

Beyond the Manuscript

Kimberly Stone, Jessica Black, Orly Stampfer, Omar Torres, Sarah Cooper, and Sandrine Zuyderhoff

Welcome to Progress in Community Health Partnerships' latest episode of our Beyond the Manuscript podcast. In each volume of the Journal, the editors select one article for our Beyond the Manuscript post-study interview with the authors. Beyond the Manuscript provides the authors the opportunity to tell listeners what they would want to know about the project beyond what went into the final manuscript. The Associate Editor who handles the featured article conducts our Beyond the Manuscript interview. In this episode of Beyond the Manuscript, Associate Editor Kimberly Stone interviews Jessica Black, Orly Stampfer, and Omar Torres, authors of "Partnership to Develop and Deliver Curriculum Supporting Student-Led Air Quality Research in Rural Washington State" and Sarah Cooper and Sandrine Zuyderhoff, authors of "Methodological Reflections of a Student and Community-based Partnership on Operationalizing CBPR Model: Recommendations for Building, Securing, and Sustaining Partnerships."

Kimberly Stone:

My name is Dr. Kimberly Stone. I am one of the associate editors for Progress in Community Health Partnership. And today I am really thrilled to welcome five authors from two different projects that we are showcasing in our current issue. I really want to welcome Dr. Jessica Black, Orly Stampfer and Omar Torres from the EnvironMentors project as well as Sandrine Zuyderhoff and Sarah Cooper from the Share the Warmth project. And one really amazing thing about both of these projects is the community partnership as well as the student involvement and leadership throughout these projects. So we are going to head right to it. I'm going to start with Dr. Black and her team, and I really just want to have her, you all tell us briefly about your project and kind of the development of the partnership and how that worked. And then we'll kind of hand it off to the next group.

Jessica Black:

Great. Well, I'll start. Hello everybody. I'm Jessica. Heritage University is in southcentral Washington state. We're on the ancestral homeland of the Yakama Nation and we're also one of the most productive agricultural regions in the country. Watch out California. Washington that's where we are, all the apples and everything else. Our population is largely Native American and Hispanic, primarily Mexican American and so are our students. And at Heritage one of the things that we do is that we work quite a bit with our local school districts. And as an environmental science professor I was really happy to run the Heritage chapter at White Swan High School. And we've been there for probably about ten years. And now we're also working with the Yakama Nation Tribal School.

Part of what we do is we want to bring really fun and exciting environmental research opportunities to high school students and that's the EnvironMentors program. We match mentors from university, our undergrad students to the community together with high school students. And so that's the partnership we've had for quite some time. And another partnership that's happened is with the University of Washington's Dr. Catherine Karr who has been working for so many years with our community. She has worked on a number of health, asthma, just so many

different projects all about empowering our local community and really learning to, trying to understand what is happening.

We do have some elevated rates of a number of different respiratory illnesses for example. And Dr. Karr reached out to us and she asked if we'd like to form this partnership together with Heritage and we said it would be fantastic. So that's how this all happened. Both of us were really well established in our own realms in our community working for a number of years. And then we got together, and I think we're very grateful that Dr. Carr reached out. And our students have certainly benefitted.

Kimberly Stone:

That's amazing! Really sounds like a wonderful ongoing partnership which is what we love to hear about in all of our work. Sarah and Sandrine would you like to talk a little bit about your partnership?

Sarah Cooper:

Yes. So maybe I can start to talk about it. When I first started working on the project, I was a second-year master's student and I came in the middle of the project. So, before I came after the partnership had started. However, I know the history now from working on it. The partnership between Share the Warmth is with students from the Department of Family Medicine at McGill University, public health research students. Share the Warmth is a community-based organization here in Montreal. Maybe Sandrine can talk a bit more about it afterwards. But it's a great organization that helps supply many programs such as school food programs, youth programs. And that program that us the academic partners got involved in was a youth music program which is implemented in the school in an underprivileged neighborhood in Montreal. It was all El Systema music program.

So originally before I was brought into the partnership the family medicine graduate student society, so student association of our department, approached Share the Warmth to establish a relationship with a local community organization on a non-research-based intention. We went to food banks for example and we reached out to Share the Warmth. However, they came back to us and the community members of the Share the Warmth came back to us with a different proposal. And they were the ones that initiated the research priority for the project. This prompted the student society to create a participatory research working group within our department to codevelop a research proposal with Share the Warmth using a community based participatory research approach.

We work together to address research questions that the community group had identified. And the research question in particular was to evaluate the music program that was initiated into the school. So they wanted to see whether the music program had an impact on the cognitive and quality of life outcomes for the children who were in the program and that's basically how our partnership and project started.

Kimberly Stone:

That's great. Sandrine what would you like to add about specifically from the community perspective?

Sandrine Zuyderhoff:

It was interesting indeed because I wasn't there either when the whole project started. Just like Sarah I jumped in kind of mid-project but it was transmitted to me and I know it is really important as a community organization to validate what it is that we do for our different like _____ like the people who fund us for example or other organizations to better explain what it is that we do and how and why it is important that we do it for our community. I'm a music therapist as my training so for me the evidence of the importance of music on the child development is really clear but it's, it may not be as well for anyone. It was really impactful that family medicine faculty came in and helped us articulate that.

Kimberly Stone:

Oh, that's wonderful! I think that that's something that we don't hear every day, kind of the community wanting the research involvement. And I think it's been a testament to both of you how long that these projects have been going on and the work that you have done. Thank you for that. I know one thing that's a little bit different than some of the projects that we hear about in our journal is really the extensive student and community collaboration that you have and I really always think about this being in an academic setting myself with a lot of residents and medical students is what—those challenges and I think the rewards of working with those kind of partnerships. Sarah, I was wondering if you could comment on kind of one like your biggest challenge and then the biggest really biggest joy that you find working in this kind of collaboration.

Sarah Cooper:

I think the biggest challenge and I think you can kind of guess by me and Sandrine coming into the project mid-project. The biggest challenge that we had was students or community turnover, like our staff turnover in the project or partnership because our department was primarily a masters student program so students were only there for two years so they can only contribute two years at a time. As well our community partners, our music program coordinators at the school who we were in constant contact with. So that was one of the biggest challenges because we always had to realign our expectations and the feasibility of the project every year once there was a turnover. And everyone who participated in this projects, students and community, was volunteers. We are volunteering our time, our resources and so we had to be really creative in order to address both the partner's goals and priorities. So, there were constant email exchanges and meetings.

And this was before COVID, this program. I think that was one of the biggest challenges but I guess one of the greatest joys from participating in this project was getting a very close relationship with our community, either the music program coordinators, the teachers, the parents of the students who we were in contact with. Near, and this was again before COVID, near the end we were invited to their recitals. So, we really got to see the progress of the music program throughout the year and that was one of the greatest joys.

Kimberly Stone:

Yeah. That's amazing. I love it when those relationships are continued to grow. Sandrine anything to add from the community's perspective? And then we'll hear from the other group.

Sandrine Zuyderhoff:

I think approaching the families was made easier because it was a student community led project and I think it really added the fact, kind of a quality of less formal project. It really felt like it emerged from the community. And it's interesting because the program itself also emerged from a community need expressed by the families saying there was not a lot of opportunities for them and their kids to learn music and to develop any cultural aspect of their lives. So having kind of the same process for the research itself really made sense for those families. I think it was like the students were really approachable and students felt comfortable with them. They did give a lot of time and were present very often in the program when they did the data collecting. So the kids become really familiar with them and it was easy for them to collect significant data. So that student quality really bettered, improved the quality of the project, I think.

Kimberly Stone:

That's great. Because I know one of the things we look at in community based participatory research a lot is really that kind of power differential and the relationships whether it's participatory or other things on that relationship. So that sounds like that was something that really helped in yours. I'm

going to hand it over to the EnvironMentors and I would love to hear kind of their thoughts on their successes and joys and challenges that they had with their project.

Omar Torres:

I can go ahead and start with the challenges we faced. One of the challenges we saw pretty early on was just transportation. Because this was an after-school program that often took place later in the afternoon after school buses had already left for the day. And because student's parents often had other children to look after and jobs that kind of carried over in the evening the program had to provide transportation when needed. And students were also very involved in a lot of different sports which played a very important role in that community. This is something that we had to respect and something that we had to take great consideration into. What this meant is that we had to be a bit flexible with our timing. Sports practices would sometimes run a bit late so we would have to wait an extra 10–20 minutes for the students to pack up their gear from practice and then join us in the classroom setting.

I do have to say that it was great to see that the students were still actively engaging in the material we were presenting and in their projects after a long day of practice. And I think one of the greatest outcomes from the program was just seeing the students design their own research projects. The students were able to produce something that was not only of their own design but also very important in the sense it provided them a way to incorporate what they were learning in the classroom setting and in the program, and kind of apply it in a broader sense that allowed them to involve their community in their projects. And at the end of the program they were also able to present their research to their own community at a national conference.

Kimberly Stone:

Oh, that's amazing! So Orly do you have any additional thoughts from kind of the undergraduate or Jessica, the Heritage University perspective and how all that kind of played out with getting that involvement?

Jessica Black:

From the faculty perspective on this one of the challenges is we're a pretty small institution. I mean we're mighty but tiny. And it means that you have just really—I have wonderful colleagues, a lot of really dedicated faculty and staff but we're also stretched pretty thin which means that our specific PhDs may have been in a very specific arena, but we become generalists when we take up at a small primarily teaching institution. And this project was all about air quality and my PhD project was about reconstructing ice sheets in Iceland so you can see there's a pretty big disconnect there. One of the challenges was that it's not really my background. That's also one of the most positive aspects is that we were able to partner with a group that that entire realm was their specialty, and not just one person but a group of people.

Orly's responsibility when she first started working with us was to really essentially translate, to be that person so the team from University of Washington they didn't just pile in a bunch of scientists and say ok. Here it is. Go for it. It was really well thought out where they had Orly working with us because she was the one who was in that group working with the scientists and she was also in our group working with undergrads and the high schoolers. She was able to help translate some very technical information first to me so I could try to get up to speed and then to train our undergrads and I'm sure Omar can talk a little bit about that later. And then part of what I do is I'm trying to get my next generation of students trained and I like doing that through intergenerational mentoring. So

having my undergrads mentor the high school students but first I need make sure that they're ok and that's where UW really helped me. They helped me get my undergrads trained. And then we would go up to the high school and the undergrads would really take the lead in training the high school about air quality and learning how to use low cost air quality sensors to make this a true community project, and feel really comfortable and really confident in their knowledge. That is not a simple thing to do, and I think initially it took us a little while to get a routine. Everybody's got to remember this was pre-COVID. This was pre the Zoom revolution. Now? I mean doing things on Zoom is no big deal. Students K-12 students are completely trained at how to do video interactions, video learning. All the undergrads that's how we've survived these last couple years.

But this was before that, so it was kind of a revolution for us on the order of like the flip phone that we were doing some of our instruction over Zoom. And Orly would do that. That definitely was a challenge initially is trying to figure out our system for being able to translate all that information and to make it available and not just available but to be able to be utilized and for the students, the high school students to feel empowered to use that information to design their projects. That took a little time to do. It wasn't an instant process. So, I'd say that was probably both one of the biggest challenges but also, I think one of our biggest successes in really our partnership growing like that. Yeah.

Kimberly Stone:

What an amazing testament to preservation. You keep working through all this and really just continuing to build those relationships. I want to switch gears a little bit and I know Sandrine especially wanted to reflect on this a little bit. And I think one thing that we always, we read a manuscript and obviously you only have so many thousand words and you have to figure out what it is you want to include. One thing I always like to find out when I talk to authors of manuscripts is kind of one thing about the project that maybe wasn't in the manuscript and either reflecting from a community based or from the academic partnership. Sandrine, I'm going to ask you to start because I know we had just talked about that a little bit right before we started recording.

Sandrine Zuyderhoff:

Yeah. For us I think it was mainly the partnership itself really speaks to our community. Just the fact that we have a faculty who is interested into studying what it is that we do. Aside from the results just the process, the fact that people know that we have this partnership really means something to our community. So that's all I wanted to mention to this point but I don't know if I can carry in words how important it is for us and the fact that it is continuing in time just not like the manuscript is not the end point of this partnership. And it really means a lot for us.

Kimberly Stone:

Yeah. And we love when we hear the community partnerships are continuing in a sustainable way so that's awesome. Orly, Omar anything to add from the perspective of your project?

Orly Stampfer:

Jessica touched on this a little bit already. But one thing we didn't really elaborate on in the manuscript was just more about the air quality sensors that we used. And yeah, we had a lot of lessons learned throughout the project about what kind of air quality sensors is well suited to a student driven research project. And we found that the sensors that we ended up using which are really popular now—they're called Purple Air Sensors. But when we started using them they were kind of more at the beginning, and we found them to be a really useful educational tool. It was just the fact that they're low cost meant that we could buy a lot of them which meant that each research team of students could have their own air quality sensors that they could set up in different locations at the same time. That was really wonderful.

They are low-cost sensors and they can have some accuracy issues but we didn't find that that was a hindrance to them being a good educational tool because the students could still look at things like variation over time and space. They could still compare air pollution measured in one place to another, even different rooms within the same school building, things like that. They were really great as an educational tool and as far as getting students excited about science. Just being able to actually go and collect data yourself and then look at the trends of data over time and understand why, what's happening and why the air pollution is greater at certain times in certain places than others. It was really fun to see them get excited about looking at the data and just being able to have their own priorities around their experiments and decide where to put, set up these little sensors. That was really great. I don't know if Jessica if you wanted to talk about the one student project with the turkey.

Kimberly Stone:

I want to hear about the turkey. This sounds great.

Jessica Black:

Omar mentioned this that the students they chose their projects. They decided where to put up the sensors and then they completed the projects and completed a research poster which they presented to the community and then they also went to present at a national conference, the EnvironMentors fair in Washington DC which was exciting. So this is all great. This is wonderful. But you have to remember that these are high school students and they're still kids to a degree. They're young adults but they like to have fun. And it was really—for us it was really fun watching one of the students. She put up some of the sensors in her house and then she analyzed the data with my undergrads, looking at when there were spikes in the PM 2.5 so particulate matter of a very small size that's potentially harmful.

But when were those spikes happening? And she started looking and we all are watching like the light bulbs going off. She's like, "That's right at Thanksgiving." And then looking a little further down. "And then there's another Christmas bump. There's a holiday bump!" Recognizing that cooking which is a well known PM 2.5 source, and making that connection. And it was so huge for her. It was like this massive moment and she was so excited that she was able to really explain those data in a way that was logical, and made sense to her. She really connected with it. She told us exactly what they were eating, what they were cooking, what made all of those particles. She wanted everybody else to know that, too, so her way to do that was she put a cartoon of turkeys on her Excel graphs on the spikes so everybody knew what caused those spikes. And for us that is what science is about. That is what community based projects are about. This is her reflecting in a way that she wanted her community to understand and it was also super fun. I mean everybody who saw that smiled so that would be one story.

Kimberly Stone:

Wow! What a great way to inspire love of research and science and everything. Sarah do you have any last thoughts on kind of thinking about anything that kind of wasn't included in the manuscript from your perspective?

Sarah Cooper:

From our perspective, from the academic perspective I think it's just the amount of time that goes into a research project and a partnership like CBPR. A lot of times when you think about, when you look at a manuscript you just see like a very small picture but you don't see the years of work that went into this partnership. This partnership with Share the Warmth started in 2016, 2017. And this article is being published in 2022 so you don't see all the people that contributed to this project getting started, the continuity of the project, the music coordinators, the parents, the children that

participated and then graduated and then new children that are now going into this program. So I think that's something to be said about community based partnerships that you might not see.

Kimberly Stone:

Absolutely.

Jessica Black:

If it's ok, I would love to add on to what Sarah just said because what she said I feel in every part of me that was so well put. The publication that we have and where Orly is the first author. Orly made sure to include the students. We have students who are now published and that is not a small thing to do. It is just as Sarah just said it is an enormous amount of work that goes into that and for the students. Omar right now is in graduate school. He graduated from Heritage and now he's moved on to a graduate program and he's doing really well. And now he's going to be published. One of the other unseen things was how much went into this publication and that Orly made sure to include students and they absolutely contributed and this is wonderful for their future careers. It was a labor of love to do that, but it was such an empowering experience. And that's what great partnerships I think are made from so we're really grateful for that.

Kimberly Stone:

Absolutely. And I feel like too in—that's one thing that we really look at. We looked for the people that are so involved and loving having Sandrine being one of the authors from the community part. And I think having the students that are involved on that we just really, we love to see that as editors and we see those names and see where they're from and we're like oh that's so awesome. So I just—that's a testament to the work that you all put into your projects and the love for your communities and your students and I just think that's amazing. This is kind of a great segue—and I may start this with Jessica just because we saw—one thing we noticed when I was looking back through your manuscripts is you really have a dedicated kind of core faculty.

And I know you spoke to the kind of getting outside of your comfort zone from your own expertise and working through that but I'd love—it sounds like really good faculty mentorship and I think Sarah and Sandrine one struggle you discussed in your manuscript was actually the lack of a dedicated faculty. And so I think that's just kind of interesting from these two different perspectives. So Jessica do you just want to comment a little bit on kind of how that kind of influenced your partnership or made things kind of helped facilitate or maybe was a barrier at times on having that dedicated faculty and how you navigated that?

Jessica Black:

I'm going to give a shout out to my boss, our provost, Dr. Kazuhiro Sonoda at Heritage. The EnvironMentors program was something that he knew about that he wanted us to initiate all those years ago. And when I first started at Heritage about ten years ago he was like, "Hello, welcome new one. It is yours." But it didn't take me very long to understand why this is so important. Community-based work for a community-based institution like Heritage this is our mandate. This is our mission statement, and we believe that everyone in our community really should have access to higher education and the ability to pursue that. And that needs to start with us, the faculty member getting out in the community more.

And it also means as you pointed out yeah, my specialty is very different but community-based projects are about doing projects that the community themselves want. They are identifying concerns and issues that they are interested in learning about and researching. Dr. Catherine Karr from the University of Washington she is embedded in this community and many of the health concerns. So

that's why this worked out so well is because this is something that's identified that they wanted to do. And when working, this is a grant funded project so you do need faculty. But I think that was also a little bit of a challenge for University of Washington because I'm stretched quite thin because this was not the only project I was working on.

And that can be—when working with small community groups, small institutions which we are, I think, sometimes we can be at the friction point because our time. We're stretched pretty thin and we don't have quite as much time as we would hope to devote to these projects. It is an enormous time commitment to mentor both undergrads and the high school students and the coordination. So it definitely, it looks really glossy but there's so much that's going on beneath the surface in terms of time and the ability to do—I wish there had been actually more, the ability to have more participation from Heritage faculty. But again everybody else is stretched really thin too. And I think one of our struggles a little bit was also our high school teachers they are also stretched really thin. White Swan High School at that time was one of the most under resourced high schools in the state. They're amazing but they also didn't have a lot of time.

So it is good to have someone like me there because I can coordinate a lot better in bringing in different groups and aspects. I have the background to do this. But it was—it is a struggle I think to work with groups like us sometimes because we don't have the time to fully devote to any one project. Our community is asking us to do multiples. So I think maybe that's one way to answer that and I will point out that University of Washington, their whole team was very patient and they understood that. It's definitely one of those things as we worked together we understood more. But I think it would be very difficult to do a project like this without having a faculty involvement because we are a stable—we don't have the personnel turnover. It's been ten years and I'm still there and so you have a point of contact. But at the same time we can be difficult to work with just because our time is stretched so thin. So it's good and bad. We try. Everyone cares but working in small communities we have some resource limitations I guess I would say.

Kimberly Stone:

Sarah, I know you mentioned this was really was kind of borne out of a student run organization. Any thoughts about kind of faculty and kind of how that might have facilitated or hurt your project?

Sarah Cooper:

Yes. We didn't have like entirely a lack of faculty member. Of course, we had to have one faculty member that could help us get the ethics approved so we could run this project. But then after that we were really given like the reins, both the students and the community group to really run this program and to really learn a lot about participatory research. However as this was student and community run there were some difficulties about not having an active faculty member and I think lack of resources, lack of funding that went into this project, lack of connections of who to contact to get a tool to measure the quality of life components that we were measuring in the project. A lot of this had to be creative on the students and the community part about how to get about this. And it also took I think more time and more organization.

However, I think the fact that it was completely student and community ran was also to an advantage because a lot of times when you look into these partnerships and especially with more senior researchers there could be maybe a power struggle or a power differential. But I think the fact that we were all students. We all have part time jobs. And then as well on the community side they as well had part time jobs. They were volunteers. It really helped to create this great mutual trust

between us and it really helped to create this understanding that ok. We have other lives besides this partnership and project so we could share the workload on going to talk to this community organization to get the _____ or going to this community organization. At times it was a hindrance, but I think at times it was a facilitator towards our partnership as well.

Kimberly Stone:

I agree. Thank you. I think we're running towards the end of our time but what I really wanted to kind of have us leave with is really one important—kind of what each of you thinks is kind of the pearl or the lesson learned, the most important thing when people are embarking on student community projects that they should know if people are going to try to develop this kind of partnership. What's kind of that one thing that you want to, your pearl of wisdom that you would like to impart. I'd like to start with Omar and have him comment and then we'll call everyone out.

Omar Torres:

Ok. Lesson learned. That's a great question. I'd have to say just truly getting to know the students that you're working with is something that's very important. Having that strong connection with students and just being able to get to know them and make sure that they're learning all the material effectively and that they feel comfortable with the material especially in our instance. They did have to present their work. We did make sure that all the students felt comfortable and so I think that's one of the things that we learned was that we had to make sure the students were just comfortable with what they were learning and comfortable enough to just relay what they're learning to their community.

Kimberly Stone:

Great. Thank you. Orly, what do you think?

Orly Stampfer:

I think for me an important lesson was just learning to kind of be flexible and tailor to what the students are interested in and what's going to kind of bring them the most fulfillment. For example, some of the undergraduate mentors like Omar were interested in learning more R code. And so that wasn't something that I initially envisioned as being part of the curriculum but because they were interested I kind of shifted and took the time to really go through R code together. And just relating to the previous question too about faculty support. I think that was also a big lesson learned because for me my role in this project was only possible because I had so much faculty support on my side too from Dr. Catherine Karr, Jessica mentioned. And also Dr. Edmond Seto and Dr. Elena Austin. So there was so much support that I needed in order to support the mentors and the students as well so I think that was a big lesson learned.

Kimberly Stone:

That's great. Thank you. Sandrine what do you think?

Sandrine Zuyderhoff:

I wanted to go along with what Sarah said. The whole faculty challenge, lack of support really created in the end a feeling of team effort. We were really on the same level of equality in terms of time investment and what it meant to put some time into that project. I really think this helped to build our project and I think its related to this specific type of research that we did. And it carries—and there is also what I like about the EnvironMentors projects is this inclusivity that it creates. It gives a message to young people that higher education is accessible and it like kind of blurs the line between the higher education, the university that may seem inaccessible but with those projects we kind of like blur those lines.

I really like that about the two projects, and I wish that there can be more so that our youth really get that message throughout. It's nice because it also narrows our music program's mission which

is to like—we teach music to the kids because we know it has benefits on their health, but we hope that it does open the doors of higher education and careers. It's nice that in the research that we do in that program it has the same message. And last thing that I liked about this project is that the students doing the project are future doctors and that maybe those future doctors will have music as an important factor on health development for youth and I think I love that.

Kimberly Stone:

That's awesome! Thank you. Jessica any last comments from your perspective?

Jessica Black:

One of the most amazing things for me with this project—and I wish everybody could have seen my undergrad students there together in the room at White Swan High School with the high school students. And truly the reason most of them were there, they would show up I don't know that it was about discussing the finer points of PM 2.5. It was the relationships. They showed up for each other. And I am so proud of my undergrad students. It was like a family affair. That's one of the things I really learned, how important it is for my students to be able to give back and to share and to feel like they are helping the next generation and they are. Not feel like. They are. These students, they kept in touch with each other. There's several years' worth and some of them went to graduations, Snapchat and Facebook. I know Facebook is so year 2000.

But they all kept in touch with each other, and they still do. And these relationships they are critical. That is what this is all about because the relationship makes learning the science, learning about these big issues. It's done in a place of a fun and really there's an underlying love there and for me that's a heart of community-based projects. And me I'm a facilitator. They're the ones who did all that work. It was a lot of emotional work. They were there. So it was a beautiful thing to watch.

Kimberly Stone:

Wow. I love that. What a wonderful thing to see just in action. Sarah, you're our last one. I'd love to hear any final comments from you and then I'll wrap up and we'll go from there.

Sarah Cooper:

I think one of the most important lessons that I learned—and when I started this project, I was a little baby researcher, baby student and a lot of times in your courses and especially qualitative courses you hear about this thing called reflection and reflexivity. And then you think in your courses oh it's going to be very easy to do or of course I'm going to be reflective. But when you actually put it into practice it might be quite harder or not as—what's the word? Not as easy to do. And I think that's one of the most important things that I learned during this project and I think I want to voice to other students or community members when they embark on these type of projects is to really be reflective and to constantly reflect about your position in the project, your goals 'cause at the end of the line your project is for the community and it's the community first in these type of projects.

I think that's one of the first things and one of the most important things that I learned. And as well advice to future students who want to embark on research projects. Just participate. I think this project that I participate was one of the—when I think back to my master's program was one of the highlights of my masters program. And I really do mean that. Like going to the school to go data collect with the children, having meetings with the community members like Sandrine. It was one of the highlights of my program and so yeah, just participate. Get involved.

Kimberly Stone:

I think that's a great way to end our time together. I really want to thank all of you for taking the time to participate today and most of all for the work that you're doing in the community and beyond and just the passion that you have for improving the lives of everyone that is around you. Thank you. I invite everyone to check out the two manuscripts that will be in the issue that is current. The one by

Sarah Cooper and all is “Methodological Reflections of a Student and Community Based Partnership on Operationalizing CBPR Model: Recommendations for Building, Securing and Sustaining Partnership.” And Orly Stampfer’s paper and the rest of the EnvironMentors is “The Partnership to Develop and Deliver Curriculum Supporting Student Led Air Quality Research in Rural Washington State.” And I just want to thank you so much all of you for sharing with us today and I really appreciate your time and your effort.