



FROM TRADITIONAL TO DIGITAL

Unleashing the power of Digital Credentials in the United Nations

June 6, 2023

ANDREAS (brief intro)

DON

Hi everyone, it's an honour to be speaking to you today from Winnipeg, Home of the Canadian Museum for Human Rights, in my background. At Learning Agents I've been working with digital credentials for over 10 years across many sectors, including humanitarian action and international development, quite a bit of that with my common sense colleagues.

CANDICE (brief intro)

Why badging for the UN?			
Multistakeholder Environments			
Increasingly complex Competencies			
Lifelong and informal learning			
Globalization / Migration and mobile societies			
Digital Societies			

ANDREAS



CANDICE

I found myself asking what can we measure [and ultimately learn about the holder of a badge]...This to me is what makes it attractive for holistic learning design and evaluation:

Open Badges and micro-credentials are designed to measure and recognize various forms of learning, skills, achievements, and competencies beyond traditional academic qualifications. They provide a way to capture and validate a diverse range of accomplishments, both formal and informal.

-Specific skills and knowledge, professional development, soft skills and competencies, project-based achivements, work-based learning, digital literacy, technology skills, participation in online communities, volunteering.



So, we're here today to talk more about "opening up" recognition beyond the very robust digital certification system developed by ITCILO... and to provide a glimpse of what's emerging, building on what Tom and Eiman have presented already.

I think the key reason we're having deeper discussions about different kinds of digital credentials in 2023 is because of the disruptive impact of Open Badges in 2011.

The Open Badges digital credential was invented by Mozilla Foundation as an inclusive way to recognize authentic *lifewide* achievements, including not only structured education and training, but also unstructured social and experiential learning. And that power is still embedded in its DNA.

Let's have a quick look at the Open Badges standard ...

Most micro-credentials & digital badges use "Open Badges"

Portable digital documents of learning achievement

Visual image & data Easily shared Structured data with links to verification & more info

Credentials are portable across silos, for employment, reskilling & flexible lifelong careers





AGILE LEARNING PATHWAYS Modular, stackable, remixable

...personalized

MAKES LEARNING VISIBLE lcons, learning maps, progress

SOCIAL PROFILE, FOOTPRINTBranding for earners *and* issuers
Socialized in online communities

QUALITY, VERIFICATION

Transparent claims by issuers backed by evidence & endorsements makes learning quality visible

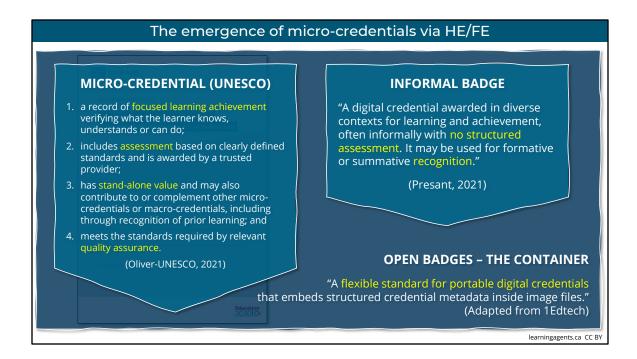


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- → Open Badges are credential documents **dressed up** as pretty pictures.
- → They're graphics files...
- that contain structured information with links to more information and ways of verifying that information.
- → We can look under the hood here to see the kind of information that's required on the left and information that's optional on the right. The actual content of those information fields is up to the issuer, which allows for lots of flexibility for content within that technology standard.
- →Open Badges can be created and shared on any platform that supports the standard.
- → Here are some examples of issuing organizations. A lot of them are education and training organizations, but in fact any organization can issue Open Badges, just as any organization can issue a certificate if they choose.

But unlike most certificates, the rich information inside an Open Badge can tell you very quickly what that badge is about: who issued it, what the topic or skill is, what the level of learning is, how much effort it takes to earn, how the learning is assessed, whether it's accredited, etc. This embedded detail makes badges more transparent and transferable to other contexts such as employment and career advancement.

- →Open Badges can be combined into clusters or pathways and those pathways can be personalized
- →and the badges themselves make the learning much more visible.
- →They can be shared on social media such as LinkedIn, to help build your professional digital footprint.
- A nice side effect is that when learners share their badges online, they're helping build the profile of the issuing organizations.
 And they're doing it in a very transparent way, and that makes the quality of the learning much more visible. A number of organizations issuing open badges have reported that their course outcomes and assessments went through a rapid improvement cycle after they came under an Open Badges lens.
- →Open Badges were invented by Mozilla Foundation in 2011. In 2017, Mozilla passed the standard over to 1EdTEch, a US-based edtech standards body, which has led to some formalization of the vision, including a concept called the micro-credential.



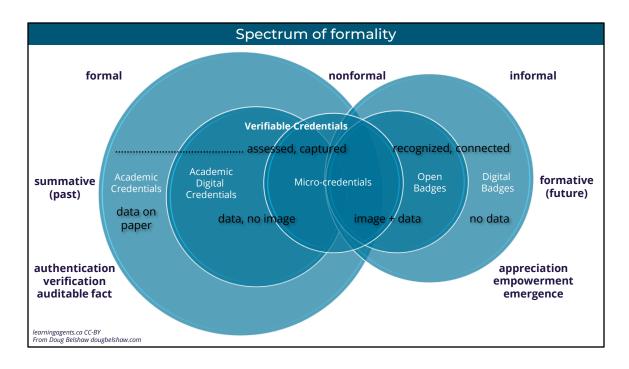
Micro-credentials can be seen as a relatively formal adaptation of Open Badges that arising in 2014/2015.

There has been several definitions of a micro-credential put forward over the years..

- → This working definition from UNESCO captures a lot of common themes. I was one of 50 panelists who contributed to it. One element that's missing is the notion of workplace relevance, which does appear in most definitions and frameworks today.
- → Beyond micro-credentials though, we still have a need for Mozilla's original vision: flexible ways to recognize lifewide learning and achievement to make a difference in people's lives. That includes **informal** learning and recognition. After all, most of the learning we do is informal and we should have better ways of recognizing it. I made this point during the UNESCO launch event and I continue to make the point every chance I get, including today!

We'll be providing some examples of what we mean about informal badges later in this presentation.

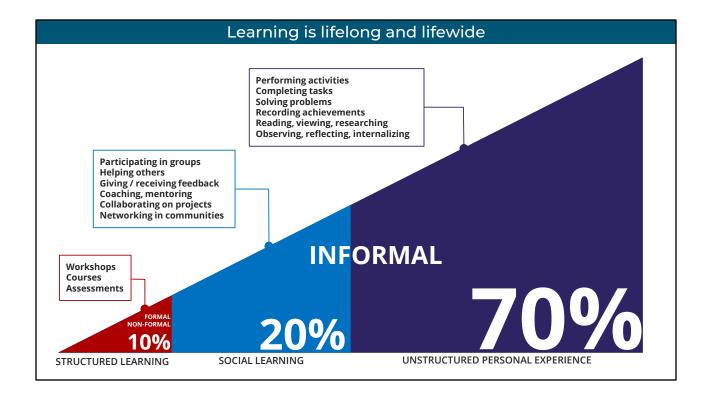
→ The key takeaway here is that Open Badges is a **flexible** standard container that can include formal and informal digital credentials. The credential should be able to describe itself and communicate its purpose within a particular context.



So, Open Badges can support a spectrum of formality within a larger spectrum of credentialing, and I'll lay that out for you here...

- → Open Badges are subset of digital badges, because some badges can just be gamification stickers instead of portable credentials
- → Micro-credentials are a subset of open badges but not all micro-credentials are Open Badges, for example some certificates you might get from a MOOC
- → Not all micro-credentials are for credit, or can stack into larger academic credentials.
- → Not all academic credentials are digital, although we're definitely moving in that direction
- → .I've roughly updated this slide today to indicate a new technology standard called "Verifiable Credentials", which is a larger digital container that can include Open Badges, but also other verifiable credentials such as driver's licences.. we'll talk a little more about those concepts later.
- → I've included some keywords to characterize the both ends of the formality spectrum, but bear in mind that most examples lie somewhere in between these

extremes



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[Slide 8]

But then what is your understanding of learning? What value do we place on knowledge? And which kinds of knowledge?

Lifewide learning refers to the idea that learning should be a continuous and integrated process that occurs throughout a person's life and encompasses various aspects of their life. It goes beyond the traditional notion of learning confined to formal education and extends to informal, non-formal, and experiential learning in different contexts.

With the rapid pace of change in today's society, lifewide learning becomes particularly relevant as individuals need to continually update their knowledge and skills to adapt to new technologies, evolving work environments, and social developments. Lifewide learning encourages individuals to take ownership of their learning journey, pursue personal interests, explore new subjects, and cultivate a mindset of continuous growth and development.

While the specific competences valued in the workplace can vary across industries and organizations, there are several key competences that are generally highly valued in the [Caribbean] workplace.

- Communication skills, interpersonal skills, problem-solving and critical thinking, adaptability and flexibility, customer service, leadership and management skills, professionalism and work ethic..

Learning is lifewide. Most of it, happens in the wild, outside the classroom: it's informal and usually unstructured, sometimes work with others, sometimes by ourselves as we navigate all the things that we need to get done.

→ Here are some examples, slotting into something called 70-20-10 ratio. Some people like to quibble about the exact percentages, but most of us agree about the basic point: you can't take a course about everything.



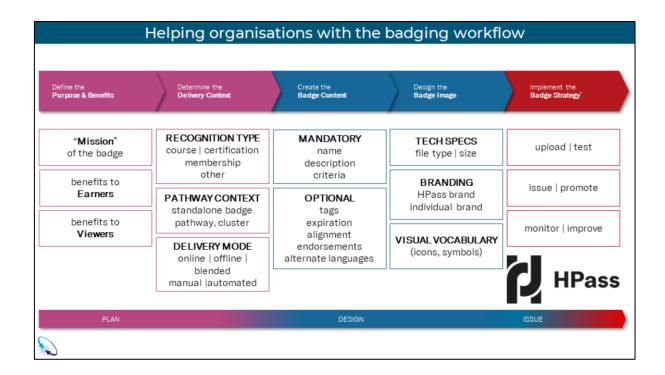
We started applying these concepts to humanitarian action and international development around 2015, and we'd like to walk you through a bit of that story, to provide a context for what we're talking about today, which includes our most recent work for ITCILO.

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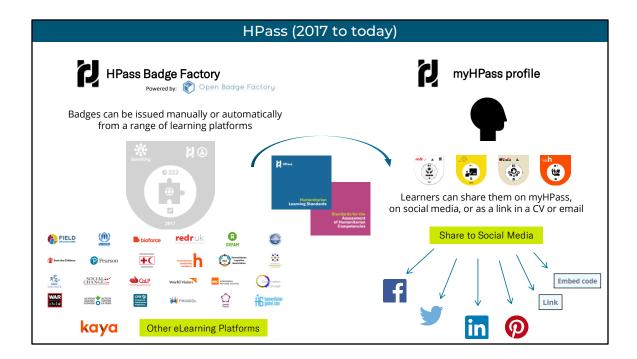
[Slide 10 - Framing the framework]

The development of an open badge framework involves several key components and considerations. It begins with 1) defining the purpose and goals of the OB Framework, 2) Stakeholder engagement, 3) Badge Design, 4) Badge Criteria, 5) Badge Issuing and verification, 6) Technology infrastructure, 7) Metadata and Standards, 8) Badge ecosystem, 9) Implementation and pilot programs, 10) continuous improvement and evaluation.

The cases you will see today have walked this path.



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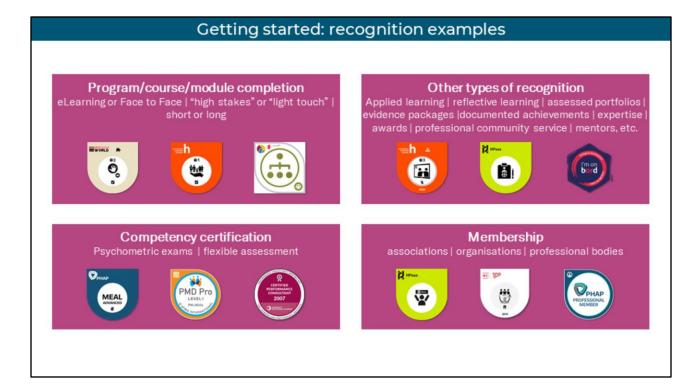


Learning Agents developed some pilot concepts in 2015 for a prominent humanitarian organisation which connected us in 2017 to a larger cross-sectoral humanitarian initiative called HPass, a multi-stakeholder initiative that is housed at Save the Children.

The HPass model is going strong today, with dozens of providers issuing badges based on courses and competency assessments, which are shared on social media, but also on myHPass, an online community that connects people and organisations through badges.

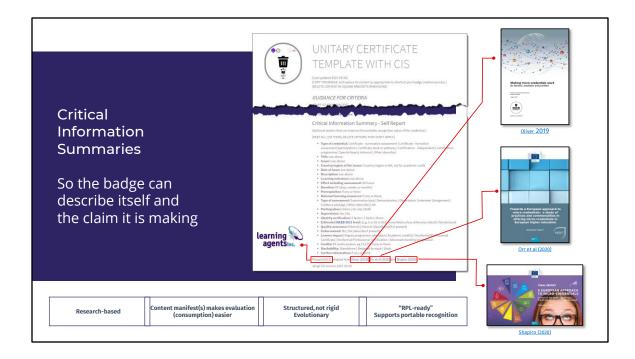
This initiative does a great job of leveraging the Open Badges standard,

→ but also introduced its own standards for learning and assessment, based on global practice. These standards are displayed as principles in the Terms of use for the platform and organisations can go further to certify themselves to the standards.

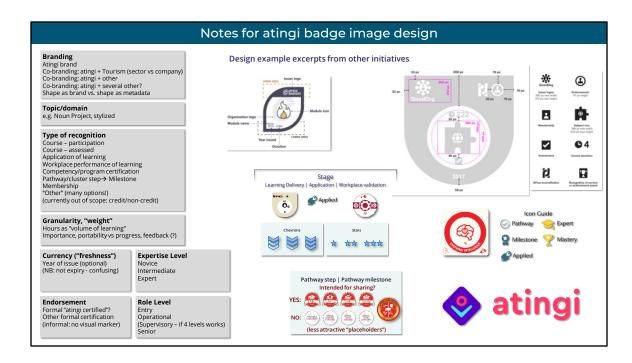


This project was an opportunity for us to start thinking about the different kinds of recognition and ways to make that clear...

- → Course completion
- → Certification of competency
- → Membership
- →And a flexible category for less formal and emergent types of recogniton



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The Inter-American Development Bank has taken a very thorough approach, which leverages its experience of creating over 700 badges that have been issued to over 200,000 recipients. We helped them develop an explicit detailed framework that codifies the patterns of their experience, informed by the other frameworks and global practices we showed you a few slides back. The Framework is packaged with its underlying principles, a comprehensive taxonomy, and a set of policies, procedures and tools to support system quality.

→ The IDB Digital Credential Framework was published in April and it's a living document that will be updated over time.

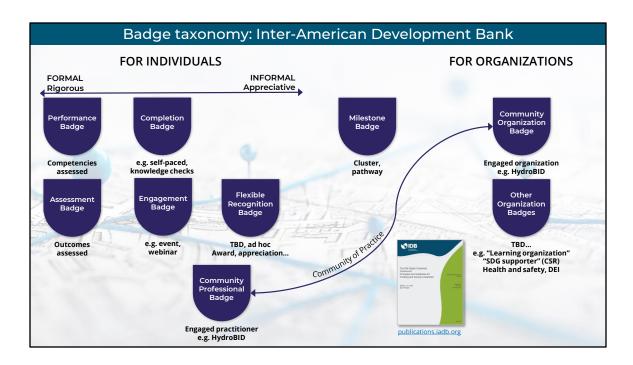
This is so far the most fully articulated framework we've worked on and it's only recently published. So it's a good snapshot of our current thinking.



If you're designing for portable recognition, it's important to become aware of global practices and standards and align to those that make sense for your organisation. Here is some research we did for the IDB that provided them with a well-balanced perspective that fit their context and current policies as a multilateral regional development organisation.

We framed things in terms of:

- → Foundational principles, such as the UN SDGs and the Principles for Digital Development, both of which the Bank explicitly espouses..
- → Academic micro-credential frameworks
- → But also broader educational equity principles, such as Open Educational Resources and Practices and UN recommendations on adult learning..
- → Technology standards, such as Open Badges...
- → Professional and industry standards, but also standards for things like Corporate Social Responsibility, which is important for Learning Organizations, which can learn and change, just as people do



Building quality into a badge framework doesn't mean making every badge a micro-credential or certification.. you can see a wide spectrum of recognition in IDB's taxonomy, ranging from rigorous to appreciative. Each of these badges has its own set of requirements, built on a common foundation of requirements for all badges.

We could call the more formal IDB badges micro-credentials, but IDB avoids the term to prevent the fostering of a binary credential mindset, such as micro-credentials/badges, credit/non-credit, high value/low value, and so on. They prefer a more continuous spectrum of badges that can be adapted to context and extended as needed.

Note the Organisation badges – these are only now in development, but you'll see in later slide how another organisation is already becoming active in this area..

→ We published a Technical Note that provides more background about this initiative. if you're interested.



DON then CANDICE

I'm grateful to ITCILO and my colleagues at common sense for the opportunity to work on our recent project. For me, it was a chance to "open up" recognition of digital badges as a complement to a robust certification framework and it was also a way to explore a different credentialing platform.

CANDICE...?



CANDICE

Factors influencing credentialing at ITCILO

Centre goals, strategy, budgeted plans

Digital transformation | Innovation | Big data, Al Learner autonomy, personalisation of learning | Capacity development: individual / institutional | Organisational collaboration, co-creation

Platform technology & guidance

Successful introduction in 2020 | Badges as "add-on" → inconsistencies Platform provider suggestions for informal badges

Three Tier Certification Framework

Non-credit, but ECTS-aligned:
Diploma | Certificate of Achievement | Certificate of Participation

Centre activities, training culture, staff perspectives

Journey from paper to digital | Value of training programs in context | Communities of inquiry Communities of practice | Dual training online model: long/short term

Global credentialing practices

Mozilla vision for badges | Rise of HE/FE influenced micro-credentials | "Opening up" to approaches for lifewide learning | "Full spectrum" taxonomies for recognition | Standardization: frameworks, content requirements | Graphical "languages" to signal credential meaning

DON

There was an interplay of factors for this project

- → First, there were the Centre-wide goals an plans to be aware of. These involved technology, but also human and organizational capacity building
- → Then there was the Accredible credentialing platform service itself, launched in 2020 with full certification capability but also with badges what to do with those things? The provider's guidance has provided lots ideas, such as in Events and Membership..
- → The Three Tier Framework needed to be respected, but also complemented..
- → We needed to take good look at the context of the Centre and do listen well to what the staff had to say..
- → And, of course, global credentialing practice, much of which we've already explored today..

Badges @ ITCILO - SWOT summary			
Strengths		Weaknesses	
Strengths		Wedki lesses	
Opportunities		Threats	

We combined primary and secondary research to develop this SWOT summary...

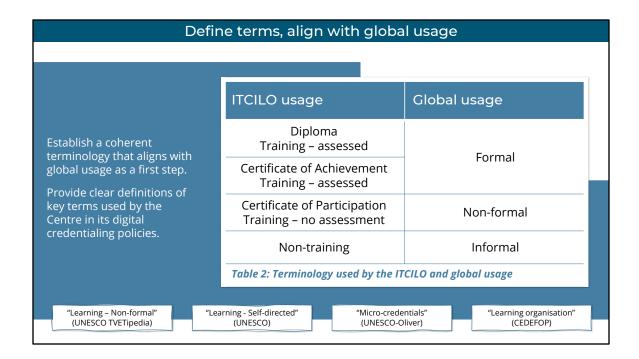
- → We've described many of the strengths already..
- → Important weaknesses include lack of awareness, for example not knowing that a badge is more than a simple icon, but has embedded data.. And allied with that, little guidance on what to put into that data
- → The opportunities for more modular approaches to learning, communities of autonomous learners and big data on impact are certainly there..
- → But need to be balanced against the risks of disincentivising learners, devaluing current credentials and fragmenting the system as a whole.

Badging Recommendations for @ ITCILO

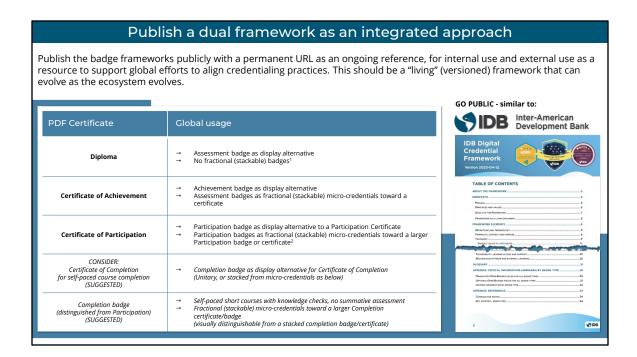
- 1. Define terms clearly
- 2. Create a digital badge framework to complement the Three-Tier Certification Framework
- 3. Publish the certification and badging frameworks publicly as an integrated approach
- 4. Create a supporting visual language for badges
- 5. Explore informal badging opportunities:
 - → Events
 - → Membership
 - → Skills embedded in training courses
 - → Personalised learning journeys
 - "Learning organisations"
- Co-create a community of recognition for individuals and organisations



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Defining terms to get on the same page is a good early step. We were able to source a number of glossaries to make suggestions for clear definitions...



Beyond terminology alone, we recommended that the Centre develop an explicit framework for its digital badges as a complement to the Three Tier Certification Framework and then to publish both as a unified dual framework.

Doing so will provide opportunities for synergies, such as assessed badges that can stack into Certificates of Achievement.

We recommended publishing the Framework publicly, for increased profile...

→ and to join the IDB in providing another non-academic framework as a reference and a touchstone for the growing numbers of issuers whose needs and goals go beyond those of higher education institutions.

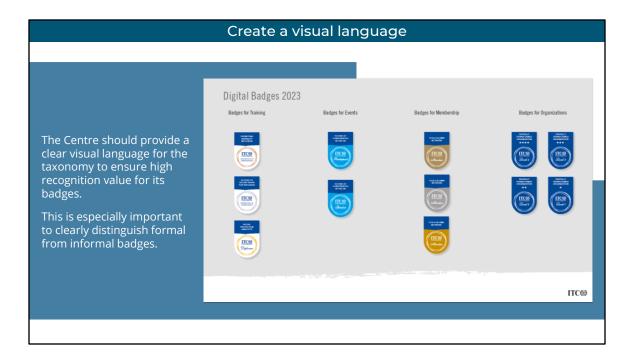


CANDICE with support from DON

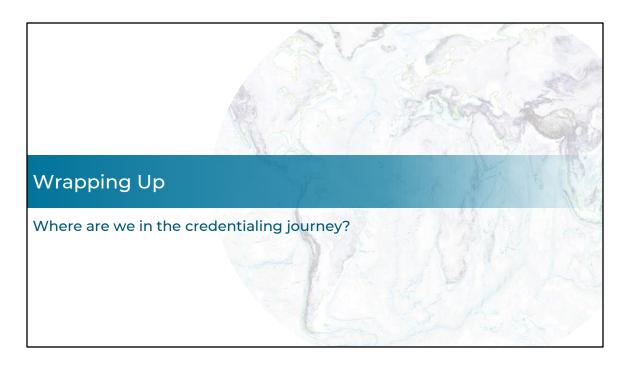
[Slide 26]

By leveraging open badges to recognize valued workplace competencies, organizations can foster a culture of skill development, enhance talent recognition, and provide individuals with a portable and verifiable representation of their abilities.

- Competency-Based Badges: Open badges can be designed to represent specific workplace competencies.
- Continuous Learning and Professional Development: Open badges can encourage a culture of lifelong learning and professional development. Organizations can create badges that recognize ongoing learning and the acquisition of new skills.
- Talent Development and Career Advancement: Open badges can be used as part of talent development programs and career advancement pathways.
- Industry Recognition: Open badges can be endorsed or recognized by industry bodies, professional associations, or regulatory bodies

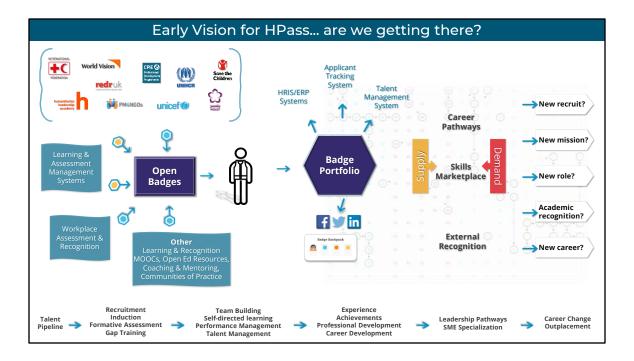


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CANDICE THEN DON

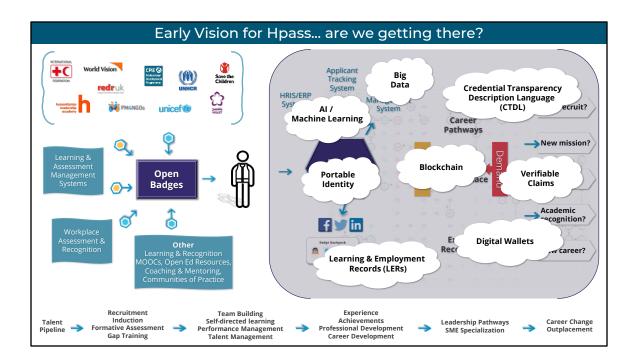
This has been a pretty fast-paced session, let us see if we can leave you with some points to ponder in conclusion.



I'm going to take you back in time to a vision for an ecosystem that I first built in 2015, then adapted for the HPass project in 2017... it's bit complex, but does put many of the concepts onto the same page for us..

- → HPass has gathered a number of organizations to issue badges as a community of issuers, certainly using e-learning as a key tool...
- → But also other ways to deliver, assess and recognize learning and achievement
- → Learners are encouraged to accept the badges in free portfolios..
- → and to share them on social media
- → Increasingly, machine-readable badges will be tracked by platforms for recruitment and workforce development
- → The overall idea is a system to connect the supply and demand of labour that can benefit all concerned,
- → providing individuals with opportunities to advance their careers...
- → And employers with tools to build their workforces throughout the talent lifecycle

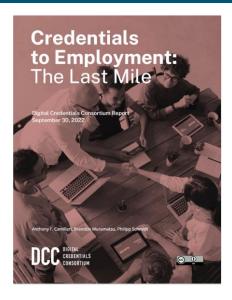
This vision in 2015 anticipated some technology that wasn't quite there yet...



Some of which has since come onto the scene... all that said, are we getting closer to this vision?

Over to you, Candice.

Reality check: we're not there yet



Some findings ("not yet")

- Large awareness gap for employers that is closing slowly
- Largely PSE-centric; employers are often not at the table
- Needs are diverse: large employers, SMEs and regulated professions, etc.
- Lack of widely accepted digital trust and endorsement protocols
- Big disconnect between future promise and current reality, due to lack of critical mass and lack of tooling for an end-to-end ecosystem

Some recommendations ("keep going")

Employers

- Pilot employer-based credential-issuing
- Invest in sectoral competence frameworks

Governments

Support innovation in credentialing

loint Action

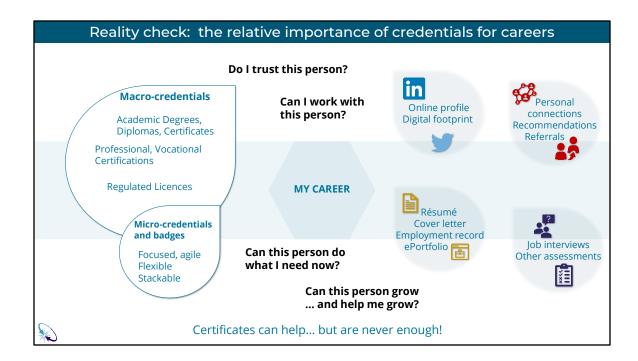
- Create a roadmap for an integrated skills ecosystem
- Enhance the evidence-base around employer benefits
- > Support development of tools for validation of abilities and achievements

Credentials to Employment: The Last Mile. Digital Credentials Consortium 2022.

CANDICE

The Digital Credentials Consortium out of MIT came out with this study in September 2022 and it works well as an anti-hype Reality Check.

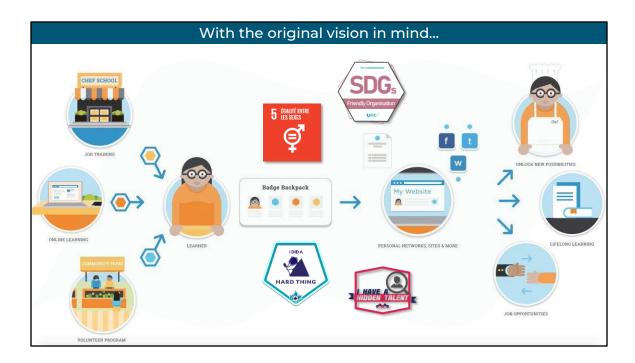
Basically we're not there yet. We need to work and innovate together to climb Gartner's "slope of enlightenment". Everybody has their part to play before we can reach the plateau of productivity.



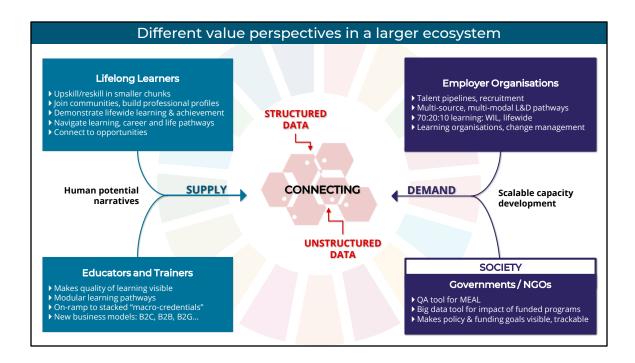
There's another kind of reality check that we need to take, and that is how much do credentials count for careers?

- → We have diplomas and certificates..
- → We have badge and micro-credentials
- → But do those really answer these questions?
- → Aren't we still relying on the resume..?
- → The LinkedIn profile?
- → The personal connections?
- → The job interview and the workplace tryouts?

Certificates alone will not get us the job...



But badges can be a way for us to tell our stories and connect our passions and our achievements to new opportunities and new communities of purpose...



DON with support from CANDICE

We're all stakeholders with diverse needs and goals in a larger ecosystem..

- → Learners need to build skills, but also to connect to others to have rewarding lives and careers
- → Employer organisations need to build the skills of their workers but also need to grow and change as organisations
- → Educators and trainers need to show how they can make a difference in the lives of learners and help provide the skills that employers need
- → Governments and NGOs need tools to inform their policies and programs
- → On the one side you have many stories of stories of human potential..
- → On the other you have the multiple goals at scale..
- → The trick is to find ways to properly match these needs..
- → And have a positive impact on the common good

Source passive candidates

Benefits of badging for the UN

Badges are digital

A channel to build digital profile and demonstrate digital transformation NOT paper - global, trans-national

Badges make learning more visible

Iconic | Easy to create | Easy to share | Easy to collect and curate Good for social connections, building community: membership, events, community of practice

Badges are modular and flexible

Micro-course | Course | Program | Certificate Assessed skill | Skill cluster | Competency | Role certification

Badges recognise lifelong learning

Incremental credentialing | Credential recognition Recognition of Experience

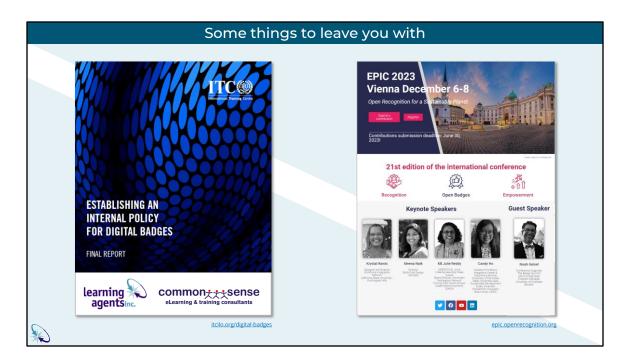
UN can use badges to bring NGOs and governments together

Partnerships to collaborate and co-create badges | Mutual recognition, endorsement and accreditation Recognize learning organisations, maturity levels and sustainable change management

DON with support from ANDREAS and CANDICE

In closing, let's focus on the benefits that we can capture today...

- → First, digital badges help us make the digital transformation
- → They make learning visible and connectable
- → They are modular and help us think in more flexible ways about learning and development
- → They are tokens of recognition that can be based on courses but also authentic experience
- → And they can be used to bring communities of purpose together



CANDICE: report

DON: ePIC

The ePIC conference, formerly known as the ePortfolio and Identity Conference, is taking place this year in Vienna, with the theme of Open Recognition for a Sustainable Planet, with digital badges in a starring role. It's our hope that ITCILO will be presenting a version of this presentation at the conference. One of our keynotes will be speaking about mission-driven careers inspired by the SDGs.

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Thanks for your attention, I'll hand back to Eiman for a brief announcement before we take questions.
