Creating Curriculum to Meet Community Needs: A Conversation about the Earth and Environmental Science Program's Curriculum Grant

Interviewer: Nic Benacerraf (NB)
Interviewee: Monica Varsanyi (MV)
Interviewee: Kieren Howard (KH)

Interviewee: Georgie Efegenia Humpries (GH)

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List of Acronyms: GC=Graduate Center; co-PIs=co-Principal Investigators; EES=Earth and Environmental Sciences; EJ=Environmental Justice; NSF=National Science Foundation; Stacy=Stacy Hartman; Alt-Ac=Alternative Academic

NB: Hello listeners. Thank you for tuning into this PublicsLab archival interview. I'm Nic Benacerraf, a former PublicsLab fellow and co-editor of the PublicsLab Archive. I am also a doctoral candidate in the Theatre and Performance Program at the CUNY Graduate Center, which is sometimes called the Grad Center, or simply the GC.

The PublicsLab was an initiative at the GC that supported the transformation of graduate education for the public good. Dr. Stacy Hartman was its director and Professor Bianca Williams was the faculty lead.

The following conversation showcases the work of faculty and students who received Doctoral Curriculum Enhancement Grants. The DCEGs funded specific initiatives proposed by programs across the GC, as they developed structural enhancements to advance the possibilities of public scholarship within their culture and curricula, and sought to make good on the GC's mission of "knowledge for the public good."

Coming up, I speak with the recipients of the curriculum grant for the Earth and Environmental Sciences program, which they used to develop a new certificate in Environmental Justice. The program in <u>Earth and Environmental Sciences</u> (or EES) includes two branches of study: 1) Geological and Environmental Science, also referred to as Earth Science (or ES), and 2) the humanistic social sciences [which includes individuals from the Geography and Environmental Psychology branches of the department]. Professor Monica Varsanyi, Professor Kieren Howard, and doctoral student Georgie Humphries explained how the certificate in Environmental Justice (or EJ) is designed to bridge the gap between the two, while also integrating the active participation of climate justice groups working in New York City.

I spoke with these earth scientists on the first day of spring in 2023.

So I was hoping that each of you in your own voice could introduce yourself with your name, your pronouns, and your role on the project, as well as your role at the CUNY Graduate Center.

Monica, do you want to start?

- MV: Sure. So I am Monica Varsanyi. She/her/hers. I guess-- would we call ourselves "co-PIs" [Principal Investigators] on it, Kieren? Or "co-developers" of this certificate program? When we applied for the curriculum grant and proposed this doctoral certificate, I was the Executive Officer of the Earth and Environmental Sciences program here at the GC. And now I'm currently the Interim Associate Provost and Dean for Humanities and Social Sciences. And still involved, though Kieren has taken the lead.
- KH: I'm <u>Kieren Howard</u>. My pronouns are he/him. And yeah, my role is collaborating with Monica and Georgie in envisaging a certificate in Environmental Justice. We've been coordinating collaborations among faculty about designing the syllabus and trying to get the curriculum passed by our own committees, the GC committees, and the state, ultimately. As Monica said, I was the Deputy Executive Officer of EES when Monica got this grant and started this project. And now I'm currently the Acting Executive Officer of EES and I'm a faculty to <u>Kingsborough Community College</u>.
- **GH:** Hi, my name is <u>Georgie Efegenia Humphries</u>. She/her. I'm a PhD student on the Earth and Environmental Sciences side, and I'm currently the Research Assistant on this project.
- **NB:** Welcome everybody. I'm Nic and my pronouns are he and they. I was hoping that, Monica and Kieren, if you would help us understand the issue that your project sought to address with the support of this doctoral curriculum grant. How did you come to identify it? What drew you to submit this application? What's the backstory here?
- MV: I can start off. When Kieren and I started working together, we became very interested

in finding ways for, well, a couple of things. Finding ways for our students to communicate their science to the public. And we had an increasing number of students who are interested in working on issues around climate change, climate justice, environmental justice, et cetera.

We initially had thought about applying for an NSF [National Science Foundation] grant to support something related to climate justice, environmental justice, and then also fostering an outward facing public science communication element to our program. We worked with a group of faculty for maybe a year or so, but it never quite fit. It wasn't quite the right grant for us, and it would've changed our curriculum in ways that were more about the grant and less about what we actually needed to do in our curriculum.

Around the same time, I was a PublicsLab mentor working with Rachel Corey, who was my student. And at some point I think <u>Stacy</u> had mentioned that there was the curriculum grants available. She said, "Hey, there's just a little more time. You guys should think about it." And we decided to go forward with a curriculum grant through the PublicsLab which actually fit what we needed very well. Which was, not so much to fully restructure our existing curriculum, but to create a new space in our program to foster student research on climate and environmental justice.

And I guess there's, there were two angles. One was an internal kind of motivation, and then there was more of an external motivation. The internal motivation is that we have an environmental and geological sciences half of the program, the science side, and then we have a humanistic social science side, which is human geography. But weirdly we didn't quite have that space in between where you would find scholars and students-- scientists with a humanistic social science justice bent-- or human geographers studying environment with knowledge of the science. So we wanted to create something that was a middle ground between those two poles, or whatever you want to call them. This curriculum grant was a really great opportunity to do that.

Simultaneous to that, we had been working for a number of years on moving the Environmental Psychology faculty into ES. Many of them work on issues of environmental justice like Melissa Checker. So we were trying to create a space in ES that could welcome and embrace those Environmental Psychology faculty as well as other social scientists who work on these issues but aren't necessarily geographers. Because all we had at the moment was like a PhD program in Geography, which is great. But we couldn't easily bring in a sociologist who works on environmental justice. There wasn't like a space in the program to put them really. So this, this idea of creating this third space really enabled a lot of things to happen that I think were really pressing and needed and exciting, and would work well for our program.

And then also, from an outward perspective [it] would create this, hopefully, this really wonderful certificate that anybody could take from an English major to a Biology major or students in ES who were really interested in climate and environmental justice, and then would also get training in science communication and public facing science.

KH: As Monica said, we've been thinking for a while to try and think of how to grow the sort of strengths that we have, which we think is having these different specializations in the program. And when Monica had the idea in the conversations with PublicsLab about the idea of a certificate, I remember she reached out to me and said, "Hey, this might be the way to do it, that we can just start working on it." And it didn't involve a huge grant, which would've fundamentally changed the way our program worked. We don't think our program was broken. If you were to set out today and design a program that was equipped with the scholars you needed to tackle climate change, you would want physical scientists and humanists to be working together.

There's a gap between physical scientists and geographers and humanists and there's a gap that exists, unfortunately, between the university and the publics that face the most harm from climate change. So we see this certificate as a way of addressing both of those issues

NB: I'd love to dig into the work of this certificate and how you're imagining it. You talked about these two poles, these two dimensions of the program, and creating a third space. What is this third space? How would students and faculty engage with this?

KH: Full disclosure, it's still evolving. We're fairly set, I think, on the idea of at least two core courses in that certificate. One being around the science of climate change, which would be structured having a primer on the history of how we know climate change is happening and how it works. And then looking at the really well-documented projected impacts at different scales from global to regional, down

to the New York City scale. And couple those projected impacts at each time with the responses from groups trying to work to improve outcomes and resist harms from climate change.

And parallel with this science-side course would be a policy-side course, which again gave people a background on history and principles and methods of work in Environmental Justice. And then look directly at different scales all the way down to the city of distribution of injustices and how communities are responding to that.

We know that we wanna involve groups working in New York City around environmental justice deeply in the course content. So be that guest lectures, be that case studies, be that meetings. In the long game, maybe we have seats in our classes reserved for people that are working with these community groups or their friends or their children or people from their community. That way we're communicating both amongst scientists and humanists and communicating with the people that matter.

MV: Neither of us is a climate justice or environmental justice scholar but we're administrators who care very deeply about the topic and know we have the raw materials and the resources and the faculty and student interest to create something that's important and will ultimately be a great, we think, a great thing.

We initially thought, "Hey, maybe we should open this up to people outside of the Graduate Center," and then we scaled back and said, let's just start simple. Make it for graduate students only at the Grad Center, which is really what most doctoral certificates are. I have a feeling we're moving back towards the potential of incorporating or opening this up to a broader public to participate.

NB: Yeah, and I'm struck by the harmony between internal and external needs, and also the commitments you're making in the process to the publics that you're also trying to weave into the program. And I think that's actually pretty radical and unusual from my vantage point. I was curious if you could say a little bit more about that, especially, like, are there some examples of who these communities are that you might be reaching out to? Not that you're making any commitments, of course.

MV: From a curricular perspective, we've thought about having, among other things, potentially an internship component, although, again, that's still to be determined. But as part of that component, we would certainly have students who are working with particular communities or community groups in New York City who could partner or benefit or work with or engage with, however you'd like to put it, with this certificate. Kieren, you're more in the thick right now, so maybe you can correct me on any errors I'm making here.

KH: No, you're not making errors. I just don't know, which organizations to name drop. But our faculty are deeply embedded in working with community groups already. So groups like WE ACT, for example, are a New York City based EJ movement. And I think we have on the radar maybe 20 to 30 different groups that we are in the process of looking at how we're gonna reach out and connect. We don't want to go out into community until having our own house in order about what it is we're trying to do. We're not trying to really put the burden of work on designing our syllabus with these groups. We want to have something ready and work out on ways that we can meaningfully connect together with it.

We knew from the beginning we spent so long meeting with different certificate programs and listening to faculty that we knew we couldn't have a certificate that mentioned environmental justice without being deeply related to people and community outside of academia, or really wasn't gonna do what we were hoping to do.

- **NB:** Yeah, I'm getting the impression that the program at the GC might be unusual compared to how programs are structured elsewhere. How much is the public interest named and integrated into university programs that you witness in these fields?
- **KH:** It might be a question for Georgie who did some amazing work researching the landscape of existing certificates through the city, the state, the nation.
- GH: Yeah. A lot of my work involved compiling what is currently out there and we came to the conclusion that this is a unique space that we have access to. And this intersect is not something that is necessarily offered on a wide scale, especially as a certificate program. What is offered outside of CUNY itself is a bit cost prohibitive. We've casted a wider net of people who might be actually able to take the certificate comparatively to some places who might, charge between 80 and 100 thousand dollars a year for a master's degree in the same concept, to get the same skills.
- **NB:** I'm curious, Georgie, to dig a little bit more into your, your experience of this. You're a student right now. What do you think this certificate would offer students that isn't normally present at the moment?
- GH: I'm on the natural sciences side, so I'm a marine microbiologist. I have no geography training. I have no social science training. I think I can speak for pretty much all of the other scientists in the program, a lot of us are going to conferences or being asked to present, and we're presenting very scientific terms and scientific jargon. But how beneficial is that to the public or to even policymakers if they can't understand what we are trying to convey? So I think this intersect creates a very unique training where someone like myself as a scientist would be able to communicate in a way that the public and students actually comprehend. And on the side of maybe people who have more social science training, they would understand the science behind it.
- MV: Climate change and environmental issues are not siloed into disciplinary categories in the real world, right? So if we can somehow create some synthesis between all of what we do in productive ways to solve real problems that are significant—great.
- **NB:** And I can imagine folks really from almost every program finding reason to spend time with you in this space. Kieren and Monica, if you could speak to what the faculty's involvement with this will be. Clearly you're making space for a whole new cohort of faculty involvement. What are the ways that, that people plug in?
- **KH:** Currently we have working groups, designing the syllabus. Okay. So we've had big meetings that have been subdivided up to be a little bit more discipline-specific, and tasking groups with designing the syllabus for our courses and then comparing notes, and trying to line things up between the physical side and the EJ side of the certificate program.

The endpoint is perceived of differently amongst different members of our faculty. So some faculty would see the endpoint will be students taking what they've learnt in this certificate and going and working for an agency, for example like the city, on some actual applied project, maybe involving for example green infrastructure. One of our colleagues, Jennifer Cherrier is very big on that idea, kind of an internship program. But it might be the case that other scholars in the program see the end point as much more academic product, or an outreach product. So there's really a lot of potential opportunities for faculty to engage deeply with interdisciplinary course content and developing sort of pedagogy to reach students and publics where they're at.

NB: So Monica, you've mentioned that you've served as a faculty mentor for PublicsLab Fellows, and I was curious, from that perspective, how you imagine that this certificate fits into the larger landscape of public scholarship at the GC. And if there's anything from that experience that's helped inform the process for you.

MV: Sure. Hearing about what the PublicsLab students were doing definitely shaped the way that I think about what this certificate can accomplish in terms of public facing scholarship. And also alternatives, alt- act careers for graduate students as well. And thinking about how our work as-- how should I put this? I really believe in the mission of CUNY and the mission of the Graduate Center to create knowledge as a public good. And that can mean so many different things among them, just that our research is useful for a public good. But also for students who wanna go off and work in non-academic careers that are serving the publics and so forth. So all these things were sort of part of our discussions during PublicsLab. And I think they must have come into the way that Karen and I then talked about this certificate, and then we brought Georgie in. So it's just been like the substrate upon which this has all emerged.

NB: From my perspective as a former PublicsLab Fellow, one of the greatest parts of that program was being in community with folks from different disciplines, and the subtle ways in which we began to internalize each other's perspectives. And surprising projects erupted out of that. And I'm curious about how you'll find, over time, the space for that surprise. Where can we locate these places where we can come together? To see how hungry people are to be in conversation across discipline.

MV: Yep. Absolutely.

KH: I feel like PublicsLab just gave people the confidence to say, look, I can contribute to this kind of syllabus, even if it seems to be, in the immediate, not that obviously connected to what I do every day.

NB: Georgie, from a similar perspective, you've been working really closely with Monica and Kieren on this project. I was wondering what the process was like for you and were there any surprises?

GH: It's been a really great time as a research assistant. I don't think it's very frequent that you're in a meeting with over 25 people and everybody actually seems to be on the same page and agree. We've had meetings of faculty, so many faculty members, where it just runs so smoothly because everyone seems to have a clear intention here that we know this is a missing part of our program, or a missing part of the community of

environmental science and environmental justice in general, that we require this space and it's going to be a public good, as Monica mentioned.

NB: I'm really inspired by the way that the process and the outcomes seem to be really aligned here. You know, the way that you've been going about building the program seems to be, in a way, already achieving what you're after. There may be other folks out there in, in the world who are interested in pushing programs like this forward in their own university contexts elsewhere. I was curious if you had any suggestions for them or things to avoid, things to embrace, that have come up for you in the process of this journey?

MV: I think a really helpful, no crucial, part of this process was hiring Georgie. Georgie did this very large, like we talked about earlier, information gathering process. Part of creating a degree program like this is the market. You know, do we have something that people will want and will pay for or enroll in whatever, however you wanna look at it. Georgie's research on all of that was essential.

And then we also did these interviews with all the certificate coordinators to figure out what their structures were, what their constraints and were, and how it worked and so forth. So all of that information gathering has been really helpful, because once you're then talking with a larger group of faculty who aren't as familiar with the institutional context, and they have all these great ideas, you know, you have that the base upon which you can build the superstructure. That's been a very crucial part of the process in my mind.

NB: As we approach the end of our conversation, I'm curious to hear from each of you if you have any wish or hope for this certificate program as it moves into the future and finds its real shape and form.

MV: I'm just excited for it to actually exist. There's a road ahead. So I'm just really excited to see it get off the ground. And then I do hope that there's a constituency for it, that people are interested in it. I think we'll be able to get students in our program interested. I hope there's a broader interest in it as well.

GH: Yeah. If I may add, I'm hoping this drives in some unique candidates as well. People who may have thought, "This isn't exactly what I'm interested in, but I'm interested in the intersect" might be drawn to the program in a way that they wouldn't have been before. So maybe a more unique and broad background of students will be driven to the GC, which would be fantastic.

NB: That's actually beautiful and exciting and I wish you lots of luck as the program takes shape.

MV: I just want to thank the PublicsLab for supporting this. It was crucial to have the funding and just have somebody believe in the idea.

NB: The PublicsLab was an initiative at the GC that supported the transformation of graduate education through fellowships for doctoral students, <u>Curriculum Enhancement Grants</u> for departments and programs, and programming for all that showcased and workshopped the methods and practices of public scholarship.

It was funded from 2018 to 2023 by the Mellon Foundation. <u>Stacy Hartman</u> was the Director of the program, <u>Professor Bianca Williams</u> served as its Faculty Lead, <u>Professor Kandice Chuh</u> Interim Faculty Lead, and <u>Professor David Olan</u> was the grant's principal investigator.

Our archive features audio interviews with student fellows, faculty mentors, grant recipients, and the program's leadership. Thanks for listening.