

Micro-Credentials: Competencies at the Core

Dennis Green, South Arm Training and Development, Keynote: What Are Competencies and Competency Frameworks?

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ROSS MCKERLICH:

We're going to transition into our next keynote speaker, who's Dennis Green. And now Dennis, he founded South Arm Training and Development in 2019 after a really long career in tourism and hospitality. And so his consultancy focuses on competency frameworks, prior skill recognition, and training and certification strategies for organizations. Organizations in Canada, as well as around the world. Dennis was also a co-author of the eCampusOntario's Open Competency Toolkit, which is a really great resource, we'll put the link in the chat over the next couple of minutes. And, and so he'll be drawing from a bit of those resources. But in addition to his work in that area, he's also a technical, the technical editor for the IEEE And I'm going to actually pronounce the I triple E and probably not, hopefully, hopefully it probably won't slur. So it's Electrical and Electronics Engineers Standards Association. So these are the worldwide folks that create certain standards that make things work throughout the Internet, but also in technology in general. And within that, there was a project going on about recommended practices for competency development, which was right in, right in Dennis's wheelhouse. And so this was his role there as the technical editor. So really contributing internationally to this field of competencies and competency frameworks. And so we're really glad to have you here, Dennis, and I'll just hand it over to you. He's going to be showing this on slides. And again, it's gonna be about the what of competencies. What are competency frameworks and what are competencies themselves. And lots of great examples in there too. Perfect. Thanks.

DENNIS GREEN:

Thanks Ross. And I'm just going to share my screen and here we are. I just have to reorganize you so I can still see everybody after while I'm screen-sharing. Little housekeeping here. Perfect. I think we're good. Well, thanks for inviting me and thanks for having me and thanks for the introduction. And it was great to hear what Lena was talking about. Lena and I collaborated on that when we were producing the toolkit for eCampusOntario in her prior life there. So it's great to hear how she's applying that in her work now and I'll pick up the thread and carry on and hopefully lead you into thinking into the afternoon when you could get us more tangible examples. And we've got about an hour together. I'm just going to go through a little bit of scene setting, talk a little bit about competency frameworks, and then the relationships between competencies, activities, and roles. And this is really when you get into the meat and potatoes of how competencies apply to the workplace in particular, those relationships are critical in terms of differentiating between what we're talking about there. And then also linking it back into your world about connecting competencies with credentials and learning opportunities. And then I'm going to close out just with a little, a little bit on how

you can find leverage competencies and frameworks. It's a pretty, pretty big space. I spent a lot of time there now. So I'm always looking at frameworks and archiving numbers of frameworks, and we'll talk a little bit about how we do that.

Before we get started, I just wanted to acknowledge that I am living on their traditional territory of the Coast Salish people. I love the map on native land.ca. If you're not familiar with it, about just showing that the fluidity of the traditional territories of Indigenous peoples around the world. And where I particularly live is the traditional territory of the Coast Salish people and a large number of First Nations, including the Stó:lō, Kwantlen, Katzi, Tsawwassen, Musqueam, among others. And it's right here in south central British Columbia. So that arrow is where I am right now. It's where I live and work. So grateful to live, work, and play on the traditional territory of the Coast Salish people and thank them for their stewardship.

I will be touching on a bunch of things that are covered in the Open Competency Toolkit. I think we're going to stick the toolkit link in the chat. I don't have it handy. I put it in the notes to my slides, so maybe someone from the team can stick it in the chat. This was something that was put together in 2021. Surprising, it's actually been two years since we released it. But the toolkit was really driven to support people working on micro-credentials around the idea of developing competency frameworks and understanding how competency frameworks relate to education. So we supported that work by creating a toolkit. It's really an open textbook, it's done in Pressbooks. It's licensed CC-BY for 4.0. So there's tools and templates in there that you can use. I use this every day in my practice. I've evolved it and adding to it in my practice. So I was mentioning to both Lena and to Ross, I've probably got some more tools to add to the toolkit. Just that I've come across over the last couple of years because as I work with people, I sort of evolved my thinking around, around competency framework development and competency development. And that idea that competence is fluid is applied to every day in our lives, including tools and resources that support competency frameworks.

There's so many words and knowledge and understanding and differences of opinion around what competency ties into. Lena did a great job of putting that in context about how it's relating to what she's doing and some great examples. And within the toolkit, we tried to just sort of set the language because we're talking about two separate things, in my opinion, just to differentiate what we're talking about as we lead into this conversation of competency framework and competencies, I want to differentiate between just the notion of competence, of being competent.

So competence is a state of being and that your ability to do something so successfully or efficiently in the concept... In the frame... In frameworks and talking about competencies and competency frameworks in particular, we're really talking about specific and measurable combination of knowledge, skills, and attributes that result in the performance of an activity. And that is the activity and task. There's a defined level of expectation or a performance

standard within that. Building a competency framework, includes bringing all of those pieces together.

And at the highest level, it's a competency framework is a group of knowledge, skills, and attributes related to activities that often, most often is related to work in the workplace, but it can apply to people's everyday lives. There's a competency framework out of Europe for just the general public around digital literacy and entrepreneurship and other things that are out there. But it's really that connection between the knowledge, skills, and attributes related to something you're actually doing in terms of an activity that are really important and how that applies to you as an individual or as a group of individuals. So competencies can apply to teams, they can apply to organizations, they can apply to individuals. When we're defining them, we're really looking at two separate things. And this is something I really kind of bring it to my work because it gets, we started talking about defining competencies. A lot of times people will end up wanting to go first to creating a task list. And in terms of development, that's absolutely what you do is you create a list of tasks. But separating between what's the difference between a competency and activity that's using the competency.

So when we define competencies we're usually describing them in terms of an observable behaviour is behaviour-based performance criteria. And that includes the combination of the knowledge, skills, and attributes required to complete two activities. So we need to make a connection between the competency and activity. But activities can also be described in terms of process, steps, and tasks. But we want to make sure that we're differentiating between the two. And I'm just gonna give you a quick example.

We talked about a cooking analogy and I think while the breakout rooms were going on, somebody had talked about making cookies, so it was a perfect segue. Whoever mentioned that in the, in the large group, and if we talk about an activity preparing a meal. So I do come from a hospitality background. So I was a professional cook for 20 years before I got into this work. There's a number of things you do when you're preparing a meal, right. You have to find the recipe, gather the ingredients. You gotta make the dishes, you gotta get it on the table. You got to clean and clear the table. You got to clean it up. And, you know, these are the things you're doing, but they're not the competencies necessarily that you're using to prepare them. In order to do all of these things around preparing a meal, there's a group of about five competencies that you're using. You're using recipes, you're using the tools and equipment in the kitchen, you're using the cooking and baking methods. You're following safe work practices, and you're handling your food safety so you don't make yourself or your guests sick. And these competencies apply to every single cooking activity you're doing, doesn't matter whether you're cooking meat, poultry, vegetables, all of these same competencies are used in, applies to those tasks. They're just applied in a slightly different context and in a slightly different way. So when we're building a framework, we focus on the things on the left. You know, what are the things that apply to the activities we're doing? And then we try and relate them to the activities

that people are doing in the workplace or whatever the setting is that competency frameworks being, being added to.

And there is some complexity involved with this. We're going to dig a little bit more into unpacking what competencies are and what frameworks are. But really the complexity around this notion of being competent. Lena did talk about it, about this idea of fluidity and things changing over time. It's not only about being able to do something, but also it's the, all of the other things about the task management and contingency management. What happens when something goes wrong? If you're... in order to be competent, you have to be able to adjust to something. It's not always about performing in ideal conditions. What happens if your oven is too hot? What happens if you don't have enough oil in your pan? And what happens if you don't have an ingredient, and you have to substitute something? Those things are all really critical. And then the environment in terms of their role, in terms of how you do it is really important as well in terms of bringing in those... the ability to work effectively with others and maintain composure and work in a certain... working, doing, performing the work in certain working conditions and all of those things. So all of those things tie into this complexity around, around competence. And we're building a competency framework, we really try and capture all of those things into, into the world we're talking about. So I'm going to talk specifically about frameworks and how the frameworks relate to the workplace because we're going to use that to lead back to how they relate to credentials. I talked a little bit about competencies relating to activities. And then we will also use that to relate those to specific roles in the workplace.

So this is a hypothetical competency framework. The little blue boxes represent competencies in the framework. But how this would be applied in the workplace is that these competencies are an aggregate of all of the work that people do in a specific organization or in a particular field. Each of those competencies links to specific work activities that somebody is doing. So, just as I showed you earlier talking about the activity around preparing a meal and the competencies required for that. When you're developing a framework, you want to understand people's, what people are doing in their work, and then what competencies to require that. So different activities, they all require a competency around problem-solving or conflict resolution or interacting with other people. We mapped the competencies to the activities because we know that the activities also map to a role. So here's a list of all the activities that might be conducted by people working in this organization. Those activities are conducted by people with specific roles. So now we know this role requires these competencies because it's a part of their job description. We also know if activity 2 or activity 3 are something that gets assigned to an individual, those new competencies are things that they need to do as a part of a professional development or learning plan. So the frameworks allow us to, because we're connecting things specifically to the work people do and their role they have in the workplace, the framework gives us enough of a structure to identify where there are gaps, where there's up-skilling opportunities where people need to train and also for future, future-proofing your organization and looking at where does somebody need to go in the next step in their career and what are the competencies they're going to need to get there? How can we support them

in attaining those? If we think about it for a more tangible, sort of practical aspect. Your typical job role and your typical job description. Typical job description has all of this stuff in it that you need to create a competency framework. And I saw somebody was mentioning, I think in the breakout rooms were going on in the main room, talking about connecting with industry and how to understand what their needs are. Job descriptions are a great place to understand what people are looking for because job descriptions usually have a title, which is a description of the role. It usually has a list of the responsibilities, which all of the activities that people are expected to perform in the workplace, and then usually ask for certain qualifications, which is often a list of required education. Need you to have this degree, this trading, the certification. And the list of competencies. I need you to be able to be a good collaborator. I need you to be productive. I need you to manage your time efficiently. And loosely described in terms of people are using in the workplace. So these are, this relationship here in terms of relating the competencies to the role and the activities is really a critical piece of building that a competency framework. And I am watching the chat a tiny bit, but if something pops up in there that I should address while we're talking, please poke me and ask me to do it. So Ross or someone else who's facilitating, feel free to poke me if there's something I should address in the chat.

So we talked a lot about sort of what, how competencies relate, but what exactly is a competency when we're talking about it within the context of a framework. A framework is an organized group of competencies, how you organize it, and how you group them completely up to you and up to the contexts. There's no right way or wrong way to do it. But typically there are, they're organized into larger and smaller organizational structures. Some people will call them domains or subdomains. Language is very fluid. People use a lot of different terminologies, so I don't get hung up on that. But when it comes to actually looking at an individual competency in my practice and what Carolyn and I did when we were writing, putting the toolkit together was sort of put our thoughts together with a working group and come up with a template around what really needs to be inside a descriptor of a competency. And that includes a few things, you know, a sort of a statement of the competency, which is very action-oriented. And then, as well as a description of the performance criteria and a list of the supporting knowledge, skills, attributes, key terms, and definitions and other information. So I couldn't fit everything that might be related to a competency statement into this one graphic. But that's really the sense of what we try to build when we're building competency frameworks and how that relates to credentialing.

With all that information. If it's well put together in a competency framework. Terry, great lead because I'm going to get to that in two steps on the... Yes, absolutely. It's similar to learning outcomes. So where this relationship exists is that within this competency statement and how things are built together, you can see that the competency statement of the performance criteria helps to drive the assessment. It tells you what the expected level of performance is. You can use that to design your assessment tools and then supporting skills and knowledge also help you inform the training and the key terms and definitions help you with that. In terms of

using this to leverage this as a way to develop training that's related to competencies if you're working from a competency framework or with the competency framework. And how that manifests itself is that from these competency statements, you can use them for assessment design, for learning design, and also to put a box around course content and scope. Within the toolkit, there's a bunch of templates and some examples there that you can, you can leverage and use. And we did license it CC BY SA 4.0 because we wanted people to use them, but sharing your work is also critical if we want things to be open, so feel free to use and leverage those for whatever your case may be.

Teri had mentioned in the chat about learning outcomes and its construction of competency statements and performance criteria is very similar to the construction of learning outcomes. We have an action-oriented verb, we have a context, and some sort of criteria or standard that we're doing that we can use that sets the tone. So this would be the competency statement. And then in the performance criteria, we would go down into breaking down, what does handling mean? Selecting, using, cleaning up, storing appropriately would be the performance criteria within this. The context around this is, you know, depending on where you work and what the regulations are, the hazardous materials you handle, may be different. The personal protective equipment you need may be different. But a lot of occupations would have the same competency in the context of the competency would change. So as a cook, hazardous materials would include cleaning supplies and things like that, and knowing how to handle and deal with those appropriately. Somebody made a comment about my guitar collection and I do like to build and paint guitars. So hazardous materials when I'm painting guitars include paints and all sorts of noxious substances. So I have to wear a respirator and all those things like that. I'm still doing the same thing. I'm doing it in a different context, in a different environment. And that sort of plays on this whole idea of transferability and how competencies flow across different occupations, different sectors, different industries. So many competencies are fluid and it's just the context around how you're using the competency that changes.

In terms of what the, how this relates to learning outcomes specifically, we define made a sort of a couple of broad statements in the toolkit to sort of separate this competence. Really describe what the performance he has, but not necessarily how they got there. So this is the end of the day what they can do. Learning outcomes, learning objectives are always tied to a learning activity. So after learning this, you'll be able to do this. It's a slight nuance in the wording, but it does also open up that learning objectives and learning outcomes can support the knowledge and skills within a competency. They don't always have to address the entire competency. I think that's really important for us to talk about as we're talking about how learning connects with... them. And the other piece there is that you can develop your competencies without the formal learning. They can be just developed through skills, experience, trial and error, and watching YouTube videos. And they can also be developed by, by taking some formal training. And relating that is finding that sweet spot of where the learning opportunities are within working with competency frameworks.

And this can lead to, I know the focus of today's work is talking about the contexts around micro-credentials, but really in terms of how this all ties together, this little skill progression map actually coincides with the story Lena was talking about driving. So, you know, when you're starting out doing something, you start out with some learning and practice and you learn the theory first. And then you move into number two where you practice and you get to the point where you're gonna be competent. Take your road test and become a proficient driver, which is number three. And then over time, you may, something may change or you may not drive for a long time, in which case your level of proficiency starts to slip. And you get to a point where you dip below that threshold and you need some additional practice or learning to get you back up to that, over this threshold of being competent. And that does change over time. Where this really ties into learning opportunities is different types of learning and different types of learning interventions sort of apply at each of these points. So we're looking at that beginning step down here is foundational theory and training just to lay the foundation for people. This may relate into, depending, we take this example applied to anything else. This can involve giving people the theory before they actually go out into the workplace, and do some of the work of integrated learning where they actually put that theory into practice. And you know that, that next piece of the closer you get to the threshold is that the learning and training and the assessment becomes more applied and practical. Especially if it involves an assessment of competence, which is sort of setting a mechanism to test people's competence and get them over their... over this threshold. I didn't put a little pointer in up at number three, but that could really be an opportunity for more advanced endorsements or training that goes beyond the scope of competence, depending on what we're talking about for the skill. But any time you dip below that competence threshold, there becomes an opportunity for refresher training, your re-skilling. And again, this can be something that's formal, formula or in formal, but those are opportunities there that all apply. All of these things would be related to the same competency. So what I'm trying to get at here is that it's not just a one way of connecting learning to competencies. There's a whole way of applying learning and assessment to the same competency depending on what the needs are and what the purpose is. And who your learner is. Somebody who's never done this before. You've got to start at number one. If someone's experienced and you're putting together a refresher program or an upskilling and reskilling program, you can design the learning and the assessments around that where the learner is.

So how that all ties in is, you know, we talk here about this idea of this competency does tie into this recognition. And I'm going to leave any discussions about what credentials mean and micro, macro, all of those types of things. But essentially we have an achievement that's being recognized and that's related to a competency in some way. That requires some learning, formal or informal, requires some assessment in order to be able to get to that achievement. And it's not a straight path. It can be iterative. You can assess and someone's not quite at the place where the achievements can be recognized. So you send them back to address some gaps and for a little bit more learning and practise and get them to the point with the ultimate goal of recognizing the competency is we have a mechanism. To have a mechanism where you can

connect that competency to a specific achievement. And people using that in all sorts of different ways. It could be an employer's set of competencies that they're looking for. And they have a performance management framework that they're recognizing the achievement. It could be micro-credential. It could be... It could be a more formal course of study that ties into the competencies.

And all of those things. When we look at that, is this connection here? And again, this is just an example of competencies within a framework that are organized into some sort of a structure. And the samples that we've put together for the toolkit focused on some competencies. We focused on two areas. We had some around occupational health and safety and some around remote work. We were developing this right in the midst of 2020. Late 2020. We were mid-pandemic and everybody was working from home and our working group. And I know there's some folks here that we're involved with that work, that we're on our working group and also provided feedback to the framework, felt it would be really important to talk about what are the competencies people need when they're working from home. And this whole world has changed for them. So higher focus on self-management, planning and organizing your own work and being accountable and adaptable to doing things differently when you're not in an office environment where you're surrounded by your peers and everybody's connected to you. Higher focus on the use of tools and equipment to communicate, Zoom, email, video, chat, anything else rather than face-to-face communication. Communicating and working with people in a different way. And then for leaders, how do you coordinate and provide guidance and monitor people when they're not in the same building as you? What changes in that aspect? So we created a set of competencies all around that, that include performance criteria and things like that as well as good guidelines for how you can customize those to your own personal, personal workspace.

And this leads us to the question, Okay, where do you find competency frameworks if you don't have them or you're looking for them, where are places you go. And I do see that Vivian shared in the chat a link to one of the ones that they, on climate adaptation. And that I am collaborating with the team there on the V2 of that framework. But you will see that professional associations or regulators quite often have competency frameworks. Industry sectors also produce them. Governments are getting more and more into producing them depending on where you are in the world. And we see the EU is doing a lot of work on competency development and competency framework development that applies to the entire EU. And large organizations are doing a lot of work as well in terms of developing competency frameworks that are within their organization that is specifically tied to their occupations and job roles and their performance management systems. And if you can't find what you're looking for, you can create your own. I didn't provide specific examples there just because there's too many to get to. But feel free if anybody's looking for suggestions on where to find competency frameworks for a specific field of study or anything. I'm always happy to share what I know. Like I said, I'm always coming across, across things. I'm working on a project right now, doing a competency framework for digital health with the WHO and another group in Geneva and

mapping out sort of all of the competency frameworks that exist around health technology has been an interesting and daunting task of just seeing how much is out there already.

And within that though, I think one of the things that becomes a challenge, and I wanted to talk a little bit about openness and how important that is. You know, there's a lot of competency frameworks out there that you can't get to because they either require membership in an association or they're, they're locked up behind a paywall. You're not gonna get IBMs competencies openly shared unless you know somebody that works there, for example. So getting access to things is hard to see. So many of these competency frameworks have the same information. I don't know how many times. Every competency framework I've ever seen has competencies on problem-solving, communication, collaboration, teamwork, decision-making. They're in everybody's framework. And every time that we work on a framework for somebody, we end up rewriting them Writing them for a specific context or looking at them. But the more open and shared ones there are, the easier it is for everybody to look at things. It's also a lot of stuff out there in static documents. PDFs that are sometimes very difficult to read and understand. That you have a 400-page PDF that's on a website, which has some very hard information to digest in terms of understanding the competencies and what the performance criteria are. And finding ways to access and interpret that information. And different areas, different terminology and context is always, is always an interesting part of discussion. And then they get to this point. We say there's a lot of competency frameworks out there, but we still see people creating them more and more. So, what's the problem we're trying to solve? Are there too many frameworks? Or are they not just appropriate for what we need? Or are the frameworks that people have developed so focused on one specific occupation role, context that they can't be applied to somebody else's work? So those are all things that I think in this space are out there.

I'll talk a little bit about solutions and some of the work that's going on. I know that Ross mentioned off the top that I was involved with the IEEE standard they were putting together on recommended practices for designing competencies. Ironically, that document is also behind a paywall because they make you buy the standards. So I found the irony about developing open frameworks that you have to pay to get the standard quite interesting, but it is what it is. But certainly the toolkit is open and you can use that as much as you like. The more frameworks that are connected, and I think this is work that I see coming along, is that the more programs that are... the more frameworks that we know have similar or competencies that are the same and we can connect those competencies, I think the better off we will be across the board. We'll be able to map this competency from this framework is the same as this one in this framework. And therefore, maybe there's ways to move credit recognition between the two frameworks. Just you're doing within some of the other priority assessment and recognition of prior work that goes on in the post-secondary system. So the more frameworks are related to each other and we know that they're saying the same thing or saying different things is important. Great collaboration is really critical in terms of working with folks. In terms of, you know, you've got enough people at the table to represent the diversity of the audience and the

diversity of the individuals for who the framework applies to. And then interoperability is another big one is that language standards, data models. Are we talking about the same thing or are we using the same word for something different, or using different words for the same thing. And then at the end there is just open licensing and making sure that we have that. If you are producing something, share it, please. And those things are, those things are really, really critical. I see lots of comments in the chat about looking at job descriptions and those great places to look and start. People are doing a lot around describing specifically what they're looking for. And interestingly enough, because people are relying more and more on technology for the hiring process. A lot of applications are being screened for the same keywords that are in the application. So people are writing, responding to a job ad on Indeed or through a portal like you're applying through. The B.C. government uses a portal for jobs and a lot of municipalities do the same thing. If you don't put the right things in the fields that you look for, your resume gets screened out by the system behind it and it'll never land on the HR manager's desk. So I think the more we use the same language and tie things together, it's gonna be better for, better for everybody.

And I do want to give a little bit of a plug. If you're on LinkedIn, there's, there's actually a group on LinkedIn, which I'm a member of, which came out of the work the IEEE was doing. But this is not tied to that work at all, which is just a group of people that are always talking and interested about competencies, competency frameworks, and things like that. So they have a monthly webinar series that's being hosted by the U.S. Chamber of Commerce, T3 Network, which talks about work that's going on around competency frameworks globally and lots of good people involved in the group. Good place to make connections if you're interested in this stuff. Then tie into it. In terms of just talking about just watching the chat here. B.C. Government, Government of Canada too. You're right, David, I actually downloaded a competency framework from the CRA, which was somewhere on the government's website. I just actually was... in addition to this sort of high-level ESTC skills for success frameworks and things that they're working on. This was one specific to the CRA that was actually very well done. It actually, it put the context of how people are communicating and interacting with individuals from the purpose of someone who's actually looking at your tax return or working in CRA. But I thought the way they put the structure and the language together was actually a great example. I'll be sharing that with people as examples of frameworks to look at. And there's lots out there, lots out there that are really well done. And if you find one that's really confusing, there's probably one out there that's put together in a way that's a little easier to understand.

I think that's all I had on my deck for today. I know I've been talking quickly and talking fast and a lot to unpack there, but I think the rest of the time we have here, I just wanted to turn it back and have time for discussion questions from people and I don't know, Ross, how you want to we want to facilitate that, but that's kind of all I have on my deck.

ROSS:

Great. Thanks very much, Dennis. And I think we'll do the same approach as before. We'll, we'll go between the chat and also the hands raised option. But I'm going to start with something from the chat. Emilia actually brought some really interesting questions when you were talking about competency frameworks. And she brought up the point that there's a lot of small businesses in B.C., particularly and across Canada. Do these competency frameworks and do they apply to small businesses as well? For example, I think you've been involved in quite a few small businesses, so anyway, what's your response to that one?

DENNIS:

Yeah, absolutely. I'm just, I'm trying to merge my thing back with the main menu here.

ROSS:

No problem. Anybody else? Anyone else see these guitars? It's a little bit obvious, but anyway, that's always probably, it was always probably some comments in there about that. So it's great, but...

DENNIS:

It actually, you know, the funny thing is, this is one thing that changed during COVID, right? Is that, you know, I said this to a lot of people, is that before, my old life, when I worked in an office and put on dress clothes every day. The concept of the fact that I have a couple of guitars and it's really just a big part of my life would never come up. We were socializing over something. So first thing everybody sees, so it's really made us much more transparent as individuals. And you open the window into your world a lot more when you're working from home, especially if you do, I'm very fortunate. I acknowledge my privilege and the opportunity to have a really nice space to live and work in that allows me to have things there.

ROSS:

Well, thank you. It's good, important to be real, right? Yeah. One thing Lena was referring to as well. We have to be real in our micro-credentials.

DENNIS:

Exactly. To get to your point about small business, Ross, absolutely, they do. And I think the challenge and this applies to small business. It just applies to everything where there's orders of magnitude, right? Applies to small colleges versus large post-secondary institutes, small regions and governments compared to the large provinces and territories. The smaller you are, the less resources you have at your disposal doesn't mean that your needs are any different. So a small employer is never going to have the time, energy, or money to go out and develop a competency framework for their specific needs. That being said, this is where the role of sector organizations or enablers in post-secondary can help bring people together. Because you could be creating a micro-credential for a group of small employers or an industry that has a lot of small employers. Bring the people together, help them coalesce on a competency framework if one doesn't exist, or if one does exist and make them know that it's available and then help

them work through how they can apply that to their workplace. I do this a lot in work I'm doing now. I do a lot of work in the skilled trades. Skilled trades, fortunate, we have national occupational standards in all of the skilled trades. Every province has a provincial curriculum that's aligned with those. So when you go into develop work around thinking about how credentialing or micro-credentialing or upskilling, gap training fits into the skilled trades, you have a framework to look at and you have something to build from. I saw a comment earlier in the chat about the need for pan-Canadian competency framework and the trades that is not occupation specific. That's the biggest flaw in the system is that if you're a millwright and you want to become a heavy-duty mechanic, those two sets of standards were developed one by millwrights, one by heavy-duty mechanics. Don't talk to each other, don't collaborate. I'm working on a project right now where we're moving people between different occupations. So I had the fun task of consolidating all 56 Red Seal strands or standards into one spreadsheet, cross-mapping them. Building a nice, beautiful pivot table, mapping that out. And then creating pathways between certain clusters of occupations where we know they do similar work. It just hasn't been mapped out that way. So the information is there. So I think to get back to the small employer, the small employer is never gonna be able to lead the work. But small employers have great insight and ability to participate in the work and support it. So, you know, when we can, we can create things that try and always think, how can we create something that will apply to everybody's workplace and then help people with a tool to help adapt that to their specific workplace. So your framework for automotive repair may include everything every auto mechanic needs to know for every type of vehicle. If I'm only running a brake shop, I can isolate those few competencies that are required for my break shot and turn that into something tangible in the workplace that I can use to leverage and support the people working for me in terms of how their work connects to the system. So that's an excellent thanks. So the conclusion is, but yeah, it does apply. And there are barriers, but it could be meaningful to their small business. And I agree with Emilia, it is actually a big part of our province and how we're put together. And I really am excited about the open aspect as well. You were saying that just like open textbooks, sometimes there's like Creative Commons licenses on competency frameworks as well. And so that could also be really useful for a small business or any business actually, right?

DENNIS:

Yeah, absolutely. There is work going on globally on more of that, both connecting existing frameworks through common language. I know some of the others on the call that are more in that space will know more about that. But like there's, there are groups that are using kind of a universal language around data models to map competency frameworks together so that they can easily translate from one to the other. And doing the same with curriculum alignment between, between places in different parts of the world. But at the end of the day, if it's not public, if it's not open, you know, how are you supposed to get to that? You have to be able to find the information and use it for things or even if something shared. This is, I read this instance all the time. If you see a great framework and it's published and it's there and you can see it and anybody can log in and look at it. You know, when you say, actually can I use this to

build, I want to take this and adapt it and customize this for my framework as I go. No, no, no, you can't do that. This is our framework. You can look at it. You can use it for inspiration, but no, no, no, you can't adapt it. So, you know, so I think that's something that's really, really important. I am trying to be more in the business of liberating competency frameworks. So if I have the opportunity to work for somebody who's got a closed version of a framework and convince them that through the work we do that we should share it and put it under a CC license to make it available to people. I always try and extol the benefits that you do this. Somebody else will do the same and be able to bring things back. Yeah. I know David's got a couple of things in the chat there to some folks that are working on stuff like that.

ROSS:

Great. Thank you. And actually, so I'm gonna get back to the chat now and look at some of the questions we have. There's one has to do with stacking and laddering. And so we're going to address that one now or we can take one from the raise the hands scenario. You're trying to listen. It was Allison Brofee. It seems like stacking laddering is important in multiple... Sorry I was going to say multiple choice. In micro-credentials. And I'm wondering how credit and non-credit programming can work together to support this and meet students' needs. Are others thinking about this too? So not exactly right in the competency wheelhouse.

DENNIS:

We can talk about it from the context though. Because I think, I think I gave the example of, you know, in the workplace, you know, you've got a job role that's mapped to certain activities and the competencies you need. And then you're moving to another job role and you have a little gap there. Well, that opportunity in the workplace is a learning pathway that I'm going to give you as an individual, say Ross, I'm going to move you into a project manager role. You've got all these already, but now you need to learn this because you know that maybe you haven't had as much experience in that. So maybe we're going to send you to a project management course to help you just understand the theory on it. That's going to help you with the work. We're gonna give you a project. We're going to walk you through it. I'm going to move you in that direction. You're going to have that competency and then in your new role, you've got that. Well, same thing applies in terms of stacking, laddering from the post-sec. system is, you know what those opportunities are for one employer, one individual, great. They've got a plan, got a whole group of people that have the same need. This is a great opportunity for post-secondary. Say hey, we're over here, we can send all 12 of those people that need that project management training into one thing and it's done in a way that's flexible. And I used that example because I know it's readily available through part-time studies in most colleges and universities, where you can actually go and take a little bit of short training and focus. A lot of the part-time studies or continuing education departments do a lot of this training already, right? And there's great opportunities there. But I think that's, those are the conversations we want to figure out. Is that... how does this aggregate into something else, right? And how do you bridge that? What are the, what are the things we can stack and ladder on top of what already exists to get to a different outcome for people. And within the credit and non-credit world, I think you all know

that are in that space, you know getting things to the credit system is a little bit more challenging in some places than others, but it doesn't mean it's insurmountable. And I think it's, at the end of the day, we talk about how those things just like competencies stack and ladder into new opportunities for people, the credentials stack and ladder into other things that help support people and new opportunities.

ROSS:

Great. Thank you. Thanks Dennis. That's enough for me trying to figure out about questions, although I can continue it, but I do have a feeling that folks would like to ask on their own as well. So we'll do the hands raised option now and see what kind of questions there are. And I'll need your help on this one, Declan. Thank you.

DECLAN:

Looks like Don's got a question.

ROSS:

Great. Thanks. Go for it. Go for it, Don.

DON:

Great. Okay, thanks. Thanks a lot, Dennis. This has been a really good review and you're doing excellent work. I've been asking about transversal skills and I just find them really, they're really important. They're really hard to demonstrate. They tend to be really hard to assess. And I'm just wondering if you have any thoughts about that, about making that more... giving them more currency.

DENNIS:

Yeah. And I think... I nearly jumped in on... somebody was asking about post-sec, or about high school students transferring into the workplace earlier and I was going to respond, and then I thought, you know it's going to come up after my talk. So I'll leave it to now to talk about that sort of skill transferability and things like that. They are critically important. And I think we don't do enough around mapping and acknowledging where people are and where they can be in some of those things. Just as an example, we have, we have a frame... There's frameworks for skills for success in the former, essential skills that ESTC has and their skills competency and skills and competency taxonomy has a bunch of a whole bunch of great information about, about transversal skills that apply to workplaces and things like that. But there aren't enough universally adapted tools that sort of recognize that on a one-to-one relationship, I would love to see this just personal blue sky. I would love to see every high-school graduate come out with an inventory, a list of where they map against those core skills for success for workforce employability skills that's been measured and assessed as they go through their learning and an opportunity for them to have connected that with their, with the work that they've done. And then that's not tied to specific subjects like, you know, like collaboration, communication, teamwork, all of those things that they use all the time. And we all use every day in our work.

We have ways to assess them. It's just not ingrained in our system to assess people against those things all the time. And I think those are, those are things that we can make a part of assessment. And it doesn't have to be, it's not unidirectional, right? I mean, I think I'm always a big fan of this sort of 360 assessment view, right? So here's the criteria. I've got a really well-defined competency around collaborating with individuals. And it says I need to be able to do all these things and what's required of me in doing that. I can self-assess myself against that. And I can say, I think I do this well, I do it all the time. Sometimes I mess up here. But then you take that to the peer or your employer or somebody else who works with you and they can say, Well, actually, you know, I don't know about that Dennis. I think you've over-inflated your, how often you do that. You do that most of the time, but maybe not as frequently as you think. And those are, those are opportunities for that. That is assessment to tie in and create and triangulate in terms of what that looks like in terms of building a bit of a more of a skill map and a profile around where you sit on those transversal skills. Because they do apply for every workplace. And I think the other thing to note on that, and this is just going for my own personal experience. I'm a cook by trade. I went to... I started working in the restaurant business when I was in high school, did my apprenticeship and that was that. So it wasn't until I got out of that world and got into an office. And I remember when I started working at my last job and working in an office and the boss was at the time, she was like, Oh, I'm not sure if this transition could be difficult for you. You've not worked in an office environment. And then we're doing something like we're managing a project and I had to do a budget, like knocked out the budget. She's like, Oh, wow, I didn't know you could add project management skills and budgeting skills. It's like, What do you think of planning an event for 200 people next Saturday? I need to know how many carrots, what time everything's being prepped, who's doing what? I've got a checklist for everybody. This timeline needs to be done and it has to be fully costed out so we're still going to make 10% at the end of the day, like, yeah. do it. You have done it. Haven't done it in this environment. It's no different. We're talking about forecasting people's time and resources and things you need. And I would ask questions about, okay, how do we calculate how much, what our operational overhead is here? We're costing an hour to bid on a project for a provincial funding grant. And they're like, Oh, oh, we don't think about that. We don't, that's just those are costs that somebody else bears and it's like, so it's like you bring that stuff to the table, right? I've got a friend from high-school, his dad was in the software business for a long time, very successful in the video game world. And I saw him a year or two ago at a 50th birthday party for somebody and his... Tony's dad was always a big restaurant supporter. He'd come out and dine at restaurants a lot. So I saw his folks a lot in my years in the restaurant business. And his dad said to me, he said, You know what I always loved about the restaurant business. He said, If I go to a restaurant and I look at an open kitchen, he goes, I am watching real-time hyper speed, project management and prototyping, and design thinking in hyper speed. Like it takes us a year to get through our project revision cycle. And I can watch a group of 15 people cook 150 meals and make small adjustments to their workflow and everything outcome with precision in the space of an hour-and-a-half. He goes, I just find it absolutely fascinating from a systems analysis and systems design perspective. And I was like, You know what, we need to do more of that in terms of you thinking about what do you bring to the

table? Like, can you apply to a job that says you need project management or prototyping skills, and you're coming from a completely different field. Can you put it into the language that the person on the other end is going to understand and say, Hey, I can do this in my sleep. I've done it here. It's not the same, but I can guarantee you it is very similar and the concept behind it is different... is, is the same. So I hope that answered your question, Don.

ROSS:

Great, great example actually of transversal skills. So being able to take skills from one area and apply it to another area that is not the same but similar. So yeah. So thanks for that example, Dennis. I think Debbie has a, yeah, exactly.

DEBBIE:

Thank you. Ross. Hi, Dennis. I think it's interesting. My question is about a video gaming and software company. I was just wondering if within B.C., where are we in the micro-credential development in the video gaming software company field? Is that a good field to use as an example for how far or where we are, or any more room to grow in the micro-credentials?

DENNIS:

It's probably going to come up this afternoon. I know that, I think isn't there. Don't you have DigiBC as one of your panel, on one of your panels this afternoon talking about real-world example? I'm not sure at the higher level about sort of how far along actually having a competency framework developed for that sector is. There are lots of competency frameworks for skills in technology, information technology, things like that, that I'm aware of. I haven't really looked specifically into the gaming side of that to know if people have actually developed, developed frameworks or not. One of the challenges you have in that industry, like you do in a lot of sectors, is the pace of change of technology and tools and applications is so rapid, it makes it really hard to keep up with what people need. So the focus becomes more on sort of the core competencies. And the problem-solving is assisted design. The thinking, the coding, and not the nuance of where the opportunity is, is like, Hey, we've got a new programming language that's taken over and everybody's using it. Everybody's got to jump on board with that, right? And just, just see what's happened the last three months with chatGPT, right. About everybody's like how can I leverage this for something else? There's something to be had there for. how do you leverage that for something, you know, something really positive as something that can really help people with their workflow and make their life easier. I'm always looking for ways I haven't had a chance to dig in yet, but like analyzing complex data for multiple frameworks, I haven't found a way to have a bot do that yet. I would love it if I can figure that one. I think my life will be easier by a long shot. But also I think, you know, there's, there's things like that that are just technology changes so quickly it's hard to keep up with it.

DEBBIE:

That's a good reminder. And that ties in with what Lena was talking about earlier, that there needs to be that nimbleness and quickness to change the offerings if needed, right. Instead of taking a whole year or something like that.

ROSS:

Yeah, and actually thanks. And I can confirm that this afternoon in our panel, the how aspect of our day. Loc from DigiBC is going to be talking about that initiative, which I think is a really good showcase of how an industry can work together with a number of different institutions and also the province as well. So that happens to be the creative technology industry. And so stick around for the afternoon. It'll be fun. Okay. Let's take one more look. How you doing, Dennis, you okay?

DENNIS:

Yeah, I'm good.

ROSS:

Okay, one second here. So, now I'm just going to be looking at the chat here. You can take a look as well, right? So maybe I'll get you to what Lena was able to do as well as take a look to see what you'd like to answer.

DENNIS:

Yeah. I'm just trying to see if there's any specific questions.

ROSS:

I'm just looking as well.

DENNIS:

There's a comment there about, you know, a competency framework for leadership that's not directly connected to a field of practice. I think that kind of goes to this idea of the transversal skills that we were talking about there. And I think the challenge is with anything like that, this is what I know when we were working on the toolkit. We really wanted to make sure that we were recruiting people that represented a bunch of different industries at the table to help us with those. So we can talk about some of the nuances about some of those skills and how they relate to different industries. Because I do recognize that people are going to say, it's different in my industry and it's different in that industry. It doesn't mean that we can't have a competency framework that is adaptable, that allows you to do that. And I'll just use something easy. Communication. Communication competency that describes that you need to be able to communicate effectively with people based on your particular role and the environment you're working in, right? That's measurable because I'm measuring it against where I am here and now. Now, what that measurement looks like in terms of the assessment of that, is going to depend greatly on the context, right? So communicating effectively for someone who's working in a really technical field with very technical people, requires a whole different set of skills that

someone who's an early childhood educator who needs to communicate with children under the age of five and their parents. It's a completely different type of communication that they required. But the competency and adapting and responding to the individual, there are so many core elements there that are the same. So I think if you are developing frameworks that are meant to be not industry or sector specific to try and use examples from a few different places to share. This is how this might apply to your work. And then it can, it's not tied specifically to one sort of industry in particular, and allow, give people the freedom to adapt, right? I think there's nothing wrong with adapting and being more specific. I was on one of my calls this morning with the Digital Health Group I'm working with. They were one of the people was asking, so we're talking about this whole idea of building this competency framework and tying it to specific roles and activities that people are doing. Now, there's no way on Earth we can map it to every possible role within the field of health care and how the competencies will apply. We said we can provide a couple of examples. What does this look like for a frontline practitioner? What does this look like for someone who is an administrator in terms of their work? Just to sort of do some framing around how the competency applies. But really it's once people start using it, that they're going to generate a whole bunch of other examples. And I think the comment that came out of my group this morning was, once we start using this stuff, is there a way for us to share back how we're applying this competency in a specific role sector, occupation, country. So that becomes a body of knowledge within a community of practice and helps evolve the framework. So you can say, Oh, so now I've given you three examples about how the competency applies. But over time, we've got hundreds of examples because Lena is giving me an example and Declan's giving me an example and Ross is giving me an example. I'm only talking... Just people I can see on my screen. So sorry if I didn't call you out, but you know what I'm saying? Is that over time that inventory of how this applies to your work broadens, right? And I think this is really, really, really important in terms of thinking about how you're going there.

ROSS:

Great, thanks. We'll just have one more question and then I think we'll break for lunch a little bit early. But I have, I see one that is an interesting one for sure, relating competencies to Bloom's taxonomy, which is always a favourite of our world. But before I ask that, is there another question from the floor? Putting your hand up and said, I really wish I'd asked this, but now's your opportunity. Okay. Great. Well, we'll just have that. Actually there's Alison and actually, and she has a good question there about great learning about competencies and I also think about scaffolding learning to achieve competencies. Are there still connections with Bloom's Taxonomy? And so Bloom is a standard of course, but what would you have to say about that Dennis?

DENNIS:

Yeah. I mean, I think it comes up all the time because I think when we start supporting people in writing competency statements, we always have to come up with a list of verbs. So we tend to filter that. We tend to filter the Bloom's list for what's most applicable in the applied learning

piece. I think there absolutely literally is a place because I think, you know, within, within the context of the comp... in defining the competencies, we're going to focus more to the applied elements that taxonomy. And we're also bringing in from all three domains within the taxonomy. We're not talking just about the knowledge domain, we're talking about the effective and the, and the skills domain as well. In terms of putting that we can triangulate this model of proficiency as we're writing these statements and leveraging them. So we want to, we want to avoid likely in the competency description of using the lower level describe, understand things like that. Those tend to fall out into supporting knowledge that in order to do this, you need to be able to understand this. And I think there's still a way of integrating it. I have seen a few models where they try and integrate in terms of trying to explain to people when they start talking about sort of proficiency levels or levels of complexity within a framework where they're trying to make general alignments with Bloom and, or Miller's pyramid is the other one that people use. And then the Dreyfus model. I know if you're familiar with the Dreyfus model, the Dreyfus model comes from medical education, which is really that beginner to expert proficiency scale, where they apply models there of where people in. So that's really tying into all of those frameworks. And all I'll say is I look at those models all the time just for ideas, especially if you're working with people that come from one of those worlds where they use one of them. Lots of time, a lot in terms of trying to make a connection. And certainly when it comes into deciding learning to support the competency, there is generally room for everything in the whole, the whole, all layers of Blooms at some point. You can have learning that is only intended to support the foundational knowledge for a competency, which is a step towards becoming competent. It's not going to mean that the assessment is on somebody's ability to be proficient or assessing their progression towards that threshold, right? There's nothing wrong with that. I think it's really valuable to do it. And when you're designing assessment strategies, having ways that allow people to apply a scale. And you know, where am I now? Where was I... where was I and where am going? In that against a framework is a really, really important piece. I did see there was a question earlier about assessments in there. We could talk all day about assessments. I was joking with somebody the other day that we need to create the competency-based assessment toolkit next. So if anybody's got any ideas, wants to collaborate with me, I'd be happy to jump on that. Because it does, it is, it does. It's a whole other, a whole other ballgame for sure.

ROSS:

Alright. Thank you so much, Dennis. And I'm going to actually ask for folks to use their reaction to express some appreciation for Dennis for walking us through the what of competencies.