

# Beyond Inclusion: Teaching for civic engagement and participation

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NORMA HOLLEBEKE: Welcome to the Every Learner Everywhere strategies for success through equitable digital Learning webinar series for 2023. It's a pleasure to have you with us today. My name is Norma Hollebeke and I am the manager for network programs and services with Every Learner Everywhere.

Before I introduce our speaker, I'd like to take out just a few minutes to tell you about Every Learner, Everywhere and the mission of our network. Every Learner Everywhere is a collaboration of 12, higher education organizations with the expertise in evaluating, implementing, scaling, and measuring the efficacy of digital learning and its integration into pedagogical practice.

Every Learner Everywhere is one of three solution networks sponsored by the Bill and Melinda Gates Foundation. Here at Every Learner, we work with colleges and universities to build capacity among faculty and instructional support staff to improve student outcomes with digital learning. Our mission is to help institutions use new technology to innovate teaching and learning with the ultimate goal of increasing student success especially for first generation college students, poverty impacted students and students of color.

A quick housekeeping note throughout the presentation, we welcome your questions in the Q&A or in the chat sections. If participants raise their hand, we will not be able to unmute them. However, we will be monitoring the Q&A as well as the chat. As a biology professor, myself and a recovering dean, I'm excited about today's discussion beyond inclusion teaching for civic engagement and participation.

Our speaker today is Bryan Dewsbury, an associate professor of biology at Florida International University, where he is also an associate director of the Stem Transformation Institute. Bryan received his bachelor's degree in biology from Morehouse College in Atlanta, Georgia, and his master's and PhD in biology from Florida International University in Miami, Florida. He is the principal investigator of the Science Education and Society Program, where his team conducts research on the social context of education.

Dr. Dewsbury is a fellow of the John N. Gardner Institute and the Racially Just Inclusive Open Science Institute. He conducts faculty development and supports institutions interested in transforming their educational practices pertaining to creating inclusive environments, and in this regard has worked with over 100 institutions across North America, the United Kingdom, and West Africa. He is the co-author on an upcoming book, Norton's Guide to Inclusive Teaching, and author of the upcoming book What Then Shall I teach? Rethinking Equity in Higher Education. Dr. Dewsbury is the founder of the National Science Foundation funded deep teaching residency, a nationwide workshop aimed at supporting faculty and transforming their classroom into more meaningfully incorporate inclusive practices. Bryan is originally from the Republic of Trinidad and Tobago, and proudly still calls the twin-island Republic home. I will now hand it over to Dr. Dewsbury.

BRYAN DEWSBURY: Well, good afternoon, everyone. East Coast time. Good morning wherever you are. Norma, I wonder how long it takes to recover from being a dean. It's funny, you refer to it as that. But anyway, I'm glad to be here, and I really appreciate the invitation. I want to spend the next 40 minutes or so. And I've set this up so that we hopefully have a little bit of time at the end to field some questions because a lot tends to come out of that interaction.

I want to spend the next 40 minutes or so talking to you about how I think about the classroom and maybe broader discussions of what I think, and my team thinks, and people who engage in this type of work with me think education can and should be. And I generally like to start these conversations by showing you this picture and describing to you what this bench means to me.

I won't go into all the detail, but this bench is situated in the middle of the campus of Morehouse College. It was the bench that my parents sat me down on at the end of orientation week, which apparently is a thing first generation parents do. And said to me that they've given me, and I quote, "We've given you all that we can."

At the time, I didn't realize that what they were saying, in effect, is this fancy term we use now called social capital, this fancy term we use called navigational capital. They were saying that as people who hadn't traveled the journey, I was about to travel, but who had faith in that journey would bear some fruit that would take me to a different life than they got to experience. They spent all their capital up until that point.

So in my later years when I would come to understand the significance of that moment, it definitely deepened my resolve and respect for what it means to have parents invest that type of thinking, that type of faith, that type of hope in you. But what the bench also represents, my friends, is a notion that from where I come from, from the communities I come from, from the extended family from which I come, that will always be my roots, no matter where this journey takes me. That space where you can be yourself where you're no longer code switching where you feel the body temperature just decrease into a state of relaxation like no other, that will always be the ultimate sense of belonging.

And I say that because sometimes we get caught up. Sometimes as academics, we get caught up in a style where everything has to be described as a framework, everything has to be described by a theory, everything has to be described with citations. I'm not here to tell you that we shouldn't be scholars, but I want to remind us that especially those of us who traffic our scholarship around issues pertaining to marginalization, we have to remember that we do this in order for the uplift and for the agency and for the rights and the justice of that population.

So, in other words, we must be able to discuss the things that we do, not just in ways that grants us entry to the conference at the Hyatt, but in then where is that everybody, college-educated or not, can completely understand. This is not even a critique directly to academics, this is me casting a shadow on this system because I get how it works, I get what tenure is asking of us. Is asking for the esoteric stuff. Get it out four or five, six times a year, and in return we'll grant you a permanent position.

But we are in times that is perhaps calling for a different kind of academic. And the question remains, are we brave enough to be that kind of person? Long before we had terms like active learning, and community cultural wealth, and an identity contingencies, and sense of belonging. Long before these terms were defined and redefined and interrogated in the academic literature.

We had people during the Civil rights era and before who understood that granting agency to individuals is a key component, is a critical component to building a society, to building a just society. So when Bob Moses, as a member and a founder of the Student Nonviolent Coordinating Committee were going to Mississippi to organize voter registration drives, they understood and he discusses this in his book *Radical Equations*. They understood that they had to build trust. They had to build relationships

with the Black people in Mississippi to the point where they coming from the outside, coming from Ohio, coming from Georgia, would be seen as family.

They understood that no matter who they communed with, what qualifications they had academically, how they spoke, they had to see leadership potential in everybody that they work with. And I can go down the rabbit hole here of there was a little bit of a not so much conflict but notion that should you rally around the charismatic leader, which at the time was MLK, but do you have a bit more of a grassroots approach where you empower your body? They understood that you had to assume that the potential for leadership was present. And your job as a leader of a community was to help people see that potential.

So when Bob Moses later went on to become a math professor and viewed and articulated numeracy as a civil rights issue that he wanted to take on as an academic, some of the same principles that were used to enact successful voter registration drives in Mississippi, he applied to the founding of the algebra project.

We don't always have to have the terms and the words. The fundamental question that drives all of this, and this is not a question we ask often enough. What is the goal of education? And I say education because you get pigeonholed, sometimes unintentionally, as the person who studies and talks about inclusive education.

But I will let you in on a little secret. I am hoping that sometime in the near future, that education doesn't need a prefix, that teaching doesn't need a prefix, that you understand that to do this well is to do it inclusively. That's the only way it's considered a quality job because it's cognizant of who's at the table and who's not at the table, not just in the classroom, not just at the MLK breakfast, not just at the International Food Festival, as a defining feature of how the campus and the curriculum is orchestrated.

So with that assumption in mind now, I ask, we should ask, well, what's the goal? Why are you asking human beings of various demographics across the country to go through a formal K through 12 system and then go to college earnings will be higher. Is the whole goal just to make more money? I don't think so. I don't think that most people would respond in that way. I think most people will agree as John Dewey said back in the early 1900s that we are preparing people to be civically engaged in Democratic society.

And I know we can quibble terms here. I am not here to assume that we all mean the same thing when we say the words demographic or even when we say the word society. But it or not, we in theory at least have a system here where everyone is supposed to be active, partakers in how tax dollars are spent, and who represents you in where schools should be built, where roads should be built, what sort of fiscal responsibility we have there. They are technically mechanisms where we should be partakers in that decision and not idly stand by while others define our realities for us.

So when we use the word participation in democratic society, right now, I submit to you that we are primarily designed our education system for technical participation. We make fabulous doctors, and lawyers, and engineers, and writers, and mayors. And I am not against that. We got a vaccine in two minutes because of science. Hallelujah please, let's keep pushing that. So as a take away from this, please don't say I am against the development of subject matter expertise.

But I am saying that education is asking of us a second participation, which is civic. And that civic participation is not something that you outsource to your general education program. It is not something that you assume that just because you made a really good biologist, that those persons will imbue the values necessary for dialogue across difference, for respectful disagreement, for understanding the different experiences that people have and bring to the table. Don't assume people will self navigate to those values. Those values have to be imbued within the structure of even a science class. And so in this civic participation, I'm suggesting three types. And one, is the power of dialogue. Can we disagree and commune across difference? Can we assume as a given that inclusion is a precursor to a quality academic experience? And once inclusion happens, then comes the beauty of learning and discovering what unique life patterns, what unique points of view, what unique backgrounds that people bring to solving beautiful problems.

So when we use the terms diversity and inclusion, recognize that diversity is a descriptor. Diversity just tells you that you have a suite of different things present. Inclusion is a thing you do that capitalizes on that. So it's not good enough to just have the healthy mix. What added value does that bring you-- not just bring you, but what added value does that bring to the overall experience?

Secondly, civic participation is about problem posing and solving.

The problem here sometimes is we don't really live long enough to fully appreciate how much of an experiment this society is. This is a term I'm borrowing from Jill Lepore, actually not Jill-- sorry, David Rubenstein, his book, *The American Experiment*.

And I don't mean experiment in the sense like, we don't know what's going to happen. I mean, experiment in the sense that from the moment of the declaration of the independence to now, it's literally a matter of you try this, you try that. You have different voting patterns. You try to hold power accountable. You ascribe value to different things. You assume certain people shouldn't vote. Some people shouldn't be in school. I'm not absolving any of these mistakes, but these have all been part and parcel of the experiment.

So I'm here to applaud the progress we've made on several of these issues. But we've made progress on these issues, partly because people have been brave to go out there and speak truth to power. People have sacrificed their lives. And frankly, people have looked back at history and said, oh, that was a mistake. We need to be different.

So when we do critical thinking and intro bio, it's not simply a matter of I want to teach you how to solve-- to do experimental design and solve problems related to genes, and plants, and things like that, it's a mindset. It's a way in which you apply a style of thinking that you apply to all areas of your life, including the propensity to be wrong, to be OK, that the answer that you propose. The declaration it says we submit these truths to a candid world. You are OK with being challenged because it's in the challenge, and it's in the proof and the finding of evidence that you make progress. It doesn't just apply to scientific inquiry. It can apply to life as well.

And lastly, civic participation refers to being aware of how power unfolds, how power can corrupt, and how power needs to be held accountable. This is not to say that once people get power, they will become corrupt. I'm not at that level of conspiracy theory and probably will never be. But we have three branches of government for a reason. We have checks and balances for a reason.

And one of the reasons why we educate is so that you student, citizen, participant, human. We need to position you to always ask the right questions of power. And that begins in the classroom. This is not just because Bryan walks in this room with a nice shirt and a tie and speaks in a loud Caribbean voice because the textbook has all these pretty diagrams and it costs \$200. Well, I don't charge that. I don't do that.

But because it's well written that you just accept everything you're told are allowed to ask questions. In fact, I encourage it. And we design the whole class around solving questions because I am subliminally preparing you to develop a mind where you are always in a mode of where is the evidence? So I want to-- just focusing on the civic participation here, I want to talk a little bit about what really is my favorite class. With all due respect to the other classes that I teach.

Intro, bio, and quite frankly, intro anything, as anybody who's taught those classes can tell you, it's a truly special place. I'm not just saying that to say it. I know all the stats. All the students that don't get retained I've seen the data that gets disaggregated and what happens. I've seen it. And it's because I've seen it, partly because I've seen it. I understand the responsibility I have when I'm in an intro class.

They like to use the word sometimes gateway. It's a gate, but it's an open gate for us. It's a gateway where I'm standing at the door with my arms wide open, saying, welcome, I am here to see the potential that you have, and I'm here to help you see it even though you may not have seen it yet. I'm not here to figure out which of you have come more prepared or less prepared, and I'll only accepted the top 20% because you've deemed yourself worthy to go on to become a biologist or a doctor no, no, no. My job is to walk you to that place where you see your potential as clear as day.

And that, my friend, is really why intro bio is more about the intro than the bio. Because once I get them to that well, they don't need any help drinking. Once I get them to that place, I can walk away knowing that my job is done. And even if getting them to that place means that you walk away with maybe not the A in class, this is not a everybody gets a trophy situation. Your grade reflects the journey of learning that you underwent or where you are in terms of your mastery. But what you leave with is knowing that this is something that you can do for real.

So just because of time, I want to focus on two of the three civic participation components. And just give you two examples of what it looks like in an intro bio class. And what I want to say here is-- and this is important because I think a lot of times what people want, and this is it's a fine request. What they want is 10 things that you could hand them on. If you do this, everything will be inclusive and equity-minded.

But what that often misses, is the reality that much of the behaviors of which I'm speaking about the cultivating civic engagement, and values, and respect for others, and equity-minded approaches, they are not explicit. They're implicit. They are more about

how you engage and how you communicate with students and each other as opposed to , make and have 10 clickers. Otherwise your class is not active enough.

So something as simple as group work, which we like to call opportunities for dialogue, is a well-honed, well-discussed active learning strategy. And even if you in the field of engineering, they have whole different ways to form groups. And I'm here for all of it. But we like to think of this as a real opportunity for students to get formative experience in deliberative democracy. So I have to set this up.

This is a large class 155 students. So I get my roster a couple of weeks before class, but I also send them a survey. Killpack and melon 2020 Journal of Microbiology and Biology Education. first Day in Full Sheets is the name of the paper. And there's 16 questions. And they are mixed. They are-- Tell me a pronoun. Tell me what you would like to be when you grow up. Tell me what grade you expect to get in this class. Tell me if you work. How many hours do you work. Tell me what your internet your access to high speed internet is like. Describe one thing that a teacher does that you like. Describe one thing that you hate. Describe something that you're good at.

And then I also send them a reflective assignment that essentially asks them to write about their sense of why I steal it, or should I say borrow, since this is being recorded from NPR. [Thisibelieve.org/guideline](http://Thisibelieve.org/guideline) And by the way, I do contribute to NPR, so technically, it's borrowing. The prompt says something along the lines of describe the values that shape your deepest passion.

So what I have now, before they're physically in my classroom, is a lot of information that's really helping me get to know them, not just as a student with an ID number, but as a human being with nuance, with a history, with a story. And so I carefully create groups that are diverse, not just phenotypic colors, but background, high school. Who works, who doesn't work. Because I'm setting them up so that when they are in a team trying to solve a problem, I understand that based on their life experiences, they may learn something different from somebody who's experience in that particular area prepared or exposed them differently.

So that means that I also have to give them the assignments that brings that out. So don't just solve these 20 biology punnett square problems and hand it in, write me a group essay. Look at the experimental design of the Tuskegee study, and analyze every portion of it. Look at the discovery of DNA and look at the individuals involved. Look at

who took Rosalind Franklin's data and reflect on that. Play the role of Dr. Otto Gay who removed Henrietta Lacks cells. And have a debate and record that debate and identify somebody to write a consensus opinion, Supreme Court style. So the assignments must be structured in a way that capitalizes on the beauty, that is the diversity within the group. Then I also have to assume I have to expect that some of the stuff I'm asking them to do is not easy. For some students, this may be the first time they are being made aware that these things actually exist. And because of the nature of the subject matter, it can bring up some feelings.

So before the semester begins, well, like first day of class or second day of class, we have a class wide discussion and read something called guideposts, which is a list of statements that says things like respect silence. When things get difficult, turn to wonder. Everyone has a right to speak their truth. So we are actively setting up the cultural norms that's going to guide how these discussions take place.

See, I'm trying to lay this out as carefully as I can, because sometimes around the country, you will hear the discussions of these types of topics being portrayed in a reckless manner, being portrayed as though the brands of the world just walking in there and saying, here's all the bad stuff that happened. America is a terrible place. No, no, no, no. We're telling the whole story of science. And in telling that story I'm getting them to engage with each other.

And the times when we weren't so great on some things. You get to discuss and commune with your peers on. But then how do we do better. What have we done better and how do we do even better as we move forward? So when I talk about critical consciousness it relates to similar topics.

I need to remind you it's a 15-week semester. We talk about the wonderful things that science has done. I'm 43 years old. When I was growing up in the '80s things like HIV was a death sentence. Things like cancer, it was just assumed you die, you go back 100, 150 years ago, pregnant women lost half their teeth. I'm not a progressive phobe. We talk about all of these miraculous things.

But we also talk about the fact that at times, science was OK with using its principles to justify continued racism, continued exclusion, continued classism. And we talk about what that growth is like because we're not where we need to be yet. Have we progressed a lot? Absolutely. And we talk about the fact that Bryan is a social science

researcher, goes through a lot of training and a lot of application because we've learned from Tuskegee what happens when these things don't have oversight.

So in other words, my friend, we've made progress and we will continue to make progress if we keep ourselves and our students in a space of learning. What else can we learn to do better? So one of the things with this approach is that immediately we put aside this notion that an intro science class had to cover an obscene amount of chapters.

And I understand the model, I've grown up with that model. I know how the culture of higher education and science, a lot of times, our professional value is tethered to subject matter expertise. And so teaching-- when people talk about teaching they typically follow the word teaching with what. I teach chemistry, I teach biology, I teach literature. But Elizabeth Moorehead, in a 1996 paper to me, turn that statement on its head by saying, "I don't teach subjects, I teach students." And I want you to really reflect on that, because if you really teach students, then you need to know a whole lot more than just chemistry.

And I'm saying this to you being fully aware of the implications of that statement that many of us, myself included, were not trained to develop all of the skills associated with cultivating internal motivation, with understanding history, with understanding social factors and its impacts on students being able to be fully present in and experience, on the complexities of the higher education system, on so many things that goes into doing this well.

Once you say teaching subjects, we have to restart a conversation on what we actually collectively mean by teaching-- so teaching students by I'm sorry. But what is important and beautiful about teaching students, is that in thinking about our teaching and our classrooms in this way, we are, in effect, reconnecting ourselves with the preparation of people to be democratic participants. We are not just in the business of cultivating technocrats. We are not just in the business of getting people ready for career race that one day they'll win because they'll have six or seven figures.

We are also thinking about values. You're also thinking about community. You're also thinking about empathy. And so the ways in which we design activities and we-- well, just the entire structure of the class. In one of the papers I've written, I use the term

classroom climate. It is undergirded by that mindset. So we cut about 35% of the content that we were handed.

And when I say we were handed. Here's how this-- hybrid is a funny place, y'all. It really is. You show up, you get hired to teach a class, you get hired to be a professor. And your contract typically starts one week before semester starts. Let's pause there for a second. What is that telling you? That is either the University telling you we're not going to pay you to do curriculum design. Number 2, we don't think you need to do curriculum design, or we think you can do it in a week. But number 3, this is not something we value.

Do you notice research professors get a course release or two but you have a week to do and teach 200 students three classes? And so what happens is you come in with the lowest on the totem pole. And you handed the syllabus that whoever had it before you and you implement that. And contracts are yearly or every three years, depending on if you're a teaching professor or not. But there's a don't rock the boat sort of feeling to it. So the desire or inspiration to engage in meaningful cutting and really asking questions about what needs to be covered, the environment is typically not there for that to happen.

And I guess we just-- just felt like, look, man, this is just not-- this is not what I want to do. A lot of people and thankfully have talked about journeys towards having a more active, inclusive classrooms. And I'm glad to see that happen. But I could tell you I was just never a stand in front and talk to you for an hour, three times a week person. And it to me, it was clear as day that model is some well-designed YouTube lectures away from being completely outsourced. Perhaps that lecture for a different day.

So we cut about 35% of the content we were handed. In order to make space for more group discussions, more writing in the classroom, more debate in the classroom, more students teaching students, more problem solving. And we do this by-- we have a forum on our learning management system where after their readings and they watch a lecture offline that's 15 minutes long or whatever, and the topics, they input-- here's the things that we are still struggling with.

And so when we meet face to face, we just discuss the misconceptions. I don't rehash the book. I don't summarize what chapter 5 said, I just-- you're still getting tied up about meiosis II? We're going to talk tomorrow about that. That's what the class will be on.

So I'm still holding them accountable for what's not discussed.

But the time in class must be value added. So even with that, cut to the 40%. And so you can imagine when we reduce the DFW rates from 40-- well, more like 35%, 40% to 6%.

The obvious pushback was, well, Bryan if you're all going to talk to them about less things, then obviously they'll do better. You're making a class easy.

And it's actually unethical because when they get to that second semester and/or their sophomore classes, they will fall flat on their face. You can download this for free as open access to plus 1 paper. And you'll see in there that not only did we reduce the failure rate, But when we tracked the students in the inclusive and active pedagogies classrooms into the a sophomore year, they outperform statistically better outperform students who were in classes that had all the coverage in the world.

So it would stand to reason that if our reducing all of this content in favor of doing more humanistic engagement was setting them up for failure. This should have been falling flat on their faces in subsequent classes. And because we are researchers and we are especially STEM education researchers, the temptation is always to have these discussions in terms of you're closing gaps and more people pass and retention increase. And all of that happened. I'm glad.

But the story I want you to walk away here with is that there were more students in this model that we provided an opportunity to be participants in this society in the ways that they want it to. We didn't just help them pass bio and do bio better than the other classes. We showed them a way of engaging the world that will stick with them well into their adult life because that's the role of our classroom. That's our goal here.

I want to pause here and just-- I know we have a little bit of time for questions, but we may not have time to get to all your questions. So if you do want to reach out and ask me anything directly, this is how you find me. I promise you, I don't do Twitter bites. It's not my thing. I just tweet articles and discussions that I find interesting. But several of my most treasured interactions have come after giving talks like these over email months, weeks after. So thanks again for spending your lunch hour with me. If you're Eastern time and morning with me if you're on the West. And I will stop sharing now so we can take some questions.

NORMA HOLLEBEKE: So we encourage you to go ahead and post your questions in the Q&A section, or post them in the chat. I know that what Dr. Dewsbury has said so far has been very thought provoking on my part. I'm still mulling through a lot of that. So I

do have a question more in terms of what inspired you when you transitioned from being a biologist to really embracing learning and the fact that you weren't teaching a subject that you were teaching students? Was there one or two things, or was there something that really put you into that new uh-huh moment?

BRYAN DEWSBURY: Yeah, there was. And I'm glad you asked because I actually did have a slide on that, but I pulled it out because I was worried about time. So I'll go ahead and answer your question reimagining that slide. So when I was a grad student, so I did master's and PhD. Master's, I was actively advised to avoid teaching. I was actually told like to do well in grad school, you want to teach as little as possible.

And so the grand prize, the thing to get was a research assistantship because that meant you did research in the lab connected to your actual project. And you just-- to maximize your lab time. But it's not cheap for your advisor to get that, so eventually when I was doing the PhD, I quote unquote "Was forced to teach" because you had at least a two semester teaching requirement.

I have to tell you, Norma. There's no other way to say this, but when I taught my first class, I really had a road to Damascus moment. I was a lab teacher, as most grad students are in science, and you have all this downtime between when things are running. And so, you've talked to your students and you kick it with them and have some interesting conversations about life.

And I would talk to them a lot about the-- I taught obsessively pre-med bio class, and I would ask questions about why, and they would give me some interesting back and forth. But ultimately you would hear things like, my parents said, I have to do this, first generation American. And we see this as a path to economic stability. And you really realize that they came in, 17, 18 not really having an idea of all the beautiful things science can be, what you can do with it because no one's had that discussion. So you had really two constituents, professors and students who were living in almost two different academic worlds.

PhDs thought you should automatically get excited about all my butterflies just because I told you. And then the students here saying like, look, man, I need to get to med school. I need this GPA, I need-- so for them, this was a utilitarian experience. Give me the good, I'll take the good and keep moving. And unless there was real dialogue between those two, both would just keep marching forward, but just in a completely different direction.

And I think that experience, Norma maybe reminded me of my own undergrad experience the good, the bad, in between, but especially the good. And the good where professors who actually saw my humanity and asked me about my well-being and how I wanted to change the world and how that made me think versus the professors who just wanted to see if I got an A or not.

And as much as I enjoyed my science work, which was marine ecology and I did a lot of diving, it was great stuff, sometimes you're fortunate in life to have an experience that's a calling. And when it's a calling you answer and you're answering not because of the title and the salary and the promotion, you're answering because you're answering something greater than that. And that's a call that you hear every day you get up to go and do it. So it really started with that class and to the point where if you came to my office-- I a picture of them on my office wall because that's how important they have been to who I am now.

NORMA HOLLEBEKE: I find that interesting because I had a similar experience when I was in grad school. My professor at the time was very much so you're spending too much time with your students. As a TA, I had both an RAship and a TAship, but as a TA, I had that desire to really interact with my students and make them not feel lost.

And he made that comment to me. You're just spending too much time with them. They're not important. And that was one of my epiphanies as well, is that they are important. They are the next generation of biologists. They're the next generation of citizens. So I think that's really interesting. I'd like to see us break out of that. If we're still in that cycle. I would like to see us break out of that to see that the learners are at the center of this. And it's not all about-- as much as I love butterflies and stuff, it's not just about the butterflies.

[LAUGHTER]

BRYAN DEWSBURY: No disrespect to the butterflies of the world.

NORMA HOLLEBEKE: We do have a question. The source that you gave for that 16 item survey was from the journal of Microbiology. Could you reshare that--

BRYAN DEWSBURY: It's a journal of microbiology and biology education. It's called JMBE for sure, JMBE. If you put all caps JMBE. And if you're using Google Scholar, you can look up Killpack, K-I-L-L-P-A-C-K- and Melon, M-E-L-O-N 2020 is when it was published.

NORMA HOLLEBEKE: We have an attendee who has decided that's an important thing, and I've seen that survey before. It's a great survey. If I was back in the classroom, I'd definitely would be using that to help move forward what I'm working with my students because like you said, it's about the students, not necessarily about the subject. You want to engage them and you want to excite them about the subject. So thank you for sharing that source with us.

We have a comment in the chat. If the evidence points to teaching students with less focus on content coverage, why is the practice of content coverage so persistent?

BRYAN DEWSBURY: Because it has a history and it would be nice if we could just all wake up one day, publish 10 studies, and then the next week, the whole system just reorients itself to that new pattern of behavior. And as a recovering Dean Norma, you know exactly what I mean about how slow changes.

So I don't want to make this story too long, but in the post World War II era, higher education became really focused on knowledge generation and away from the comprehensive teaching the whole student, which was the roots of the British model. In fact, the word pedagogy, the root of that really is about cultivating the whole person. Now, when people use it, they just think about teaching a subject.

So we've been in this mix for a long, long, long, long, long time. You and I probably grew up in you look to the left, look to the right era. And I remember I had a professor undergrad who first day of class, he would say 90% of you would fail. And he's right. 90% of us did fail. He wasn't lying. At least you couldn't accuse him of that. So there was this notion that lack of success was always on you. My job is to come and show you how smart I am, how much I remembered. And if you don't get this, and you can repeat this back to me, that's on you.

So I think those of us who do faculty development and do any change work in this space have to accept that change is going to be slow. And when we walk into rooms and give talks like this and talk about there's a different way to do this, I am very mindful of the fact that sometimes people hear that and they hear like, wait, Bryan, what are you saying? Like the thing I was doing for you last 20 years has no value? And I'm here. That's not what I'm saying. But I understand it may trigger those types of feelings. So to answer that comment is we again, who are involved in change work, have to understand what is involved in a change process. If you're going to get human beings to

change their mind and accept or at least consider a different way

of doing things. There are methods to going about that and it's not instant.

The last thing I will say on that is I'm part of a small group. We call ourselves the Equity Based-teaching Collective. And we actually also funded by the Gates Foundation. And our project right now until mid next spring, is to write a playbook that really describes the whole complex ecosystem around what equity-based teaching looks like.

Because a lot of times when comments like that pop up and this is not obvious in an accusation to the person who made the comment, but it positions teaching it's though it's disconnected from a whole bunch of other factors. People's salaries, how they're hired, how they're supported, how people who support them are paid, tenure policies, research versus teaching. There's a whole lot of things to be addressed before we really get at that particular issue of people just want to cover content.

And that's the ambitiousness that this project that the EPC is taking on. So it's a good comment. I will tell you, though, that I'm hopeful. I have the privilege of traveling the country a lot to give talks like this and also do a lot of workshops around this. And sometimes I go to campuses and faculty are more down on what they're doing than I think they should be.

Do we have a ways to go? Yes, we do, but I'm seeing investments in quality teaching. I'm seeing universities partnering in learning communities to learn from each other. I'm seeing a lot of federal dollars being spent on this. I actually think the future is brighter than sometimes we think it is. But we still have some ways to go.

NORMA HOLLEBEKE: So true. And the comment about 90% of you are going to fail, in the '80s and '90s, it was like it was a badge of honor for your faculty member to walk in there and say, 90% of you are going to fail. It was a badge. And it was like, why? Why does that make you proud? Why don't you want to make sure I got the understanding of calculus so that I can move forward?

And you're right. Just investing in us becoming better learners ourselves as educators, we have to be good learners so that we can then share that with those that we are trying to help them with their successes academically. So this has been really just a wonderful opportunity. And as I mentioned to you before, it was very thought provoking.

I think over the next few days I'm going to have a lot of things mulling around in my head in terms of what you said and how I can bring that forth into our work here at Every Learner, Everywhere. Are there any last questions for Dr. Dewsbury before we wrap up? I

haven't seen anyone pop in. I think everybody's the same way I am. We're scratching our head going, oh my gosh, I haven't thought about this. I need to think about it some more.

So I do want to thank you very much. I know that you've got a hard stop. So I want to thank you very much for the opportunity that you have shared with us and moving forward, this has been just wonderful for all of us. So thank you very much. It was a wonderful presentation and it's been really exciting. We appreciate it.

BRYAN DEWSBURY: Take care.

NORMA HOLLEBEKE: For our audience, we ask that you take just a few minutes to complete our survey for today's presentation using the link that Patti is going to post in the chat for you. And if you've got something going on immediately after don't worry, we'll send you the link to the survey in a follow through email within the next couple of days.

I would like to show you, just to give you a brief look at our strategies for success schedule for this series. As a quick reminder, we encourage you to visit the Every Learner Everywhere website and our resources page, including our workshop page. Not only do we have these workshops, but we have other workshops posted there that are up and coming or are currently running that you can register for as well.

So we would like to thank you for attending today's webinar. We look forward to seeing you next week for our webinar and Equity First Approach to post-secondary digital learning, as well as we hope to see you at future Every Learner Everywhere events, so have a wonderful and exciting day. Thank you very much.