Data is a four-letter word in some quarters of higher education, even as many people call for colleges and universities to get better at using data and analytics to support institutional decision making. Plenty of academics equate discussions about data with an overemphasis on efficiency or productivity or accountability, and worry that college leaders will put algorithms and numbers ahead of thoughtful analysis. Amelia Parnell strongly believes in the power of good information to help college faculty and staff members make better decisions. But in her book, “You Are a Data Person: Strategies for Using Analytics on Campus,” from Stylus Publishing, Parnell describes a very expansive view of data-informed conversations that just about everyone in a campus community can and should be able to participate in. Parnell, vice president for research and policy at NASPA–Student Affairs Administrators in Higher Education, joins this week’s episode of The Key for a conversation about the different ways that professors, administrators, and staff members can use data in their everyday work and contribute to important discussions across the institution, whether they consider themselves data people or not.

AMELIA PARNELL: In its simplest form, I think of data as being collections of information, and you use in a lot of different ways to make a lot of different decisions. So to make the claim that you are a data person, that just means to me that you are in the regular, routine habit of using information to make your best decisions. So the goal is not to label anyone specifically or exclusively as a data person, but to say you have that type of identity and use it more often than you think.
DOUG LEDERMAN: Before we start today's discussion with Amelia Parnell, here's a word from D2L, whose support helps us bring you this episode of The Key.

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DOUG LEDERMAN: Now on to our discussion with Amelia Parnell, vice president of research and policy at NASPA. Amelia, welcome to The Key, and thanks for being here.

AMELIA PARNELL: Thank you very much for the invitation.

DOUG LEDERMAN: I guess I wanted to know how you define a data person, what you mean by it, how widely does that tag apply on a typical college campus. I think there are people to tend of think of themselves as not data people at all, and I'm just curious how think about that.

AMELIA PARNELL: Yeah, that's a great question. I have to admit that the title of the book, I did that by design to be catchy, but with the nuance that I did not say, you are a data scientist or you are a data analyst. And intentionally, I put it that way so that it would open the door for more people to say that they would accept that they have to use data or some type of information in their daily work. So that part I think is true. But for those who would say I'm not really working in a data office. I'm not an institutional researcher and I don't nearly come even close to using data as some others. I think that's okay. But I do want make the case that date use and information use is a part of everybody's job. And so I think a little bit of the focus of the book will be on teasing out for the reader some of the things that connect to making data-informed decisions, things that we might not necessarily consider to be a data-oriented role but is does have an adjacent effect on it.

DOUG LEDERMAN: Let's break that term 'data person' down. I think we know what people are... What about data? How do you define data, and how does that affect how you think about what makes just about everybody in one way or another a data person?

AMELIA PARNELL: In the most simple way, data is information. And that data can be robust, it can be comprehensive, or it could be very simple. So I think when someone tells me, I'm not a data person, I
typically say, but you are a data person. They say, no, I'm not. And I say, let me tell you why you are, and I would say, did you check the weather today? And they would say, well, of course I checked the weather. And I would say, what did it tell you? How many degrees will it be outside? And they'll answer that, and I'll say, that's an information point. And at some point, if you look at trends data or trend weather points over the week, now you're building a bit of data collection, so to speak. So in its simplest form, I think of data as being collections of information, and you use it in a lot of different ways to make a lot of different decisions. And so to make that claim that you are a data person, that just means to me that you are in the regular, routine habit of using information to make your best decisions. And so the goal is not to label anyone specifically or exclusively as a data person, but to say, you have that type of identity and use it more often that you think.

DOUG LEDERMAN: Are there things about the current moment we're in that make it more important than it might have been before for the typical college administrator, the typical faculty member to think of themselves in this way? I guess I'm curious whether you could have envisioned writing this book, or envisioned this book being written 20 years ago, or even 10 years ago. Or are there things about today that sort of require more of us to be what you would define as a data person?

AMELIA PARNELL: So I think it's a yes and no for me in terms of 20 years ago. I think from a relational standpoint, those who read the book will see that it does emphasize pretty heavily on collaboration, the idea of creating a data climate in a culture in which professionals embrace the opportunity to work together and share their respective strengths. So I think 20 years ago, that type of thing would have been absolutely relevant. I think that 20 years ago there was not nearly as much conversations of uses of data for predicting outcomes and prescribing certain interventions and things like that. So if the book that time ago had come out, it don't know if it would have landed the same way, but I do think the kind of the impetus for the book, that because we now have a lot more pressure to show with outcomes how things are working, how things are going, it can create a bit of silo effect, or even divisiveness within a campus, so who would say either they have the skill or they don't have the skill.

And so a book like this right now I think is a pivotal time to remind us that even 20 years ago, when data were maybe not used in such a sophisticated way, we had to work together, and we had to make decisions collaboratively. So I think, fast forwarding to now, that theme is still here. I think the timeliness of a book like this to help people not see data as something that's scary or punitive or competitive, or detrimental to how they want to do their work, I think the time is right for that.

DOUG LEDERMAN: That's a great segue. One of the reasons I wanted to talk to you about this book is because when we at Inside Higher Ed write about data initiatives or have discussions about the use of
data to influence decision making, which I think we're doing more and more, we often get pushback from people who view the emphasis on data as, you know, pick your poison here, either promoting excessive accountability or focus on efficiency or productivity, which are kind of dirty corporate words in certain circles, or reductionism. How do you describe the importance of your pretty broad definition of data in ways that avoid provoking the people who tend to take that critical point of view?

AMELIA PARNELL: There are a couple of different ways, I typically describe it. The first when someone says, let's meet together and a data session. Let's have a data-informed discussion, oftentimes somebody's going to say, who's the data person coming with the metrics? Who's the person who's going to walking us through the dashboard or showing us some type of visualization? And that's good. I think the regular use of data to look at performance and operations and productivity, there's nothing wrong with that.

But if the conversation becomes exclusively that, I think it creates a space where you could easily have two colleagues who are both working on a particular program, and someone says show me your data. Show me how it's performing, how it's operating. And if one's data may indicate higher uptake than the other, that usually leads to a conversation about, well, what's wrong with the one that doesn't have the higher outcome, and should be change things? And now these two professionals who both came to a data-informed conversation are now in competition with each other. And so I think if you take that and extrapolate it out could easily have an environment that becomes competitive. It becomes political. You're now jockeying for resources.

And I think one of the most concerning comments I got... It was in a reception. I was talking with somebody who worked on the campus as a VP. And you know what they told me was I have a close relationship with the IR director because data is power. And in that conversation it immediately told me that any data conversation that you have it you're not careful, communicating the importance of using data could then turn into something where it makes people uncomfortable, maybe even nervous about sharing things that are not going well, or even nervous about sharing things that are going well.

And so I don't think that the goal with any of this conversation is to somehow suggest that we should not longer care about outcomes or operations. We're running multimillion dollar businesses so we have to look at those things. But I think in order for those outcomes to show up the way we want them to, the emphasis on context, communication, collaboration are equally as important.

So I hope that this book really promotes the idea that people can bring a lot of different strengths and
abilities to a conversation. And the use of data is just one part of it. It doesn't always have to be metrics. It can be qualitative data, it could be lot of other things. So I'm really hoping when someone sees the title of this book, they might say, this is the book for me, because they've been in the conversation where they've felt a little anxious about the overall goal and how they're work might be situated in that.

DOUG LEDERMAN: So when you talk about the different strengths or capabilities that people might bring that would get them included in your broad definition of data people, you have something you call the data identity framework, which I think my sense is that is sort of helps lay out the different ways that people can contribute to conversations and decisions about data. What can you tell us a little bit about the data identity framework and why it's important?

AMELIA PARNELL: Yes, I would love to. So in starting this book, I really had an outline where I kind of had in my mind maybe three different things. And one of those things was research and analysis. So naturally, if someone brings up a data-informed conversation, you have to actually have the data and you have to have some ability to actually analyze it and determine, you know, what's the right computation, things like that.

But it became obvious to me that communication and conversation is also equally as important. So you could easily have a situation where someone comes to the meeting with a report and they've done extensive analysis, but when it comes time to explain it, someone in the room is saying, I'm not really getting it. I'm not really sure what these numbers really mean. To have somebody in the room who can actually translate a little bit there and consult and say, hey, let's connect this point to that point, that really helps. So those would be two, the first being research and analysis, obviously, communication and consultation, obviously, but curiosity and inquiry is a really important piece here.

I've been in a lot of conversations where someone said, wouldn't it be nice to know, and they start some type of random question. And it's only random to the extent that maybe somebody's been thinking. They haven't asked themselves what would we do if we did know. And so being able to ask a clear question helps you make sure that you're using that analysis in the most appropriate way, so that's number three.

The fourth would be campus context, and I say that because oftentimes you might hear someone say, well, Doug and Amelia have worked at the university for the last 15 years. And so that might assume that Doug and Amelia have seen everything and that might not be a reason to start something new and involve them. Instead, I say that would be a reason to invite them for sure. They've seen trends, they've
seen initiatives start and finish, they've seen things come and go, and so that bring that campus context.

Number five would be industry context. So if you're working on a small college for example and you have some trends that show a particular level of participation for a student group, you might belong to another national association focused on small colleges, and you can say our college is situated similarly, or not so similarly to other small colleges across the country. That helps too.

And the last is strategy and planning, the ability to execute a course of action. So let's say you've got the right information that you need to answer the perfect question, and you know the context of the campus and how it's situated nationally. And you want to figure what to do. So what I'm claiming in the book is we all have a little bit of all of these things. And so the goal of data-informed decision-making process is to use the information you have to address a core need and make an informed decision.

And so I think all of those respective assets that people bring make it a much more robust and collaborative process. So that if you have someone in the room who says, hey, I'm not the one who's done the most recent statistics on this, but I do happen to know that I talk with students every day and they always tell me this... So your campus context is showing. So in the book, I'm making the claim that we have either an emerging or developing or strong level ability in each of those of things, and even in those six, there are four additional subcomponents. So there's enough room in there for everybody to find some strengths, and I think that's the place where I want the conversations to start.

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DOUG LEDERMAN: I'm speaking today with Amelia Parnell, vice president for research and policy at NASPA, and author of "You Are a Data Person." So I'm picturing people listening to this podcast, and whether they were attracted by it because they thought it was a good thing, or because they figured it was a conversation with the devil about data. I'm picturing, and I'm going to stereotype, but I'm picturing an English professor who might say, I teach these books and that's what I do. That person I suspect is only thinking about data-driven decisions around which programs are performing well and
which one should we get rid of. What are some of the kinds of conversations and decisions that are maybe less obvious that you would think maybe would be attractive and important potentially to an English professor or to a, you know, help us out here...

AMELIA PARNELL: Well, the first point I'd make is that not all of every single data conversation has to take place on a very public stage. And to that professor who says, you know, I'm being forced to answer these questions about outcomes of my particular class and how my instruction's going, that probably could be the case on the campus, but that could be many, many more conversations, between colleges, between professors that never actually go outside of the division, you know, that actually take place and can lead to great outcomes.

For example, I think it's probably routine and commonplace for us to look at things that relate to outcomes, you know, to what extent the students graduate, does this program produce a certain result. In the book I'm making the case that we should also look at needs assessments as well as process assessments. And those type things actually lead to better outcomes. So for example, using that faculty member, I could see something that many professors probably already do, is that they do a real time poll. Let's say they're in the classroom setting and they're about to discuss a particular reading, and they want to get a sense of if the students have felt like they really understood the material. And so doing a live poll, it doesn't have to be, you know, fancy or sophisticated, but that's a real time way to check the process, it's just they use the time allocation in a certain way or another.

I can see a community college counselor who's working on orientation of students, looking at their materials to see if those materials have enough various formats to address students needs. Are they offered in multiple languages? Are they recorded so that students who are visually impaired might be able to listen? So those are types of ways to do assessments that relate more to needs, what to the students need at the time. And if it turns out something needs to be adjusted, let's not broadcast for everybody on the whole campus to know, but that's a real time use of data that you can collect specific to what students need.

In addition, when I mention process, you've got needs assessment, but you also have process assessment. I could see a residence life administrator seeing low participation in a community-building activity. And it might be tempting to go straight to the outcome. Let's say that activity's hosted monthly. I can see somebody saying, well, if nobody's coming, let's go ahead and cancel it. Let's not do it anymore. Instead, maybe look at the process. What time of day is it offered? What's the material that's going to be discussed in that particular activity? Could it be tweaked a little bit?
So I think all around us are data-informed discussions and decisions. Not all of them have to relate to outcomes. I think a thorough job on needs assessment and process assessment can help us lead to better assessments of outcomes. So that faculty member who might be skeptical, I think I would give them some credit for what they're already doing, and suggest that maybe their needs assessment and their process assessments are the ways to make the biggest impact that they can control.

DOUG LEDERMAN: I think you've put your finger on it. A lot of the worry about a data-driven culture is that the data can and will be used against me in a court of tenure or a court of budget cutting. What is the pushback you tend to hear most against use or overuse of data to influence decision making?

AMELIA PARNELL: I don't know if I would say large scale feedback or critiques are concerns, but I do see an emerging need that is probably now more prevalent than ever, which is strategic communication and context setting. And so I think there can be an overdependence on data. And without the context, you could easily jump to quick conclusions and make decisions that are not appropriate for what you're talking about. So I think that there's always going to be a need to situate most decisions with data. And I oftentimes make that joke that data don't drive, they don't have a car, you know, but most times data inform. So the data really can show you kind of the current state of things.

But the decision making is still going to be ours to make, you know. It doesn't matter how fancy your artificial intelligence is going to be or your predictive model, at some point some human person is going to have to decide what to do. So using that same weather example, if I look out at my forecast and it says tomorrow's going to be 70 degrees, the forecast doesn't say, so wear shorts. It just tells you it's going to be 70 degrees. I have to decide what to do after that.

So making those decisions is often tough, and I think that the communication part is really critical. And again, back to the purpose of the book, it's to spark conversation, so if you have someone with some data and information that probably are useful, and they want to make a decision, they need to talk to colleagues and share amongst each other what's really going on. So that contextual piece, if it's missing, it does create that climate that you just described, the one where people are definitely nervous, all types of reasons why people should be concerned about the misuse or overuse of data, or depending on it in inappropriate ways. But on the flipside, you get to have a group of colleagues that are coming with their best strengths to the table and sharing what they have. It's like a buffet. Everybody gets a little bit of piece of the meal, and it's better when you share than trying to do it all on your own. I know this sound cheesy, but that's really the vision that I had when I was writing it.
DOUG LEDERMAN: One of the biggest tensions I've seen around data over the years is this question of their use for internal or external purposes. A lot of my experience was around the political conversation around student learning assessments and outcomes 10 to 15 years ago during the Bush Administration. There was this dichotomy about whether the focus on student outcomes was for internal purposes for institutional improvement or individual improvement, if we're talking about an academic department or a specific course, or for external purposes, more of an accountability framing. The data can obviously be used for both. It seems like you're more focused mostly on internal improvement... Am I hearing that right?

AMELIA PARNELL: I'm greedy enough to want both, but I think starting internally will lead to the external outcomes that we're hoping for. So using that same example with student learning outcomes. If we can get even more collaboration, again, you know, sometimes people say, I'm on every committee, Amelia. I'm on every initiative of the campus. I'm thinking widespread, as in everybody on a campus, and not every decision as to involve everybody.

But if everybody, regardless of their role, is seeing some opportunity and they have conversations as needed, I think that internal culture and climate building of collaboration will eventually lead to a shift in the way we do our work. I think the result of that will be students who actually can find that regardless of what office they go to, they're working with professionals who have had some intentionality and they know where to direct them to next. As a result, students have a better sense of what they're learning and how, and that shows up as they start to move toward completing a credential. And I could easily see accreditation conversations shifting that way too. So I could see how someone would say look externally first and then change internally. This book for me, I just see a great need for us to really establish that type collaborative environment.

DOUG LEDERMAN: There are people who think higher education isn't data-focused enough. And then that leads to a question of do we not have enough data? Do we have the wrong data? Do we not understand the data we have? Which of those is true? Which is the bigger problem in your eyes?

AMELIA PARNELL: I wouldn't say that we don't have enough data. I think we have a lot of data. Some people say, information rich, data poor. I don't really have a quip like that to say, but I do think we have quite a bit of data. And I think there's a lot of opportunity there to do some different types of analyses. And I think that's where we get into spaces where you move into predictive modeling, and even from predictive to prescriptive, you know, decision making, and things like that. So I don't see it so much as an issue of we just need more data.
I don't even think it's necessarily that we have the wrong data per se. I do think there's a place to go back to the questions that we're trying to answer, though, and whether the data that we have are appropriately paired for the questions that we want to find the best answers to. I also think that there's this culture of quick, fast, I need to know now. You know, this particular outside entity needs this. We need to get this answer right now. And the faster we move, the more we lose the opportunity for the contextual pieces that are so critical. So if it truly is I got a phone call and someone wants to know what is the number of students who graduated within the last five years with this particular major. And without the context of knowing what that information will be used for, you could miss on opportunity to talk about more than just the number of students who graduated, but why.

So I don't think that we have a shortage of data. I don't even think we have a shortage of good data. I think that we have a misalignment of putting that good data toward the questions that we need to answer most with the right context, and that takes time. And that time should be spent collaboratively across the campus.

DOUG LEDERMAN: A lot of conversations around higher education get oversimplified because of generalizations when the reality is much more complex, depending on how something might be affecting different groups of students or playing out at different types of institutions. Having more disaggregated data seems like it would help avoid that tendency to make overly simplistic statements about higher education. How key is disaggregation of data, particularly at a time when we are paying more attention to equity of various kinds?

AMELIA PARNELL: I think that in the bigger context of the discussion, disaggregation is but one way to approach. It won't be the solution to everything that we're looking for. It certainly will get us farther than it did before. I mean, I think those who are in denial and saying, well, no, I don't really see difference in outcomes among our students, I think is doing pretty well. That's someone who's speaking at a very macro level, so that the immediate push is to say, show me specifically by certain student groups, race, ethnicity, you know, income level. And that pushed the conversation to say, well, actually, this very broad statement you made doesn't look quite the same for various student groups. But we were doing that years ago.

I think that at the core, as long as we are in a space where maybe there may be not as many resources as a campus would like unless somebody comes in with a whole lot of money, and can say, do whatever you want to, I see some of the impetus on disaggregation and other tactics to be, if we only have a certain amount of resources, let's put those resources where we need them to be placed most. And in order to find that, let's see which students are performing at a certain level and could benefit from
additional resources. In order to do that, let's disaggregate.

I think we'll always have a tension between tailoring and a community-based approach. The more you tailor it to an individual student's needs, the more it's going to cost. But it will be effective, it will just be really expensive.

And I'd say even within a particular student group, there's a need to have more nuance space. So let's say we do disaggregate the data and you do look at it by gender identity. You say, men have this outcome, you know, women more often have this income. Not every woman is the same, you know. So, again, it's like an unraveling and you can go as far as you want to. But I don't think disaggregation is a bad thing. I think we should continue it. I just don't think it's the only thing. I think there's more to it.

DOUG LEDERMAN: And there's one other topic that it seems probably important to bring up any time we're talking about data is about privacy. And I'm curious, again, it's not exactly the focus of your book or the thrust of this conversation, but do you believe that... And again, I don't get the sense that you're necessarily talking, maybe in a classroom context, about sort of a professor's understanding of his or her students. But I don't think you're necessarily talking about individualized data that could potentially be at risk. But, obviously, any conversation about data that is at some point based on individuals creates some risk of privacy invasion. So how does that play into the book or into your thinking about this?

AMELIA PARNELL: It plays into both, and, honestly, it's one of my favorite questions to answer, because there is a lot in that question that relates to just the climate for data use. So I'll give you the great example. Many years ago, you know, early conversations about how to use Wi-Fi data or track students if they have a mobile phone, something like that. And the idea that you can then pair that data with students use of a particular service. So that student happens to be walking passed the library at the time that tutoring is offered, and they get a ping on their phone that says, hey, Amelia, it looks like you're at the library. Tutoring is available on the fourth floor. This question of like, oh, hey, that's too much. Now you're starting to do surveillance on students. That's creepy. You know, you shouldn't do that.

I think it does come back to, of course, privacy. You know, to what extent should the campus really be knowing what students are doing. But it also comes back to that theme of communication. So let's say that that communication via text to a student might make the student say, how did you know where I was, and how often have you been watching me, and what else have you been watching? That type of thing.
So I think it comes down to, number one, letting students know how their information is used. I don't know that the average is thinking to ask those question. I find that most often it's professionals, administrators, you know, leaders like me and you who are talking about it and saying, give them an opt out option, something like that. Most students say, I think when we talk to them, their sentiment is that as long as it's not being used for some type of inappropriate reason, they would probably be okay knowing that the campus has some information about them.

But to your point earlier about maybe faculty knowing about an individual student's situation, something other than their grades, what would it be like if a faculty member knew about a student loan debt, for example. Is that too much to know? What happens if an academic adviser knows about something like that? So I think, again, the level of communication with the student about what's known about them, as well as the level of communication among colleagues about how to make decisions based on that, it would be real easy to say if a certain student has a financial position that we might deem as being possibly, you know, difficult for them to maintain, and they're not performing well in class, to combine those two things together and say, well, they must be doing poorly in class because of that, or they may not be doing well financially because of this--that's when you start to run into really difficult things here.

So I think it's not exclusively the privacy question so much as it's what do we do with the information that we find out and have to hold so close to being, you know, really borderline inappropriate. So I think you can probably ask me any question, I'm going to tie it back to strategic communication. [LAUGHTER] But in the book, you asked if it relates to the book, so the second part of the answer, yes, it does relate to the book. There was a part of the book where I mentioned the data rules, one of which is know as much as you can about students, but don't be creepy. And I think that's the headline.

DOUG LEDERMAN: I hope you enjoyed that very fun interview with Amelia Parnell, vice president for research and policy as NASPA. I really appreciated the nuance with which she approached the vexed issues surrounding data use in higher education. I tend to believe that we live in an era of evidence, and that colleges and universities, and most, if not all, of the people who work within them, should be making more strategic use of the increasing data available to institutions and instructors to make better decisions about and for students. I also believe that information and data are only conversation starters, and that overdependence on measurement and data can skew decisions that don't prioritize mission and values and student interests most of all.

That's all for this week's episode of The Key. Thanks to America Parnell, to D2L for sponsoring the last six
episodes, and as always to you for listening. I'm Doug Lederman, and until next week, stay well and stay safe.

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