

## Humans of Learning Sciences

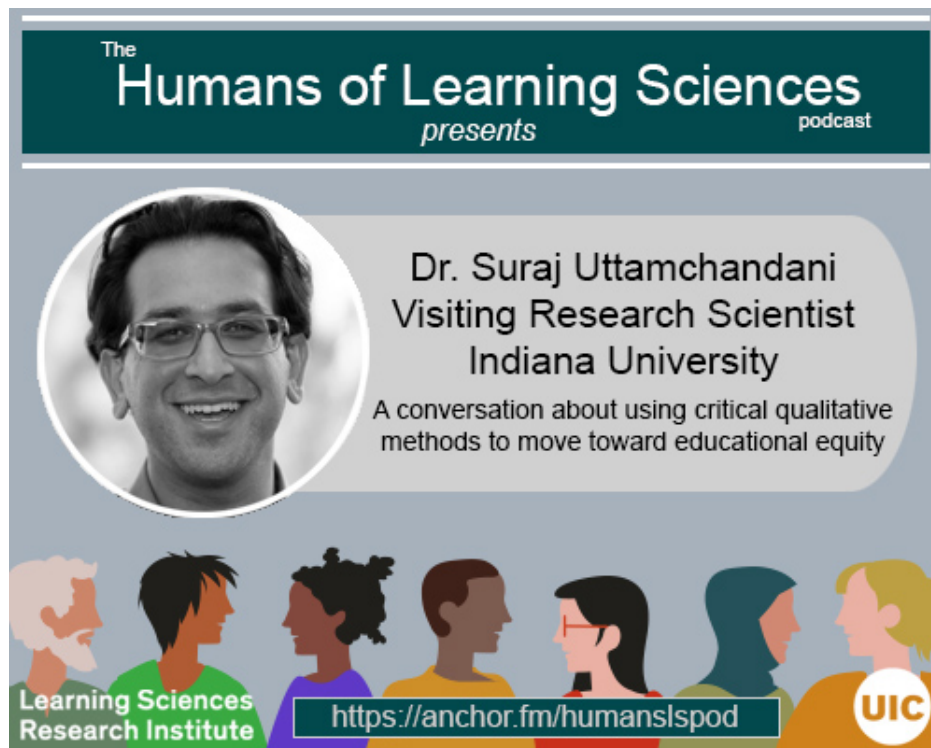
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Using critical qualitative methods to move toward educational equity

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### SPEAKERS

Dr. Mon-Lin Monica Ko, Dr. Suraj Uttamchandani

**Monica Ko 00:07**

Welcome to the Humans of Learning Sciences. I'm your host, Dr. Mon-Lin Monica Ko. The Learning Sciences is an interdisciplinary field that studies and supports learning in classrooms, after school clubs, museums and the outdoors. And while the learning scientists are united in their central commitment to trying to understand learning, there is a great diversity in how we do that work. And even in how we define learning. This podcast tries to take stock of and amplify these diverse perspectives. Our conversations will go beyond what you see on a website profile, CV or scholarly publications. We want to dig deeper, and understand the person who was behind the work. We'll ask questions like, What experience is formed your view of learning? How do you conceive of the learning sciences? And where do you think the field needs to go next? As your host, I'll be learning right along with you through these conversations and hope that they inspire even more dialogue about what it means to study and support learning. Join me on the Humans of Learning sciences podcast.

Dr. Suraj Uttamchandani is a visiting research scientist at the Indiana University Center for Research on Learning and Technology. In today's episode, we'll discuss his experience as an undergraduate mathematics major, and how policies in the United States like the Religious Freedom Restoration Act directly informed his scholarship which is at the intersection of educational equity, the learning sciences and critical qualitative methodologies. In our conversation, we talk about educational intimacy, a construct that came out of his dissertation, as he was trying to put a finger on the forms of learning that were happening in an LGBTQ plus youth group. We talked about his participation as a volunteer in the group and how his methodological training within and outside of the learning sciences prepared him to take on this work. He is currently exploring non-western orientations still learning and development with the South Asian Learning Sciences Research collected. What I found most compelling about this conversation with Suraj is the Invitational nature of his work, and the connections between his lived experiences and how he approaches his research. We also talk about the revisionist nature of learning how what we put down on paper in a publication is just a mere capture of our current thinking, and how taking a retrospective lens to our own thinking helps us see how far we move forward and deepen our initial ideas. I hope you enjoy this episode, and look forward to your reactions and responses to our conversation. As always, email us with your comments and questions. Our email is [humanslspod@gmail.com](mailto:humanslspod@gmail.com). Dr. Suraj Uttamchandani, welcome to the podcast.

**Suraj Uttamchandani 02:52**

Thank you. It's such a pleasure to be here.

**Monica Ko 02:55**

I wanted to ask you a little bit about your entry into the learning sciences. What drew you to the Learning Sciences graduate program? And what were you intending to investigate when you got there?

**Suraj Uttamchandani 03:06**

Yeah, it's fun to think back to that because I think those roots are pretty interesting for helping us chart and future courses. So I was in my undergraduate degree, I was a math major. This was at SUNY Geneseo outside of Rochester. And I really loved this major in math, I found it to

be a really wonderful space to think about truth and validity and proof. And I was also dabbling in creative writing in anthropology. And, so in my, in my junior and senior year, I started to understand that the way that students were learning concepts like proof and calculus was not entirely effective. And more than that, that students were having really different experiences based on who their professor was. And that got me kind of interested in some of these education questions for the very first time. And then my senior year of college, I TA'ed a section of an anthropology course called language and culture. And that course was with this wonderful professor, the late Dr. Denise Saffron. And she was so popular at the university that the university made her course larger and larger and larger. So, by the time I was the TA for it, it had become a 100-person course. Whereas when I took it, it was a 20-person course.

And so, she was faced with these questions about how to keep some of the things that were really working about the course, small group discussion and so on, while catering to a much larger body of students. And so, I was teaching with her. And she introduced me to this idea of the flipped classroom and some other sort of humanistic perspectives, anthropological perspectives, Social Sciences, ideas around pedagogy. And then in my spring of my senior year, I went back to teaching for the Math Department, and I said, I wonder if we can import some of those lessons into our math pedagogy. And so, we had introduced this idea of a flipped classroom format. proves this was very early on in my thinking. So now I see that as sort of a model, but it has some kind of interesting underlying principles and as a named model has the potential for people to gravitate to and take it on. So, in the context of that flipped classroom model, I found myself thinking like, there's a lot of good ideas here, something seemed to be working, and some things seem to not be. But we're mostly writing our intuition about what is working about how it's working about why it's working, or not working. And I said, I know that there's these massive bodies of literature around education research that I might want to learn more about. And so, I was debating between doing a PhD in math and doing a PhD in education in some way. And I was introduced to the field of the learning sciences. And it was that math ed, kind of higher ed pedagogy focus that originally brought me to the learning sciences.

**Monica Ko 05:51**

And so, when you started the graduate program, were you intent on pursuing that line of thinking around mathematics education? Or were you thinking were you hoping to sort of expand your repertoire in terms of the things that you were researching or interested in?

**Suraj Uttamchandani 06:11**

In my first few years of graduate school, I found literally everything interesting, which is a feeling I'd like to recapture one of these days, there was no article that you could give me that I wouldn't find fascinate, I get that feel like has since passed. But at the time, I was really excited about literally anything. And in my first year of grad school, in the learning sciences, we were learning about learning outside of school and learning in games and learning in maker spaces and learning with technology. And MOOCs. Remember MOOCs? So, I had become interested in some of these ideas around out of school learning and learning technologies, and so on. But math was sort of my first home. However, I have always had an interest in equity, which was a term at the time that I didn't really have any anchor or history or political context to but was something I kind of knew mattered somehow. And I was thinking about this in terms of the

diversity of perspectives that people brought to mathematics. In college, I lived with two roommates. And both of them had really, really different skill sets than I did. And all three of us were math majors. And all three of us loved being math majors. And all three of us really enjoyed our math classes. And one of us had all of this great experience with building things, and with sports and with sailing. And one of us had all of these great experiences with Boy Scouts and identifying plants and living in the wild. And one of us me was like really good at reading textbooks. I guess, only one of us was having academic success in these math classes. Even though all three of us really were enjoying ourselves as math majors. And it hadn't, we really start to pay attention to the way that the mathematical pedagogy systems were organized in that college in ways that promoted a very specific and narrow kind of mathematical learning, even among people who were already sold on mathematics is where they want it to be. And so that sort of equity idea came to come to focus for me over the course of my grad career, but was always of interest to me. I was always asking, "Why is this mathematical learning environment working for this person and not this one? How can we understand that difference, not as a difference between the two people, but as a question about the activity structures, and the pedagogy and the things that we as learning designers can control?" And so, over the course of grad school, I started really diving into trying to historicize politicize and make sense of what I was asking there. And later, I would adopt things like asset-based framings, and so on. And it would actually lead me away from the classroom to do some of that theorizing around what equity actually is.

**Monica Ko 08:50**

I think it's really introspective of you to, to look at that situation and ask that question about how do we, how do we attribute that phenomenon to the design of the learning environment rather than the individual? And I think that's a question that learning scientists are always asking, I hope. But it's something that I think could be easily overlooked. For folks who were maybe not so who maybe don't adopt the frame of, of performance as just one measure, right? And as unlearning, as is that an activity, an activity system that involves tasks, individual's content. So, I guess I'm curious. During graduate school, it sounds like you had a lot of different interests, and were kind of trying to figure out how these pieces fit together and, and perhaps that the methods that you were wanting to draw on pulled you outside of the classroom, and I wondered about how you navigated that tension, because I think in doing research we think about methodological tools, we also think about context, we think about theoretical frameworks. How did you identify in terms of your dissertation work? What the right place was to be to be taking all of those things and putting them together?

**Suraj Uttamchandani 10:18**

Let me answer your question with three stories. So, the first is actually kind of going back to that original question about what did I intend to investigate in grad school? And how did that shift. So, I was coming in fresh off of this undergraduate experience in math, really passionate about math, and also still thinking about these humanistic and social sciences ideas that I had adopted from my English classes, anthropology classes, and trying to bring this more holistic perspective to math. But also, I think the day before I left, my parents' home in New York to come to grad school in Bloomington was the day that Michael Brown was killed in Ferguson. And so, when I arrived in Bloomington for grad school, and we were in a hotel, I hadn't yet gotten the keys to my apartment, we were having breakfast, and the news coverage was all

about this. And this was a really crucial event in what became the Black Lives Matter movement. And then later, in my first semester of grad school, I saw that the police officer who had shot Michael Brown was not taken to trial, a grand jury had acquitted him. And in that moment, I didn't know what was right. But I knew something was wrong.

And so, I had started to attune to this question about like, what is justice? And there are some things that require really rigorous thinking, really rigorous historicizing to understand and there are other things we kind of know in our bones. Like, we know that that's not right when we see it. And because that event had happened, the day that I had moved to Bloomington, it's so colored everything that came after it, it felt like something that really shaped my thinking throughout was like, what are the material realities of people in the United States and different kinds of realities and who is treated how, and I knew in my soul that schools, and particularly public schools, but all schools really are social institutions. And so, things happening in society always can be seen in schools and schools construct society thinks that we do in schools have potential to change society. And that's an animating belief that I think, probably most learning scientists share and as part of how we understand our work to be part of a larger conversation or larger social project. So that was the first thing that's sort of more to answer the first question you asked. Then you had asked this question about sites and methodologies. So, in my first semester of grad school, I took a cultural psychology class with Dr. Cindy mela silver. And I was introduced to socio cultural theory as something that was always interested in pluralism and diversity, always interested in what people were up to, when they were motivated by their own, their own needs are left to their own devices in communities that matter to them. And that was how socio-cultural theory was framed to me in the very first place. And every other thing that I saw as a hallmark of learning sciences, or a common area of study in the learning sciences, such as STEM education, or learning technologies I saw as coming from that core socio cultural theoretical commitment.

But then I wound up taking some qualitative methodology classes, and at IU we have a super qualitative methodology program. And I took classes like discourse analysis, and feminist theory and methodology. And these classes together helped me develop a methodological repertoire that came with commitments about how we treat participants, as co researchers for other ways of organizing equitable research interactions, particularly with marginalized and minoritized communities. And those commitments from critical qualitative research really then shaped my research also in the learning sciences. The last story, I'll tell us that it was in my first year of grad school right at the very end, where Mike Pence at the time was the governor of the state of Indiana, and he passed the Religious Freedom Restoration Act, which was an act that would allow businesses to discriminate against LGBTQ plus individuals. This had these massive repercussions throughout the United States is a piece of legislation where there were boycotts of the state of Indiana, there were protests, there were other states banning travel to the state of Indiana on government funds and so on. And at that point, I realized that there was a real continued need for more equitable organizing of schools and learning environments for LGBTQ plus youth. And so, I became really attuned to that question sort of as a person, not necessarily related to my research. And so, it took several years after those events for all of those pieces to come together, the theoretical aspects of socio cultural theory that attended to learning in context and outside of school, the political questions about the kinds of things that I saw happening across the United States and their disparate impacts on



minoritized communities, and the methodological commitments of critical qualitative research. And it turned out that after many, many years of coursework and study those things actually really resonated with one another in really productive ways that made my research possible.

**Monica Ko 15:21**

I see your personal experiences, your prior experience as a student of mathematics, your methodological training and theoretical frameworks, I see that all coming together in your work. And it's lovely to be able to hear the stories behind how all those things came together, I wanted to turn to a paper that you put into the International Conference of Learning Sciences back in 2018. It's called "*Equity in the learning sciences, recent themes and pathways*". This paper was really written in a way to document the work in the learning sciences that quote "explicitly focuses on issues of equity, justice, and learner dignity". Tell me a little bit about why you felt the need to put this particular piece together. What did it mean to you personally, and what has been the response?

**Suraj Uttamchandani 16:06**

I see this paper as sort of the first paper that I wrote, as part of the trajectory of what would become my research agenda. And I wrote it for a variety of reasons. So let me set the stage a little bit. Right after Donald Trump was elected, as president of the US, there was a plethora of papers in the learning sciences that started to really explicitly reiterating the fields to how politics and ethics shape learning and learning environments. And so most famously, was the paper in Cognition and Instruction, I believe it was called "The learning sciences in an era of new US nationalism", or some such by the Politics of Learning Writing Collective. And that paper, and another number of other editorials started to recenter, our attention around these questions as, as scholars across the field, were asking now what. And I think it's important to note that those papers did not mark the beginning of this political interest, that there have been scholars who have always been interested in these issues since the genesis of the field.

But what is so productive about those papers was how clearly they articulated not only the history of that scholarship, but where we as a field might need to move, given the changing political circumstances, not only in the United States, but across the world. So it was in that climate that that this paper was written. That's the first thing I'll say, the second thing I'll say is that I had encountered in my day-to-day life, a lot of people who were really starting to become deeply attuned to questions of equity and having a desire, a strong desire to bring some kind of equity lens to work that they were already doing, but didn't quite know how to start. And I wanted to write a paper that would be Invitational that would say, you can start somewhere, you can start small and begin to work your way out, you don't have to have it all figured out. But you can bring a stance or an ethic around equity to your work without having all the vocabulary and without having all of the history of all marginalized groups. There was some tension in this though, because I had encountered a number of people who would also position all learning sciences work is equity oriented. And so far as learning sciences work is about creating more productive, more fun, more humanizing learning environments, about spaces where children could engage in deep inquiry, where people could take on identities as disciplinary practitioners, and they saw this work is fundamentally about creating a better world and therefore fundamentally equity oriented.

**Monica Ko 18:40**

What was your response to that stance toward equity?

**Suraj Uttamchandani 18:43**

Parts of that idea are quite reasonable. And yet, this sort of political and ethical turn asked us to pay increased attention to marginalization, history, politics and ethics. And in a way that sort of moved beyond that. And so there, there was a tension I was experiencing around this idea of wanting everybody to take some kind of equity lens, while also wanting not all equity work to be treated the same. That's part one. Part two is that I was taking my qualifying exams and as part of our qualifying exams at IU, you're sort of asked to review some of the literature in the area that you're planning to write your dissertation. And it happened to be that I was writing my qualifying exams at exactly the time the ISLS deadline was. And so, this was my qualifying exam paper sort of kicked up a notch and refined a little bit more. So that's the story of what motivated that piece.

**Monica Ko 19:37**

It's so interesting to hear about the backdrop of how these written pieces are put together. I actually remembering coming across that piece in the ISLS proceedings back in 2018. It caught my eye and I marked it as something to attend to but never got to the session. So I'm really thankful for this opportunity to dig into it here in this conversation. I wanted to get your retrospective take on the ideas that you Put forward. Now, four years later, in that piece you wrote, In this paper, I offer a set of pathways that characterize this work toward justice in the learning sciences work, which reflects a variety of means and ends. The pathways are, consider the goals of an equity-oriented framework for learning to theoretically draw on existing critical social theory, three methodologically focus on collaborative change making and for support heterogeneity in knowing and doing what's your view on those four pathways now? Are there new pathways emerging are on the horizon? And do you see current work in the learning sciences mapped to one or more of these pathways that you outline?

**Suraj Uttamchandani 20:45**

That's a great question. And one that I've been thinking about I. I think actually, if I were to make like some sort of major revision to this paper, what I would do is probably keep these four themes or pathways, but no longer call them themes or pathways. Instead, I might call them starting points or entry points, because one of the open questions I left at the end of that paper was like, Can you traverse one of these pathways without the others? And I'm not totally sure that you can, or even if you could, if it would make sense to or it would be fruitful? And one of the pathways was what is equity? Think about what we mean by equity. And that's like, not really a pathway that one can travel because there are, that's one of those things where there's both no right answers, but some answers to righter than others. As I think about that pathway, I think about equity is a field wide project where one individual can't possibly take on all possible equity lenses that we might want to have the field to become fluent in. And so that first one is hardly a pathway, a sort of a provocative, provocative question. And the other ones around theory, method and design, I am not sure that it makes sense to do equity work without a critical social theory or without any historicizing at least, or situating. But I certainly think that multiple kinds of methodologies can be mobilized and participatory are critical ways. And not all learning sciences studies are design oriented. Even though I think design oriented learning

sciences studies provide some of the best opportunities, we have to transform social circumstances, there's still a long history and plenty of use to naturalistic studies, in which researchers become involved in existing projects, just as the original communities of practice and cultural psychology studies did and help us understand what people do in these activist settings or when they themselves are trying to trying to create more equitable social structures. And so is there might not be a design piece in those kinds of studies. And so those questions about can you traverse one pathway or not? And are the pathways actually providing a path forward? I don't know that they are. So, if I were to revisit, I might not change the four categories. But I might reframe the paper entirely as starting points. entry points are ways to get your get your head in the game, get your hands wet with equity ideas. So, one way in is to ask questions about what is equity, one way in is to engage with critical social theory or other ways of situating situating the circumstances of a learning environment politically, historically, and ethically, one way is to methodologically engage critical perspectives that see participants as co researchers, or other ways of getting research to methodologically be equitable. And a fourth entry point, your starting point is to bring that heterogeneity design principle as a central concern to design. Yeah, and

**Monica Ko 23:42**

Even as you talk now, about those four pathways, the way that you are now reframing them, I almost imagine that they are sort of like these nested circles. And it really, to me, that first pathway is potentially what you're always going to come back to is like, what is the goal of this work? Right? I feel like one of the hallmarks of the learning sciences is the fact that we center the problem, and then we bring the appropriate tools to actually tackle that problem. The way that you're talking about this now for me is is making me think how we define equity will directly inform the body of literature that I leverage, the way I conceptualize studies, how I approach the work, what I think the levers are, and then there's also fundamental questions about the epistemology, right? That you're going to have to honor heterogeneity as, as a central way to think about knowledge.

I think entry points is a really, really good way to think about it because they're all interconnected, right. You know, the work that I do i I'm thinking about teacher learning all the time, but the way that you kickstart teacher learning, it could be through a variety of experiences, it could be through the things that you're seeing in the classroom problematizing the ways in which students are or are not learning or who is or who is not learning. And then it goes back to well, how do I think about learning what is learning? If or it could be through professional development experiences, personal experiences that I have as a learner, as I go meta on what it means for me to learn. So I love the openness of that. And I love that there are multiple ways in. You know, it all comes back to this question about what does it mean to really take up equity? What are some ways that I could start to begin to tweak and play and to learn more deeply? And then where does that take me next?

**Suraj Uttamchandani 25:33**

Yeah, I think what you said, Monica just brings so much so many rich ideas to the table. This idea of heterogeneity is fundamental to learning as articulated in papers by Warren and Roseberry. And colleagues over the years, it's a really challenging one to take seriously, actually, if we take seriously the idea that heterogeneity is something we have to support and



understand it's fundamental to learning environments being equitable spaces, we are immediately faced with some challenges around how we decide. And the authors in that first paper are quite clear that supporting heterogeneity doesn't mean anything goes. But it opens more questions than answers. And yet again, that's a stance or an ethic, as well as a design principle or, or an area of interest. I also think your comments make me think really hard about audience. I think it's so useful to always imagine the audience for a paper like when I'm working with students, I say like you can't just write for anybody at any time, you have to think about yourself as writing for a particular group of readers at a particular time and understand that like, not not all papers can do all things. And not all papers are meant for everybody. And so, if I think about this paper, I think it's situated for an audience of learning scientists who are feeling newly galvanized and wanting to take on these perspectives. And I say that thing like there are other papers that might have been written differently if my audience was learning scientists who had always centered these issues in their work, or learning scientists who needed to be convinced that this work mattered, or people outside the learning sciences who are in fields with long histories of really centered equity-oriented work. But this work was meant to be Invitational, it was meant to lay out starting points for somebody who was familiar with the learning sciences as a field, for whom something like CO design would be a natural extension of some of what they were doing. And so, the purpose of that paper was to be Invitational to say, to the reader that they should be able to start to see themselves in equity-oriented work, because I really believe that equity-oriented work requires all of us.

But if I really believe that, and I have to create those entry points and, and not to be gatekeeping, around equity-oriented work, but it's hard, because all of this stuff is limited. And I think this is one of those places where my own thinking has shifted so tremendously. And I understand this to be something that happens to most scholars, you know, in my first year of grad school, anytime I read a paper, I was like, "Well, why would they only do their study with six teachers instead of 1000? Then, you know, like, why wouldn't this technology, like automatically read people's minds and tell them what to learn or whatever, you know, and then over?" And then, of course, I started to do research. And I was like, "Oh, it turns out every paper that's ever been published is a miracle, you know?" And so, I feel like over time, I stopped taking that explicitly critical perspective. And so, when we talk about critical work and critical social theory, we're talking about work that is about illuminating things that might otherwise go unsaid, not necessarily critical. In a tear down sense. I think all critical work should be constructive that should come from this idea of a generative critique. As I think about that first entry point, what is equity? I think we have to understand that sometimes we need to fix the definition of equity that we can work with in the context that we're in working with our partners working in that particular space. For example, if we're working with white teacher in a predominantly white school district with a particular political set of circumstances around what books they can read, we should fix the definition of equity that helps us actually create a more equitable learning environment rather than one that constantly leaves us wanting more. And yeah, like, of course, we can always be critical. Of course, that's part of it. And so, equity is a stance, it's an ongoing project and not a fixed thing. And yet, I say all of that to say like, there's a difference between what the individual scholar might do and what we as a field might be able to do. And we as a field might be able to surface lots of different ways of thinking about equities so that any individual in the field can start to make positive change in their learning environments that will humanize learners, while recognizing that again, not all equity-oriented

work is equal. And this was a tension I was really struggling with at the bottom of that paper. How can we take seriously diversity? Again, heterogeneity not only in learning environments, but also in the field? How can we take culturally situated ways of thinking about equity, where the frameworks that I'm using in Indiana might not be appropriate or helpful in India? And so I think I think that paper is wrestling with some of those tensions around. What does it mean to take seriously the idea that we as a field should put equity at the center, without compromising on the kinds of heterogenous definitions of equity and perspectives on equity-oriented research that might actually help us make that larger impact?

**Monica Ko 30:34**

Yeah, I love that you talk about this is a field-based effort, right? I mean, I think what I really love about this piece is that you in some ways, lay out the terrain of what already exists. And for someone who is new to this scholarship, to be able to have that as a way to navigate through that literature is really, really important. But you're right, it's about this collective work of how we move forward and the different ways in which we do that, that we again can help us begin to problematize our own approaches, and think about how it feeds into larger systemic changes that we are all looking for. But I think in that piece, you're talking about sort of classroom-based shifts that we think can immediately impact the learner in how they engage with disciplinary thinking and reasoning. And then these larger systemic issues around how that discipline is being defined the different policies that are in place to, to lay those boundaries about what counts of science, for example, and what doesn't, those are all interrelated. And that's why I think that piece in particular is really, really powerful.

**Suraj Uttamchandani 31:39**

And I'll just say, as a last note, on that piece, that one thing that was really empowering or fun about writing that piece was also this sense of feeling like part of my project there was to uplift the work that already existed and not try and place my own my own research agenda at the center, but rather to say like, wow, I promise you there is enough of this work that we don't have to necessarily figure it out from a new, we can read together and build on some of the work that has been going on for a really long time. And I liked, I liked the opportunity to feel like that paper was a conversation. And I don't know that I could write such a paper again, because I was writing it for a qualifying exam. And so, it was kind of a particular genre. And I wonder if people who know that would read that paper differently than they would have, you know, we've all we've all been there. But I just want to call attention to like we were talking about a field a field-based project that that paper was a felt to me like such a lovely opportunity to be in conversation with scholars whose work I was really enjoying reading. And that was helping expands the possibilities for what I could see myself doing in my dissertation and my life.

**Monica Ko 32:50**

I want to turn to a piece that was recently published in the Journal of Learning Sciences, around your work in a youth led community organization, for LGBTQ plus youth. That organization you call I refer to as Chroma. I wanted to know a little bit about what led you to work with the youth in that group. What What drew you to considering this as a particular context for some of your dissertation work?

**Suraj Uttamchandani 33:18**

So, I had already talked about Mike Pence and the Religious Freedom Restoration Act issue. And after that had happened, I found myself wanting to become more involved in supporting the well-being of LGBTQ plus youth. And so, throughout the region, then Midwest United States, I was paying attention to youth led efforts. And there happened to be a panel at a school that I was able to go to where youth were presenting about, I think it was about gender neutral bathrooms and other kinds of issues that were really relevant. And I went to that panel. And I watched the youth present. And I thought that they had done something really magnificent. I thought that they had articulated the issues that matter to them in really sophisticated ways. And I thought that they had done something really brave by getting up there in front of an auditorium of people who were perhaps hostile to what they were asking for, and made a really compelling case that their lives mattered, that their well-being was important, and that that we as a community had not done enough to support them, you know, and that their end laid out ways that we could do it better. And so, I was at that school and afterwards I said I, I'd really like to do whatever, whatever this group needs to do, to support to support their efforts. And so so at the time, those youth were preparing to do a professional development for the teachers in their own school district about LGBTQ plus issues. We've written about that collaboratively with youth that's an A paper by Barbara Dennis myself, Bree blow Felton, Spencer berry in ethnography and education 2018. And so, the organization was asking, like, does anybody know anything about education? And so, at that time when I was volunteering, they had a need for somebody who had thought about learning and education.

So, I joined that group as a volunteer. And I stayed with that group as a volunteer for 234 years before it came time for my qualifying exams there. And so, I was debating between a variety of possibilities for my dissertation work. And again, for these qualifying exams. One of my committee members Kylie Pepler, asked sort of suggested to me, why don't you try writing about what it might look like to do this work with chroma for your dissertation in your qualifying exams. And if you find that it wouldn't necessarily be a good sight for some of the research you're trying to do, or it doesn't feel like it would be that productive, then you know, it was just a qualifying exam, it was just to try it out. But if you do, then you'll know that it's a productive direction to pursue, you know, and that that qualifying exam really was such a generative experience for me, because then I could sit down with my two committee members at the time, that was Dan Hickey, and Kylie pepper, and talk out those ideas, what it would look like to do work with chroma, there is one other piece that I feel is really important to mention, which is, as I've mentioned, time and time again, I had this really wonderful experience with a qualitative methodologist at IU, who were really helping me see where the learning sciences didn't have long trajectories, with some exceptions, of course, and things like participatory research, feminist research, some of these models around community based research that I think have been really growing in productive ways. But the that work has been done all over the place in other areas of educational research.

And thankfully, Barbara Dennis and Jessica Lester, my two other committee members who were qualitative methodologists, really helped me take that guided tour of the of the methodology literature. And so, I felt really fortunate that I had these pieces that I was able to bring together that made it seem like oh, okay, actually, you could do this work. And then

because I had joined Chroma as a volunteer and had been there for years, I was able to return to them and start exploring with them the possibility of how they would feel about me doing research in this space. And I feel that that the youth were extremely generous about that possibility. And I feel really lucky that that happened. And I also think it had to do with the fact that I had been with the organization for so long as a volunteer. And so I don't think it's, I think it would have been a radically different experience, if I had just had an idea that I wanted to support some query with and just like walked into that space and said, I'd love to turn a camera on, I don't think that would have been nearly as appropriate of an experience.

**Monica Ko 37:37**

To me that that is a real model for how to do this work, right? That there's genuine engagement, not for the purposes of collecting really great data to put out this really great piece, right? But because of your genuine desire to really understand how these youth come together, and do this wonderful work of advocacy, and how they learn how they learn to teach others about how to make these equitable learning spaces for their peers, your presence in that space, is fundamentally one where it's a frame of care, and concern and interest that leads you to, to be in that space as a partner first. And that transition to taking the researcher lens has some credibility and merit to the other members of that community.

**Suraj Uttamchandani 38:32**

Yeah, and I think you know, there, some advice I might give to a new grad student would be like, get involved in things that matter to you, not for research. But I also want to acknowledge that like, in some ways, I got lucky that I had been interested in a space that was that had been volunteering for a space that then wound up being an appropriate space for a dissertation. But time is of the essence as a graduate student and for all of us, and that it's not always possible to do this work. So slowly, and yet, I would love for the field to create some of the mechanisms that are needed to, to and I'm not sure yet what those might be. But I have been really intrigued by the slow scholarship movement that I best saw articulated, but from feminist geographers collective in a paper called force those scholarship against the neoliberal politics of the university, I believe, was the name of this paper, that that helped me learn about this though scholarship movement and it really made me think about how slow scholarship can also be more equitable scholarship, and also a little bit less heavy on the researcher, but your reference to Nal'ilah Nasir and others writing makes me think about how informed I was by this idea of politicized trust as part of equity oriented learning research in which participants feel that you have a political solidarity with them, you know that you're on their side. And that is not that easy to establish when you're working with people who are constantly being over researched and constantly being viewed Through deficit lenses, that people, you know, I think LGBTQ plus youth are right to be distrustful of many researchers, and they're right to worry about being exploited or worry that people nominally are invested in their well-being. But when push comes to shove, don't really believe that gender exists in a non-binary way.

**Monica Ko 40:19**

Right, right. I mean, so that focus on relationality brings me back to this concept of educational intimacy, which you introduce in this Journal of Learning Sciences piece, I want to know a little bit about how I mean that the piece to me is really about the conceptualization of this idea, sort

of putting it forth as a, as a concept as an argument of what was present what you could feel in the air as a member of the Chroma youth. And I wanted to know a little bit about the way you that you put that construct together, like you were saying earlier, that there's some there's some things that when you're there in the room, that you couldn't you can't put a finger on it, but you know, it's there. Was it that kind of an experience it? Or was it something much more nuanced and belabored, in the sense that you had to, you had to see it after really sitting with the data over long periods of time. I mean, I asked this, because there's so many different ways of, of coming to an idea, right. And then there's also the work of making it publishable. And I wondered how much of this piece in particular was about knowing that it existed, and making sure that you yourself had a good argument for its existence? Or if it was sort of more an emergent process?

**Suraj Uttamchandani 41:41**

I love that question. Monica, I think you asked a really beautiful question. And my answer is sort of both that and like, you know, when you find this, this idea, and then you find evidence for it, and the data, and then it sort of feels inevitable that actually you've seen it all along, much like the plot twist at the end of a good movie, or some bad movies. And I think I sort of knew that there was I knew relationality was really crucial in this space. And that has to do with how I came to it and what I was seeing in the air and like you said, but I also, you know, when I first sat down with this data, I was really interested in how these youth were developing conceptions of gender and sexuality. That was my research focus at the time, like "what is what is being learned about gender and sexuality?" And as I spent time in the data, I realized that there was no neat and clean way to understand that in this particular dataset. Every time there was some crucial insight about gender, sexuality, it was always along, alongside some kind of support, some kind of building some kind of critique, maybe some sarcasm, maybe a bit, maybe a meme, maybe somebody's trying to emulate the script of the Gilmore Girls, you know, maybe somebody's trying to talk like they were on Tumblr. And I said, and it became so evident to me as I combed through the data that you could not separate those insights about gender, sexuality and advocacy from these other pieces.

I was trained as a discourse analyst in the, in the methodological traditions of conversation analysis, and discursive psychology, by Jessica Lester, and then in the traditions of feminist ethnography by Barbara Dennis and participatory ethnography. And I tried to bring this, together with some of the traditions in the learning science is around participant observation and thinking about work by Fred Erickson all the way through some of the commitments of social design experiments to think about learning as a future organizing practice, and trying to bring all of those pieces together was really fun methodologically when it came to what that meant for analyzing the data. And so, as I sat with that data, I, I slowly shifted my perception from, from trying to find those really clean learning moments where I could walk away saying, like, look, the kids are learning, which I knew they were right. But also, I was so informed by the some of the queer orientations to to the world and to research that helped me start to question some of the binaries that I had been posing on the data that tried to separate clean learning environments, from the relational pieces of those learning environments, or bringing that queer energy to the to the data helped me move away from that kind of binary lens I was taking and start to see how those things weren't neatly separable, how they worked together. And so, I started to focus on that part, that kind of that kind of relation building. And then this



piece was to be included in the Journal of the Learning Sciences, special issue around learning and social movements guest edited by Joe Curnow and Susan Jurow. And because of that context, I felt really invited to start to think with scholarship on so movements through reading work by Joe Curnow and others, I was introduced to this idea of prefiguration, which felt to me like maybe a missing piece for understanding why that kind of relationality, which I knew was really important, couldn't be thought of as part of a learning experience. And I am still not totally sure that I pulled it off as effectively as I might now that I have grown as a scholar. But I think there was something really wonderful about being able to bring those methodological orientations to data, that sort of queer ethic, those ideas of prefiguration from social movements and those ideas as learning as future oriented from Chris Gutierrez, Susan Jurow, Shirin Vissoughi, and others in their traditional social design experiments, trying to bring those all together to say like, what is even going on here? And so, to answer your question, Monica, it was both in the air and something that I really did try and take a rigorous analytic micro-orientation to the discourse to help uncover.

#### **Monica Ko 45:59**

I know that you draw on and are inspired by work by Eve Tuck, Audrey Lorde, and others. And Eve Tuck calls, calls for research and scholarship to shift towards a desire and complex personhood perspective, right, pushing back on this deficit or damaged view of of learning. And I wonder about this idea of educational intimacy. I wonder if, what it's in response to or what you wanted to elevate, when you put that construct forward. I mean, to me, it seems like underneath educational intimacy, like you said earlier, there's sort of two things going on. One is this assumption that learning is fundamentally about shifting or building new relationships. Right. And I think we know that intuitively. But in terms of methodologically, capturing that, I think is one of the new things about this construct. But the second thing is trying to think about the prefiguration aspect to that there is that collective work is toward a future that is unknown, but that is being aspired to. So yeah, I wanted to maybe connected back to this idea of desire and complex personhood perspective. What do you think educational intimacy captures about what was happening inside Chroma for you? And why was it so important for you to put a finger on it? And put that out in the field? Like, what did you want other people to know about? About Chroma? And about the youth that were leading that work?

#### **Suraj Uttamchandani 47:38**

I'm having such a fun time with you, Monica. Two things. The first is that the idea that relationships matter to learning is, I think one that probably all learning scientists could agree on, I doubt you'd find, I think I'd be creating a straw man, if I said that I could imagine a learning scientist being like, "those don't matter". So, the paper was less about putting a stake in the ground that relationships mattered. But I felt that taking a queer and feminist perspective to relationships offered me some opportunities to think really hard about what I meant by relationships, and to expand the kinds of vocabularies and ideas we have for relational repertoires among people. Let me explain what I mean by that. Over the course of the last few years, as I was doing this study, lots of things happened. But like, here's an example I've lost some friends, right? I've had people ghost on me, I have made new friends, I have had people who have gone out of their way to support me in really superb ways. And I felt that I had a really limited way of talking about all of these people who were all sort of friends. And I needed a better way to understand like the the aspects of those relationships that made some of them

different from the others. I also have been thinking really hard about found family, chosen family, queer relationality, non-chosen family. And some of these, these questions this is raised for me as for example, like "what is considered a successful life course?"

And often in the United States that is framed as sort of single to married, ASAP. And there is sort of narratives around the other half and ways of thinking about people as incomplete unless their partner monogamously heterosexually. And it turned out that these sort of assumptions about about relational trajectories, I think, like fail to account for some of the gorgeous complexity of being alive, in which you can relate with others in all sorts of ways that are delightful. Another example, this is a great opportunity to shout out my undergraduate advisor way back in those math days. You remember those maths days from earlier on this call? Dr. Olympia Nicodemi was my advisor and she became such an important figure in my life. And we still talk mostly every week even as recently as last week. We were talking about sort of what my it'd be next for me and she was giving me some advice and all like this. And that mentor, the relationship has been so significant for me, but I wanted to call attention to it as like, arguably just as significant as as perhaps a romantic relationship or a sexual relationship. And so while I think that relationships really matter, the discourses around relationships that matter for learning, and relationships that matter for being a complete or solved person seemed to be in some tension and and queer and feminist lens helped me start to try and resolve that tension or illuminate that tension, or offer us some new ways of lenses or vocabularies on relationships as they matter for learning that might, that might help us as a field, better design for for better learning experiences, or acknowledge the kinds of relationships that are really high stakes. That's part one of my answer. And that's sort of my theoretical, what do I want us to get out of it?

But the other question you asked is sort of what do we need to know. And that brings me back to, to the Religious Freedom Restoration Act. I felt so sad, discouraged, upset at what I sized, the day to day dehumanization of LGBTQ plus people in the United States, and especially LGBTQ plus children in schools, schools, you know, and I felt that understanding that political context of what was happening in Chroma made it all the more significant that was happening was a kind of counter spacing, a kind of freedom, and something that youth deserved, they deserved the opportunity to mess around and have fun and be sarcastic and have a good time with one another in schools too, as they were learning in schools. And I don't know that these particular youth were always deprived those opportunities in all classes, although of course, they were working really hard to create those more equitable school environments. But I knew that even to this day laws are constantly being passed that are explicitly designed to curtail the freedom of LGBTQ plus youth in schools. And they are dehumanizing laws, they tell you that they don't know who they are. They tell you that who they are, is broken. And they tell you that who they are as Mom, how can that be? How can that be? And so, I feel that part of what I set out to do in this project is bring that that suspending damage lens to say, that's why that prefiguration lens was so important to me to say like, what what are we talking about when we're talking about dehumanizing students, often that has to do with the relationship between the student the school, the teacher, the society and power structures, right. But we can also see traces of that and how students relate to one another. So, I think I think there is a very direct thread between that very first, that very first wake up call, wasn't my first wake up call,

but that that moment with Mike Pence, or Religious Freedom Restoration Act in my first year of grad school, all the way through to this paper.

**Monica Ko 52:58**

Thank you for that. It was a beautiful response. I want to talk a little bit about what you're up to now. And where you're hoping to go next. I know that you've taken the time to initiate a South Asian Learning Sciences Research collective. Can you tell me a little bit about what sparked that initiative? And then some important takeaways that you've been learning C, have you been engaging with Indian scholars?

**Suraj Uttamchandani 53:25**

The original idea of the South Asian Learning Sciences Research Collective is that we were at a graduate student conference Learning Sciences graduate student conference in Nashville at Vanderbilt in 2018, I believe. And we just noticed that there were quite a number of Indian graduate students, and it might be nice to have some sort of way to connect. I grew up in the United States as a member of this in the diaspora. And I have had experiences that have been shaped by that positionality and history, and many other members of this group where folks originally who had grown up in India or elsewhere in South Asia and had come to the United States to do graduate school. And so the group started as just a way of having community and just to sort of support one another, but also grew to become interested in how we could theorize the way that those, those positionality shaped our understanding of teaching and learning and the learning sciences, and from that, of course, turns out to be a non-trivial project, you know, and that that impulse brought us to really start to think about working together in ways that could surface that what that meant, and it meant having to get our feet wet with history, and politics and movement and heterogeneity. It turns out that you know, South Asia, one in four people on Earth is South Asian. So, it turns out, they're not all the same, who knows. So, so that work evolved to to help us start thinking about issues relevant to our communities, such as caste oppression and read together about some these issues and it led us to submit a grant to the International Society of the learning sciences, affinity and regional outreach grants program. And this was me, Vishesh Kumar, Gayithri Jayathirtha and Deborah Dutta.

And the purpose of that grant was to hold interviews, much like the interview you're doing with me, with scholars who were working in this in the case of this particular project, specifically in India, and I'm happy to explicate India versus South Asia, but in this project, specifically in India to help us understand what kind of work was taking place in India that would be recognizable and legible to the learning sciences as learning sciences work. And that could help us shape and build our understanding of what it means to take an Indian lens to the study of learning. And that project began with these intentions and has unfolded and I believe that website will hopefully be live by June 2022. And that project has really as we started to conduct those interviews, our questions for our participants really changed. And we started to become increasingly curious. And we started to realize that there was not going to be some easy or obvious Indian perspective on learning, but rather that we needed to take a much more storytelling approach to be able to surface in nuanced ways, how these political circumstances shaped the kind of work that people were doing, and how and how we could learn from it. And so, so we really wanted to move far away from an extractive model, but rather to a more

dialogical one, and to one that brought attitudes with curiosity to bear. And as that work unfolded, we encountered, of course, a number of tensions, like what does it mean to represent to put something up as representative of Indian Learning Sciences? What does it mean to elevate particular perspectives at the expense of others? How might we capture so much of that rich diversity in a country as large as India without tokenizing? And it turns out that those questions had no easy answer. But it has been such a pleasure to explore with these collaborators and others, what those questions mean for understanding learning and for projects that try to decenter the global north and the global West, in learning science to studies. So that project is sort of coming to to get ready to be released publicly. And the takeaways have a lot more to do with the tensions and the questions that we encountered as we sought to understand ourselves and our communities better and less about any singular takeaway.

**Monica Ko 57:31**

I'm really looking forward to the work that comes out of this. Yeah, I want to thank you first, for your generosity and your time, I want to conclude with a couple of things that I'm that are coming, they're rising to the surface for me, not just about your work, Suraj, but about you. I think there are three words that are coming to mind for me, and one is sort of the expansive, generous in the Invitational nature of your work, that I see it as being intimately related to how you position yourself in the world and your relationships, I see a direct connection between the spaces and the experiences that you create, or situations that you put yourself in as being directly related to your body of scholarship. That's really exciting to me, and I think says a lot about who you are and how you approach this work. I think the other thing that comes to me to mind for me is that the word community, I think every single thing that we've talked about today can be traced back to your relationships with specific people at different time points in your life. And what you weave together is this storyline of how it all is leading to where you are currently, but also where you're going next. And I think being able to pinpoint those experiences, those people the words that that been exchanged, in seeing that as part of your story has been really, really neat to hear about. And the third word is sort of humanizing. I think that you have a really special way of thinking about equity and justice in a way that is not divorced from, you don't see it as a concept, you're not striving to understand it in your head. That is something that you feel in something that is really, really meaningful to you.

**Suraj Uttamchandani 59:26**

Thank you for that. That is just really that's really kind of you to say those things. I think that situatedness of learning means that we are situated in relational webs and in political circumstances, then that has helped me feel like I can move away from some of that individualistic focus that is so necessary for some kinds of scholarship towards scholarship that sees itself as part of a larger conversation and part of a larger network and measures itself against not only what it has done for the individual, but what it has done for the people who come next and for the communities that That individual works with. I'm really happy to, to be here and chat with you about about this and I appreciate what you've said.

**Monica Ko 1:00:09**

I'd love to hear what you took away from this conversation and connections that you see to your own work. Send us an email at [humanslspod@gmail.com](mailto:humanslspod@gmail.com) and find us on Twitter at

@humansLSpod. This podcast is co-produced by Andrew Krzak and Mon-Lin Monica Ko. Our work is made possible by The Learning Sciences Research Institute at the University of Illinois at Chicago. Thank you for listening!