



Foresight and the Future of Credentialing with Denise Roosendaal

Leading Learning Podcast
Transcript for Episode 483

Celisa Steele: [00:00:03] If you want to grow the reach, revenue, and impact of your learning business, you're in the right place. I'm Celisa Steele.

Jeff Cobb: [00:00:10] I'm Jeff Cobb, and this is the Leading Learning Podcast.

Celisa Steele: [00:00:17] *Certification, certificate, microcredential, badge*—these terms often get lumped together. But they're not interchangeable. They represent different business models, different purposes, and different promises to learners and employers.

Jeff Cobb: [00:00:32] Our guest in this episode, number 483, is Denise Roosendaal, executive director of the Institute for Credentialing Excellence (I.C.E.). Denise has worked for more than 35 years in the credentialing space and has led I.C.E. for 15 of them.

Celisa Steele: [00:00:46] Denise walks us through the credentialing landscape—which includes a whopping 1.8 million credentials in the U.S. marketplace—and what that ecosystem means for workforce development and the learning businesses operating in it.

Jeff Cobb: [00:00:59] You and she also cover how assessment is evolving from point-in-time tests toward ongoing, real-world evidence of competence and what that may mean for credentialing bodies and learning businesses.

Celisa Steele: [00:01:12] And Denise makes a case for why durable, uniquely human skills—critical thinking, creativity, and problem-solving—are going to matter more, not less, as AI reshapes the workforce.

Jeff Cobb: [00:01:25] If you offer credentials or are thinking about adding them to your portfolio, or if you simply want to understand where credentialing is headed, listen to this conversation with Denise Roosendaal.

Celisa Steele: [00:01:41] For listeners who are maybe not super familiar with the Institute for Credentialing Excellence, give us a short version of what I.C.E. does, the problems that it exists to solve, and the work it exists to support.

Denise Roosendaal: [00:01:55] I.C.E. is a community of credentialing professionals. These professionals want to raise the bar on credentialing best practices. This community has always been incredibly generous with their thought leadership—what's working, what's not working, sharing things that they have learned, lessons learned. And now we are pushing the envelope on what the future holds for credentialing, whether that is the standards that we have and accredit to, which are NCCA [National Commission for Certifying Agencies] for certification

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programs and ICE 1100 for assessment-based certificate programs. We are always looking to figure out how programs build and maintain high-quality, rigorous certification programs. In addition to the standards, we offer education for those individuals who are making their way in the certification credentialing world. We offer research that really tries to hit at those highly relevant and important aspects of this work. How can we talk about it? How do we benchmark it? How do we tell the story of credentialing, both internal to those organizations that understand credentialing as well as to external audiences who may not be as familiar with the terms we use, how we go about it, or the purpose that it plays in the marketplace?

Denise Roosendaal: [00:03:30] We also have a certificate program ourselves for credentialing topics, and we also have the ICE-CCP [I.C.E. Certified Credentialing Professional] certification program. We are always trying to educate the association world and population on credentialing and the role that it plays and trying to recognize those who have demonstrated proficiency in the certification field that we want to aim toward. Some of the topics that we are leading on are how we articulate the value of credentialing: what it means for the individual certificate, for employers, for external stakeholders like regulators, legislators, third-party payers, how they think about credentialing as a sign of competence in the field. We also, as I mentioned, think a lot about the future of credentialing and exercising foresight, understanding what all the signals in the marketplace might be telling us about credentialing, and how the business of credentialing may be evolving.

Denise Roosendaal: [00:04:38] We're going to talk some about AI. But there are so many aspects of the business of credentialing. Ninety-five percent of our members are nonprofit organizations, 501(c)(3), 501(c)(6) organizations, and they are on a mission to protect and uplift their profession with the work that they do in identifying competence, talking about competence, measuring competence in their field. Those are the topics and the areas that we are trying to address in our work, and we feel that we have a very tight-knit community but always welcoming others who are curious, who just want to understand a little bit more. While we like to see programs get accredited so that they can demonstrate that they have met those standards, not all of our members are accredited. Many organizations come into I.C.E. to better inform themselves about best practices, create a community, a network of other certification professionals who talk their language, and understand the terms that we use. I'm very proud to represent this organization and the community.

Celisa Steele: [00:05:51] One of the things that can be an issue in this space is terminology. We have *certification*, *certificates*, *microcredentials*, *digital badges*, a lot of other terms. Those are just a few. I would love to hear from you about where you see the biggest points of confusion and what distinctions really matter with some of those terms.

Denise Roosendaal: [00:06:15] Great question. In the 15 years that I've been with I.C.E., this continues to be a very important topic because terminology and words matter, and so how we talk about what we do is important. We have a terminology document that we are about to release. It's an updated version of our 2020 document, and it's going to get into some of the distinctions that I'll talk about. But we use *credentialing* as that umbrella term. It means everything that can be used to recognize skill, competence, or knowledge. Certification is a subset. Certificate, microcredentials, diplomas, apprenticeships, badging—all of that fits

underneath that credentialing umbrella. This is important because these are different business models, intended to achieve specific and different outcomes. We've seen a lot of misapplication of these terms, especially *certification* and *certificate programs*. Let me underscore that a little bit. Certification is intended to recognize the knowledge, skills, and abilities that an individual has acquired in their career through education, practice, or occupation. It typically has eligibility requirements, renewal obligations, and a rigorous assessment. Once an individual achieves success in the application process, then they can carry a designation—letters after their name.

Denise Roosendaal: [00:07:48] A certificate program is an educational program with specific learning objectives that should be demonstrated in the course assessment, assuming there is a course assessment at the end. It's a point-in-time measurement of understanding of those learning objectives. It typically does not have eligibility or renewal requirements, and, according to our standards—the ICE 1100 standard—it doesn't carry a designation after a person's name. That's where the confusion comes into the marketplace, and we recognize that. But we have stuck with that distinction because we didn't want to contribute to the confusion in the marketplace. We wanted a clear distinction. One is not better than the other. One is meant to be recognition while the other is meant to be an indication of an individual having gone through an educational course. They are very different in the way they operate and what they're trying to accomplish for their certificants. There's another class of emerging models, which are those microcredentials you mentioned, and typically that will come with a badge. In our terminology, we like to think about badging as the recognition of having demonstrated skills attained. But we recognize that in other spaces, especially in the academic field, badging is the program itself.

Denise Roosendaal: [00:09:15] We understand that there are differences in how we describe these things. For us, microcredentialing means a smaller slice of the overall skill set that has been articulated for a profession or occupation. And you can get really creative with that microcredential. You can create stackable models, perhaps a series—maybe they are synchronous/asynchronous; maybe they are meant to build on one another; maybe they are all discrete. But it's an interesting way to get in the game of skill set identification, skill set training, and recognition. What's important here is that the field has begun to respond to what learners are telling us. They want those smaller bits of recognition. They want to be able to say, "I'm proficient in this area, and let me put that on my LinkedIn; let me put that in my resume," so that they can indicate to employers that they have gone through training; they have gone through a series or a program to get recognized. It's also important that we understand what employers are telling us. Employers are saying (according to a study out of Northeastern University, I think), "This is great. Be innovative. Make sure you're responding to the marketplace. But what we need as employers is validated skills. So let's not forget the assessment component of those items so that we know that they have been validated in the process."

Denise Roosendaal: [00:10:55] What's important with all of these models is to understand the goal of the organization in creating such a program, understanding the market, doing the market research so that employers and potential participants have a say in what they want or need or what they think is relevant—really doing that rigorous work to identify the key

competencies, especially in the case of a certification where you've got to identify what will be assessed. And get very clear about what that is. That's super important. It takes time. It takes money. But that investment is well worth it. I can't tell you how many programs come to us and say, "Hey, we're two, three, four years in, and the program's not growing," and then we realize they didn't do any of that homework, and they didn't do any of the connection between the goal of the organization and what it is they were putting out in the marketplace. In many cases, they had to start from ground zero and start all over. It's very difficult to go back and retrofit a program if that work hasn't been done. We have resources on all of this.

Denise Roosendaal: [00:12:02] One of the things I would point to in addition to the terminology document is something that we call the "Defining Features" document, which is literally putting certificate programs next to certification programs and outlining what those differences are. It's free, downloadable for anyone. We want the community to be educated on this. There's also a video. Many folks have reported to us that they use the video with their boards so that they can help them understand the differences. And we also have a strategic questions document—free, downloadable to anyone. That is a good checklist for boards to go through and say, "Okay, what is it that we are trying to accomplish? Let's go through these series of questions to get alignment." Just a couple of resources we have on this super important topic.

Celisa Steele: [00:12:54] When you look at the credentialing landscape today, what would you point to that feels most important for learning businesses to understand about where credentialing is now and where it may be heading?

Denise Roosendaal: [00:13:07] Let me throw some stats at you because that gives us a foundation to work from. Credential Engine has a report out. They updated it last year. There are 1.8 million credentials in the U.S. marketplace. That includes academic diplomas. It includes badges. It's a big, wide ecosystem. But 1.8 million credentials is a lot, and it's serving an important population. This report goes on to say that the field of adult education, served by these credentials, is a \$2.3 trillion industry—that's significant. If you break down the 1.8 million credentials, we're looking at 14,000 professional licenses, 6,900 certifications, and 3,400 microcredentials. All of those are a subset of that 1.8 million. But the key here is that this ecosystem is growing. Employers and academic environments have recognized the importance of not only traditional models but also innovative models for making sure folks feel they have the skills that they need and then connecting them with employers in their fields. This is an editorial comment: I do hope this ecosystem, this industry, is growing for the right reason because it's not just about monetary gain; it's about the enhancement of the workforce.

Denise Roosendaal: [00:14:43] That's why I like the fact that I.C.E. is so filled with nonprofit organizations because there is a business component to this, and these nonprofits have to operate under business constraints just like everyone else. But I feel that, with a nonprofit mission orientation, they are thinking hard about what it takes to be proficient in their profession, and that's really important. There are a lot of for-profit entities in this space as well. I'm not going to knock that. But it's important that we make sure the competencies that are associated with a profession are well-articulated, and the value of a credential is well-defined—a real hallmark of those that are in this for the right reason. A quick word about foresight. As we think about this landscape and where we are headed, I.C.E. has been doing a lot of work in

the future of credentialing. We have an incredibly large toolkit—and we can talk more about that in a second—but it's important to think about the culture of foresight within an organization. We're all so busy in our day-to-day worlds, and it's hard to lift our heads out of that grindstone. But we need to look to the horizon and understand what's possible, what's headed our way, what the risks and opportunities are, and build the future scenarios so we can say, "Okay, this is the place we want to go," and "How do we begin to make those decisions to get there?"

Denise Roosendaal: [00:16:26] Nonprofits, like many organizations, have a finite set of resources, and so deploying those resources in a way that can help the organization get to that preferred future is critically important. I often talk about this as the culture and the competency of foresight, building that into the organizational mindset and practices. As I think about that future landscape, I can't tell a particular profession, "This is exactly what's happening or going to happen." I don't have a crystal ball. But foresight helps us gain the language to begin the analysis of those potential futures and get comfortable in a very uncomfortable space. In talking about I.C.E.'s look at the future of credentialing, we have a paper that we've written that looks at the future of credentialing through the lens of technology, through the lens of the business model, and through the lens of government and how they may have a say in that future as well. We have tools that go along with that to help begin to have that uncomfortable conversation with governing bodies, with certifiers, and to digest what that future might look like. I suspect we should probably talk about AI, which is an important component. I am a big advocate of making sure we think about what AI can bring.

Denise Roosendaal: [00:18:05] I feel like we're over the hump in terms of the fear factor of AI. It's an important aspect. We need to think about the harm or risk that AI might bring. But I feel like many credentialing bodies are diving into one of those opportunities that AI can bring them, always with the caveat: Anytime we're using AI, we've got to have that human intervention, that human element really thinking about what those opportunities might be, making sure we're gathering data about how we're using AI, and what those improvements might be. There's a lot of great opportunity with AI, and we shouldn't be so afraid of it. Other topics we're certainly looking at are what are the impacts of changes in higher ed? What are the needs for alternative pathways for eligibility for certification? What might be the impact of that ideological battleground that we might find ourselves in with state or federal stakeholders? A lot of topics we're looking at. I've only scratched the surface here.

Celisa Steele: [00:19:15] I know that foresight is such an important topic for you and an area of focus. You've connected foresight to the idea of the future of professions and the workforce and where things are going there. How would you suggest that learning businesses think about their role and how they can shape the future of the fields they serve so they're not just observing what's happening, but they're trying to have that influence on where things might go?

Denise Roosendaal: [00:19:44] Really important question. I highly recommend organizations look out at the field and see what the data might be telling us. One report that I rely on heavily and cite often is the World Economic Forum. They released a 2025 version of the study of the future of the workforce, and they are predicting significant shifts in the types of occupations

and the growth of occupations in the next five years. 2030, they're saying there's going to be a 7-percent growth. But that's not a straight-line growth. That's retiring of many occupations, which may become obsolete even as we grow new professions and occupations that we haven't seen or understood just yet. Another piece in that report talks about durable skills, which are critically important for us to think about. They have a top ten list of skills that will be needed by 2030. You would think that would be largely occupied by technological skills. Two or three of them do talk about the importance of understanding technology, but the rest are all about durable skills. It's all about how we are uniquely human and what humans are bringing to their occupation—critical thinking, problem-solving, creativity, teamwork. I can't say enough about this report and how they are setting up and shaping that conversation around durable skills. Also, we have to think about how we measure those skills, and that's going to be a big challenge for credentialing bodies moving forward.

Denise Roosendaal: [00:21:23] There's a lot of research out there on how it's being done. But one of the things I ran across in a conference I attended was an AI application to teach doctors how to have better bedside manners. And I thought, "AI is teaching doctors how to be better humans!" That was really interesting, but I can't emphasize enough how important I believe human skills will be in the future of our workforce. ASAE, the American Society for Association Executives, has a ForesightWorks set of drivers. They look at 50 different drivers. One of them that I have relied on heavily in the I.C.E. world is "more human humans." How are we going to deploy those ideas moving forward? But, in the ways that we're thinking about foresight, I should also mention I.C.E.'s partnership in the Advancing Workforce Mobility initiative. It's a grant coming out of the Education Design Lab, and we are partnering up with Credential Engine, funded by the Walmart Foundation. It's a really significant grant to think about how we might analyze or build a prototype for using micro-internships for skills validation. And CredUp Hub, led by Mickie Rops, is going to help us think through that. We don't have all the answers yet, but, again, this is an innovative way to think about what the future of credentialing might look like if we get creative. I'm really excited about that work as well.

Celisa Steele: [00:23:12] You were just talking about durable skills, workforce mobility, those sorts of things. Clearly tied in with part of that is the assessment. How do you measure, as you were saying, some of these skills and knowledge? You've argued that in the future assessment, systems may increasingly draw more on real-time, on-the-job evidence of proficiency. Talk a little bit about how you see assessment evolving and what that might mean for more traditional credentialing approaches.

Denise Roosendaal: [00:23:47] It's a really important area and one that's evolving quickly. I don't have all the answers, but here's what I'm learning. I want to do a shout-out to our psychometricians in the space because they are going to want to make sure that whatever we do in the future is psychometrically sound, and they are looking at this as well. Technology is going to have a profound impact on how we gather performance data. Currently, we rely quite a bit on measuring continuing competence, either through assessments or portfolio reviews, where a team of individuals analyze skills. But I believe technology can take us incredibly far in terms of how we measure and collect performance data. One thing I'm hearing quite a bit about is wearable technology, and what does that mean for on-the-job measurement? And then, over

time, what does that mean for calculating enhancement of performance, and how do we demonstrate that performance over time? One of the great examples I've heard—I use this a lot; I hope they're still innovating—is the idea of individuals who work on trees, tree cutters, tree trimmers wearing technology in a helmet that might then measure how much they have respected a cone of safety around a project that they're in and whether they impeded in that zone of safety or respected it and then, again, how they changed their behavior over time. Calculating this real-time data and analyzing it over time can give us a great indication of an individual's performance on the job. There's some real promise there that's important.

Denise Roosendaal: [00:25:43] I also think that AI and other technologies will do a great world of good in terms of how we do initial assessments. I think performance testing will become more and more important and perhaps less and less expensive because they hold an important element for that initial assessment of how we are able to demonstrate, in a practical way, the skills we have identified for competence in a particular area. That's a very intriguing area as well. Another area that I'm beginning to understand better is how organizations are investing in longitudinal examinations of competencies of their professions, so it's not just a point in time but, again, over time. This wearable technology idea is probably an example of longitudinal exams. But what's interesting about it is that individual practitioners can get real-time feedback in terms of what they have learned or areas where they are weak so that they can begin to enhance their professional development to seek better knowledge or skills in particular areas. Some of this is the MOCA Minute, which is a model that many organizations have adapted, where you get a question on your phone every day or once a week, and you answer that question. Over time, it begins to build to say, "You're really strong in this area, but here's an area you might want to pay attention to in your professional development." And then some organizations are building that into their recertification process. That's really interesting and some very promising innovations.

Celisa Steele: [00:27:33] I especially appreciate the idea of moving beyond the point-in-time level of assessment because it speaks much more to true proficiency and true knowledge and skills. You began to talk a little bit about professional development and how some of the feedback that professionals are getting might influence what professional development they undertake. A lot of the learning businesses we work with are embedded in associations. They provide a lot of education and professional development to serve those professionals. We've been talking mostly about credentialing, but there is clearly this other side, which is education and professional development. Talk about that relationship between education and credentialing. Where do you see them naturally supporting one another, and where is there tension that might arise?

Denise Roosendaal: [00:28:25] The tension is a healthy tension. It's a really important element and concept to think about—that traditional separation of church and state that is in our own NCCA standards. This is all about the firewall approach. And there are good reasons for this separation, so let's hit those first. You don't want educational instruction to be so tied to an exam that you're teaching to the test. That's a really important aspect. You want a well-rounded audience of subject matter experts developing the credentials so that you're not just relying on educators to create the content that is used in a credential. You want the creation of the

credential to be separated from those who are building content. You want exam development activities—item writing, exam development, job task analysis—to be separate from education. The firewall is also good for security measures and keeping each side of the house independent of each other so that exam questions/items are under good lock and key, even though educators can reference tools that programs will publish, like an exam blueprint or a body of knowledge, to make sure folks understand what the exam will cover.

Denise Roosendaal: [00:29:48] Lastly, there are really good governance reasons why you want this separation so that there's not undue influence on credentialing decision-making from others in the organization. So keeping those things clean is also important. But it's also important for credentialing bodies to understand the lifelong-learner nature of their constituency and be able to serve that. There's a really important element to understanding how the particular field is changing quickly. You don't want to be so isolated from the constituency or education population that you're not appreciating how quickly changes are coming about, and you want to make sure your credential is reflecting the important changes that are coming about. It's important that credentialing bodies respect that separation. But, again, it's perfectly fine for organizations to be engaged in test prep or continuing education, as long as they have that healthy respect for that firewall internally. There are ways to navigate that. Again, we have a lot of resources on that—articles, things like that. This idea of lifelong learning is really important in society generally, and so we want to make sure that we are respecting those needs in our own communities as well.

Celisa Steele: [00:31:12] Since you've brought up lifelong learning, I want to ask a question we love to ask all of our Leading Learning Podcast guests, which is about your own lifelong learning. What are some of your specific habits, practices, or sources that you use to continue to grow?

Denise Roosendaal: [00:31:27] Several years ago, I took the Clifton StrengthsFinder [CliftonStrengths] and discovered that I am a learner; that's one of my strengths. When I learned that about myself, so many things finally made sense. I'm the one who's always asking questions like "Why?" or "What if?" I was that kid growing up—always asking your parents, annoying them on the road trip, asking about everything you saw along the way. I am definitely that person. Curiosity, to me, is a core value. I'm constantly reading. I have more books in my house than furniture to house them. I have a Kindle. I have my Audible app. I'm constantly enrolling in online classes in my spare time. I have two graduate degrees, and the second one I got is in creative writing, just for the fun of it. I am constantly trying to feed my brain with good information. One of the things I have found that brings me joy and energy for my very tired brain is to sit in a room with really smart people and ask the big questions. This happened recently in a meeting between Smithbucklin, our management partner, and McKinley Advisors, where we asked just big questions. It was only an hour, but I left that meeting incredibly energized, thinking about how are we are operating in this fast-changing environment. I can't say enough about surrounding yourself with that kind of environment. Go to conferences; enroll in meetings; listen to podcasts like this. The importance of our network and learning from our network is critically important. Those are the ways that I try to be a lifelong learner, and I don't think there's any end in sight.

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Jeff Cobb: [00:33:23] That wraps up the conversation with Denise Roosendaal of the Institute for Credentialing Excellence. Stay with us for our recap.

Celisa Steele: [00:33:29] You'll find show notes and a transcript for this episode at leadinglearning.com/episode483, along with links to the I.C.E. site, specific resources mentioned in the conversation, and a link to Denise's profile on LinkedIn. If you found this episode valuable, we would be grateful if you'd share it so more people can find the show and benefit from the conversations we have.

Jeff Cobb: [00:33:52] Denise made the point that the terms we use in credentialing aren't just semantics—they reflect genuinely different models with different purposes. Knowing the distinctions between certification, certificates, and microcredentials helps learning businesses make better strategic decisions about which fits their goals and market.

Celisa Steele: [00:34:12] On the future of assessment, Denise sees real promise in moving beyond point-in-time tests toward ongoing, real-world evidence of competence—from wearable technology that captures on-the-job performance to longitudinal approaches that give practitioners feedback over time rather than at a single moment.

Jeff Cobb: [00:34:29] And, as AI takes on more technical work, Denise believes the skills that will matter most are the uniquely human ones—critical thinking, creativity, and problem-solving. Credentialing bodies that get ahead of that shift will be better positioned to serve their professions.

Celisa Steele: [00:34:45] Thanks again for listening—and see you next time on the Leading Learning Podcast.

[music for this episode by Moarn]