, initially, that group was funded under the IMD, then when they got the second grant for research then they also built in that group as well, so I think that group was funded for like six years and what happened as a way of operating, we'd come together, at least monthly initially, because the materials were so new and we not only had to develop teaching materials, but we also had to look at what had been written by the mathematicians just to say that it was clear and offer some suggestions and did a little bit of editing. So that was the first part of the work. We really had to look at those materials and give feedback to the mathematician. So once that was done, then the teachers started to work on the additional materials that would help students understand and be able to make sense of the the concepts, the mathematical concepts, a little better. So teachers did lesson plans and that's where we started to work with Dr. Takahashi of DePaul University around lesson study. You get a feel for how those lessons should be written so they wrote lessons anticipating students for more of a problem solving format and also in a way that teachers would know what they're looking for in terms of questioning and how they should do their preparation for the particular lesson. That was the problem, they would extend the problem, and then they'd do some kind of closing. So, that's what we did initially. We had one person, and that was Marcus Hung, that actually developed the website for the TRM and he posted everything that teachers did on the TRM so all the materials were there. So we had a deposit of resources for our teachers. So in 2009 we had a big, well, so 2006 I think we had one of the first big professional development workshops in Mississippi. I think was 2006 or '07. We had that workshop and that's when you had people come in and they stayed a week, but the work was around, I think Road Coloring, and maybe Race Against Time because I don't think geometry was ready at that time, but then in 2009 we not only had the algebra materials ready but we also had the geometry materials ready, and we held that workshop. I do know that one, because that year was 2009 in Chicago because we had it in downtown Chicago, and that's when we also brought in David Henderson, and he helped to facilitate the materials for geometry. Prior to that, I think we have one in 2007 in Ithaca, New York as well. So there were three that I actually coordinated, and those were the three. In Ithaca it was basically only algebra, so Dr. Budzban and some other people there, but we did it close, on Cornell University campus.

**BO:** Okay.

**NC:** I also want to say something else about professional development.

**BO:** Sure.

**NC:** I also worked with Bill Crombie to do, it was called PD PD, so I did... I think we were supposed to do one. I did one in 2009, and was it 2000? Yeah. I did one in 2009. I was supposed to do, I think we did. What was that? That was on SIU Carbondale. And I think we did another one, like, 2007, and that was in Boston, so I helped to coordinate that. We did some work around trying to construct new competencies for that professional development for a professional. So I've been working with Bill to make sure that we framed that out for the people who were going to be a professional developers working with teachers. So, I think that that's pretty much the extent of my PD work.

**BO:** Okay, great.

**NC:** Okay. So you collaborate with teachers and you work with the Algebra Project. Can you talk about your experiences fostering these partnerships? Yes. So, when we had the TRM it was, it was really great because we'd either meet monthly or we'd come in bi-quarterly, and they would come to my house and do the meetings here. So some people would stay in the house and others would stay in hotels, but we were able to kind of work together, provide planning, that kind of thing for any professional that was coming up and anticipate what the needs of teachers were and various sites. So what we decided to do was do site visits, and that group went from--it was Petersburg, Virginia, we went to San Francisco to observe the teachers who were working, and the Algebra Project provides feedback, and actually meet there. So we moved from Chicago and then we started moving to wherever the Algebra Project was being implemented. So, we went around... I think we went to Southern, not Southern, South Carolina, and we also went to... we were in South Carolina, Boston, we were in Boston as well, and one other place... oh, Florida. We went to Florida and Mansfield--Mansfield, Ohio. We went around, and again, it was an opportunity for us to use that lesson study format where you actually observe the teacher, provide feedback. Teachers provide feedback around the way they thought the lesson went, and then we would collaborate with the teacher and then provide additional feedback for whatever was stated about students' reactions and materials, and the way the teacher actually interacted with the students, and just to provide any type feedback that the teacher wanted and stated that they would like to see. So...

**BO:** Okay.

**NC:** All right. Then the next one is: you're involved in a lot of different initiatives related to mathematics education. How has your work outside the Algebra Project influenced your work with Algebra Project and vice versa? Okay, so, the work outside of the Algebra Project is... Well, okay, so I kind of partner and align what I do when I teach, in my research, with the Algebra Project, so it's not much that I haven't done that hasn't been related to the Algebra Project, so I think the Algebra Project has informed my work outside of, in terms of my job, and in terms of research, and even service. So, I have made a good integration of the Algebra Project with what I do across the board. So I think... it's a two way direction, but first it starts with the Algebra Project informing. For example, when I first got the job at DePaul University, I actually

talked about the Five Step Curriculum Process and used that as a way of looking at mathematics teaching and learning. And then, from that point, I would always integrate the Five Step Curriculum Process into my teaching. Lately, I've been also using YPP's Flagway so all of my students who take my course, and I had to teach two courses for math for elementary teachers, and they actually learned Flagway, the Möbius function, and how to play the game. So it has been at that kind of direction. Now when I do additional research, then I'm always doing my research with students who are in lower quartile in mine, and also looking at teacher competencies, how we could build those competencies in multiple ways, and analyzing how my students actually present to each other and to their students, and I based that on the competency that we call the Model of Excellence. So again, this is something that we look at, and then I'm in the process of always examining that model to see how we can tweak it, how can make it more current and more user friendly for teachers.

**BO:** Okay, great. So, you would say in general, like there's not a whole lot of work that you do they will consider separate from Algebra Project?

**NC:** Yeah, it's not a lot. I'm running a summer camp now for girls and that might be probably the most removed, but they still have Young People's Project Flagway in there.

**BO:** Okay.

**NC:** In terms of STEM camp, we do science, technology, engineering and math, and that has been--I've done that for five years--but I still found a way to integrate the Five Step Curriculum Process and also Flagway into what I've done.

**BO:** Got it.

**NC:** Okay, then we have...

**BO:** What is your greatest challenge working with Algebra Project, and how did you deal with that challenge?

**NC:** Okay. So, working with the Algebra Project initially... so I went into, as executive director, and it was it was a lot of pieces for me. I just learned at that time I didn't want to be an administrator.

**BO:** Right.

**NC:** It was, you know, it moved me from the classroom, and that I was not comfortable with, so I did it for two years and then I was ready to go back to the classroom. When I got a call from DePaul that we had, they had this particular position available, and I applied for that position at that time. So in '94, I went to DePaul, so I think it's just a lot to take in. I mean, it still is. I mean, even when I consult, it's a lot.

**BO:** Right.

**NC:** You do one thing, but you have a limited number of people trying to do all of these great and wonderful things. So, you have a few people putting a lot on their plates, and these are people who are passionate about the work that they're doing, and, you know, just don't want to limit themselves because they know that the children in the end will benefit. That's the challenge. It's knowing when to say no to some of these big projects, and saying no, and then feeling that saying no will not hurt the children in the long run but can only help you to get information together that you can use. If you're stressed, stretched too thin, then that just doesn't happen, so I think my greatest challenge is to make sure that I'm not stretching myself with everything else that I need to do and having a quality of life that I need to have.

**BO:** Right.

**NC:** So, yeah, I think that would be how I would answer that one.

**BO:** Yeah. No, I can respect that for sure. And so, what has led you to devote your time and effort to the Algebra Project?

**NC:** Well, I didn't know about the Algebra Project until '93? '92. No, actually it was '91, because I was working on my doctorate at the time and also teaching, and then the person was trying to coordinate the Algebra Project in Chicago. And actually, it was Jeff Howard, so Jeff Howard was working with Bob Moses, and he has the Efficacy Project. So, in this workshop with Jeff Howard, I asked a simple question because I was a doctoral student then and, you know, you want to know evidence, what's the evidence of this work? So, he was telling us about his Efficacy program, and it happened to be linked to the Algebra Project, and it was a person at that time trying to coordinate the Algebra Project as well. So, I had a very short conversation, asked questions of Jeff Howard, and he initially, you know, obviously said, "oh, you must be a student working on your doctorate here asking those questions." I was like, "yeah, well that's the perspective that I have at this point," so he shared some research for both the Efficacy Project and the Algebra Project, and I was impressed, but you know, it was in passing. And then one of my friends saw this particular add in the newspaper, and she says it sounds like something that you would love to do, because I also was running a summer camp from my church and some other stuff related to working in the community, and so I think it's the fact that Bob Moses is community organizer first and foremost, and a great mathematician, and his work has always been dedicated to the improvement of students in lower quartile and that has been my passion as well. So, any time I think I can't do it, I think about all that he does, and so I think he's a motivating factor in addition to the staff. But the Algebra Project's Ben Moynihan is amazing, and Bill is really amazing as well. So, I think it's all of that. It's the mission of the Algebra Project, what we're trying to do in terms of helping children.

**BO:** Yeah, well kind of building off of that, how do you see the National Alliance and its member organizations, like the Algebra Project, challenging educational inequity and living up to the promise of "We the People" moving into the future?

**NC:** Yes, I see it as a major force. So, it's something that people will certainly be able to relate to, and it's gonna be, I think it's--if this Alliance continues the way it has been, I think it's going to be a movement. It's gonna be part of a math as a civil right movement, equity issues, so I could see having conferences for "We the People," the National Alliance. I could see writing coming from there in terms of journal articles, maybe, as well. So I could see this as a major entity. It could be part of a larger group. I know some people are saying that they wish it could be like NCCTM, or Benjamin Banneker, or something like that, and I'd like see it move in that direction. So, it would be its own organization, but I think it could be under a broader banner of organizations that are also looking at equity issues and mathematics education.

**BO:** Okay, well, great. Well that's all the questions that I had prepared, was there anything else you wanted to talk about related to your Algebra Project work?

**NC:** So... I think we just about covered everything. I think the Algebra Project has given me a platform, and it's, you know, everywhere I go people will say, "oh, you're doing work with the Algebra Project." People know about Bob, they know about the work that the Algebra Project really focuses on, and I just went to a conference the other day, and the woman quoted something from Bob Moses, so I think it is...I have just been very privileged to be a part of it, and I'm very glad that I was able to understand the importance of this work, continue to do it, and continue to have passion for it. And so, it's very hard for me to say no, but at this point since I'm in the process retiring, I am going to do it to retirement and not retire and then do work for the Algebra Project for the rest of my life. I'll probably do some work, but I'm not gonna do full time for the Algebra Project.

**BO:** Well, right. I mean, you you have to live your life, as we all do.

**NC:** Got to kind of do something! But it's afforded the opportunity to travel, I went to Thailand for the Algebra Project...

**BO:** Oh, that's exciting!

**NC:** I've, you know, I've had just a number of different, really cool trips and events, and I represented Bob Moses in Washington, and, so, it has taken me to higher levels than I ever really thought I'd be. And so I'm very appreciative of all of those experiences.

**BO:** Okay, well, thank you, Nell, for talking to me today about all of this.

**NC:** Okay, well, thank you and let me know if you need clarification or anything.