



European Network for Catalysing
Open Resources in Education

Interview Series on ‘Credentialing and OER’

Interview #5

Ildiko Mazar



***Ildiko Mazar**, currently employed by NTT DATA¹, has worked in eLearning and OER for about 25 years. Organising over 30 conferences and managing 50+ European projects that had open education at their core, she accumulated valuable knowledge and practical experience in the field. She has had roles as a producer, developer, implementer, and publisher of OERs, and has worked extensively in supporting aggregation and better machine readability of OERs and credentials. She is currently supporting the European Commission's DG Employment, Social Affairs & Inclusion in the development and implementation of the European Digital Credentials for Learning².*



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¹ <https://nttdata.com>

² <https://europa.eu/europass/digital-credentials/issuer/#/home>



Dai Griffiths: What approaches and methodologies for OER are you aware of that incorporate credentialing into repositories or even into the OER themselves?

Ildiko Mazar: Certification started with paper and then human readable electronic documents such as PDFs. Then the Mozilla Foundation developed machine readable open badges, and digital credentials have been constantly evolving ever since. Now we have many global and European standards and initiatives such as ESCO – the European Classification of Skills Competencies, Qualifications and Occupation ³, JRC's European Digital Competence Framework ⁴, the national ⁵ and the European Qualifications Frameworks ⁶, UNESCO frameworks such as the ISCED fields of education ⁷, the ISCED levels... The wide use of these standards in tamper-evident and verifiable digital credentials can support what I think is probably the most promising approach to the transparency and portability of an individual's learning achievements. Digitally signed credentials are electronic documented statements containing their issuers' digital seals that are the digital equivalent of the institution's rubber stamp. These signatures are eIDAS ⁸-compliant, and therefore legally binding. If all education and training providers (formal as well as non-formal) used the above-mentioned controlled vocabularies and other frameworks to describe a person's learning, their credentials could be interoperable across the board. In other words, a university degree could be described using the same

language as an employer recommendation or the tiniest OER that is just a short course for an hour and a half. This makes credentials of different shapes and sizes easily understandable and comparable by third party viewers like employers and/or admission officers. I'm a chemical engineer by degree, and I don't have formal credentials to prove my professional expertise, despite my 25 years of practice. So, understandably, I'm very passionate about credentialising non-formal and informal learning.

I'm most familiar with the European Digital Credentials for Learning. This is a significant EU initiative funded by the European Commission. It doesn't just focus on higher education or just on non-formal education or macro-micro, it covers all kinds of learning. It offers an open, freely available collection of standards, tools, services, software, so implementers can use a readily available platform to build their standard compliant credentials. While the services can be used freely by any awarding body that has an e-seal, organisations who are particularly concerned about GDPR and learner data privacy can use the open code to build and incorporate a customised issuer or wallet service inside their own existing learning management systems or student information systems.

Dai Griffiths. There's a whole discourse about OERs, and another about the representation of credentials and interoperability, but there's a point where they overlap. You could potentially directly credentialise activities

³ <https://esco.ec.europa.eu/>

⁴ https://joint-research-centre.ec.europa.eu/digcomp/digital-competence-framework_en

⁵ <https://europa.eu/europass/en/national-qualifications-frameworks-ngfs>

⁶ <https://europa.eu/europass/en/european-qualifications-framework-eqf>

⁷ <https://unesdoc.unesco.org/ark:/48223/pf0000228085>

⁸ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/What+is+the+legislation+-+signature>



with an OER. Do you know of repositories or institutions or organizations where that happens?

Ildiko Mazar: The things that immediately spring to mind are more MOOC platforms than OER repositories. In the old days, OER repositories were kind of upload-anything-you-want-and-somebody-might-find-it.

MOOC platforms are a lot more structured and controlled, but they're not really open and free. For example, you have to register to the platform to take the courses as a learner, and the contents cannot be easily reused by external educators, for either IPR and/or technical reasons. OERs, however, are really useful in continuous professional development, and don't require you to enrol in a formal course. So, if I, for example, have a new job and I need to present a lot, I could take a short course on public speaking or presentation skill development. Small OERs can support learners in quickly and conveniently acquiring such distinct knowledge and skills, but their purpose is not to support the documentation and verification of learning achievements. And very often, they do not have assessment built into them which demotivates OER producers from providing credentials. What's a credential worth if it cannot prove the attainment of learning outcomes, right?

Dai Griffiths. Can you say something very briefly about MOOCs? To what extent are MOOCs providing credentials and to what extent are those interoperable?

Ildiko Mazar: When you go to a MOOC platform and finish a course, you can usually request a credential at the end. Sometimes, it's free, sometimes you have to pay for it. If

it's just the production of an electronic document, I would argue that charging the learners goes against the idea of being "open". But when it is "if you would like a credential that certifies your learning then for a fee we will assess and certify your learning outcomes" then that's a very different type of credential. As a lifelong learner, I would expect to get something at the end of a learning journey that is not just something for my LinkedIn profile but something credible that I can attach to my job application. The MOOCs I took recently provide a credential that is kind of machine readable but is not tagged enough to allow the machine to find out what bit of textual content stands for what concept. You probably wouldn't be able to parse the credential to identify the title, the achievement, the parts that describe the learning outcomes, etc.

Dai Griffiths. Could that also apply to OERs, at a finer level of granularity?

Ildiko Mazar: It could be. But enthusiastic advocates of OER, who are already investing great efforts into creating OER, would have to take on further tasks that are difficult and time-consuming. They may not even know how much their OERs are used by learners, so it's really difficult for them to put extra effort into credentialising, making their OER credentials data rich, granular and digitally readable, not to mention standard compliance and verification, just for a handful of people per year to use them to prove their learning. So OERs, in themselves, may not be the most likely candidates to solve the problem of credentialising the learning outcomes of short open learning, but they could be a good basis for educators to



experiment with credentialising on a smaller scale.

Dai Griffiths. Which approaches or methodologies to credentialing through OER are, or could be, the most effective?

Ildiko Mazar: Micro-credentialing and flexible learning pathways could support the personalised learning journeys of lifelong learners like ourselves. Unstructured OERs are probably not very useful, unless you're a really mature and digitally experienced learner and you know how to find them and use them. But if they contributed towards stackable micro-credentials, or there were recommendations like those on MOOC platforms that say "If you liked this course, you might like this one too", that could make credentialing more sensible. Global and European standards provide a stable vocabulary, a currency if you like, so that understanding the learning can be much, much easier for anybody. If you just use free text descriptions of learning, that is very difficult to understand across sectors and across countries. But frameworks such as ESCO or DigComp can describe the level of competence (whether digital or otherwise) of a person via a multilingual vocabulary that will be understood throughout Europe, and across sectors. Tagging OERs with concepts from these vocabularies is not difficult and would be very useful, for example in highlighting sought-after skills, like digital competences, green skills, or language skills; whatever jobseekers need to demonstrate. If the credentials are verifiable, tamper-evident and machine readable, then the learner can use them to prove their skills and competences more readily.

Dai Griffiths. Well, there's plenty to be done there. What stops it happening? What are the barriers to these things working?

Ildiko Mazar: I think on the top of the list is lack of incentive. It is hard for OER authors to spend more hours in coming up with an assessment and a credential in the end that learners may not even use. Most OERs are small, and lifelong learners tend to use them non-formally, just like Googling something and skim reading. Busy people may not have the time or interest in sitting for an assessment however brief it is. Once again, here comes the question of stackability. I think it would be much more attractive from the learner's point of view if they got micro-credentials after every little OER or MOOC they took. If there's no proof of achievement then that's not a valuable credential, in my opinion.

Dai Griffiths. You've mentioned incentives for creators and for learners. What about the incentives for the institutions that would offer the credentials?

Ildiko Mazar: I once participated in a project, where one of the partner universities produced graduates who were exceptionally employable. Part of the explanation for this was that these graduates could display, prove and share their transversal and soft skills, as well as their degree dependent skills. Employers are increasingly interested in whether their future employees can work in a team, whether they are capable of using digital instruments. Eventually there must come a point when education institutions recognise, or at least assess, the benefits of supplementing degrees with complementary



smaller OERs that develop and document learners' transversal skills.

Dai Griffiths. What are the practical solutions and mitigations to the barriers to credentialising the learning from OERs?

Ildiko Mazar: Digitization, above all. Now that people can apply for jobs electronically, there can be so many applications for a vacancy that HR management systems will have to use some kind of algorithm to scan CVs and credentials to assess the candidates' suitability for the job. If the data is structured and machine-readable, that can help the credential holder prove their match to the job profile. This sounds very futuristic, but I'm convinced that, sooner or later, this could benefit citizens who have digital credentials, and provide an incentive to education and training providers to supply these kind of data rich and structured credentials.

Prior Learning Experience (PLE) recognition and credential portability is also highly desirable, in that people could avoid going through the same learning experience twice just because there's lack of understanding or trust in credential quality. PLE can also work with transparent structured data that uses open standards and controlled vocabularies to describe learning.

Institutions need to find time and money to explore and share good practices. But it's tricky, because education staff are already too busy with teaching, grading papers and R&D on top of that. Finding extra time for something that they're not used to could be very difficult. So, institutions should make sure that digital credentialisation and providing transparent and portable credentials is higher on their priority list.

Dai Griffiths. How can trust in credentialing learning through OER be developed?

Ildiko Mazar: Not all assessments are equal. If I just click through the learning content pages to get an acknowledgement of participation, that's not the same thing as contributing to forum discussions and/or doing an assessment or self-assessment. Even if there is assessment involved, it's different to be sitting at a supervised exam, where I have to prove that I'm me with an ID, then just doing an anonymous quiz at the end of an online course. If the assessment process is well enough described to show how the learning outcomes were proven, that would definitely support trust in the credential. It is equally important that the authenticity of the credential is verifiable, and forgery is detectible. For example, the EDC portal doesn't let you issue a credential unless you sign it with an electronic seal. If anybody changes a single digit in the code, the electronic seal breaks, the tempering becomes evident. And because these eSeals certify the authenticity of the credential, the institution that issues the credential has legal responsibility.

Dai Griffiths. The next question pulls together a lot of what we've talked about. What should we be doing? What should the learners do? What should teachers do? What actions can be taken to make this more of a reality by all the different levels?

Ildiko Mazar: That's a tough one, isn't it? The learners need a better understanding of where to look and how to find suitable OERs, and to see immediately if it offers just the knowledge or if it also offers a credential. But it is hard to learn to distinguish between high



and low quality OER credentials. As for the teachers, personally I have never seen anybody reusing or repurposing somebody else's OER. To be really open we need to exchange, to be flexible in digital learning provision, and use credentialisation solutions to reward learners. Of course, this is hard because teachers are already overwhelmed. It has to be the institutions themselves who can encourage and reward teachers for innovation and the use of open educational resources. That includes a responsibility to provide guidelines for teachers on digitalisation and on credentials, and whatever support is needed, because every institution might have different processes, different protocols.

At the higher level of educational authorities and administrators, it is encouraging interoperability of learning resources, so they are exchangeable, stackable and contribute towards the same overall goal. I know that some universities can award a certain number of ECTS credits for any kind of extracurricular activity, as long as it's proven that the person spent N number of hours and it's thematically relevant. So again, recognition, use of open standards to describe the learning outcomes and learning processes properly so that we are not staying within silos, but we are becoming more interconnected and interoperable.

There should be more national and/or European funding sources for the implementation of digital credentialing, because I don't think institutions will voluntarily put more effort into this on a small scale. There's scepticism that "There will always be new standards and technologies in

education. We'll just wait until there's something that is consolidated and robust and maybe then we will consider implementation". But if there's funding for digital transformation and sharing practice then I'm sure there would be more and genuine interest.

Dai Griffiths. If we managed to make this work, so that the credentializing of OERs became a reality, how could that contribute to the sustainability of OER?

Ildiko Mazar: Micro-credentials are small and agile enough to support personalized learning pathways, but that doesn't happen on its own. If you have to reach blindly into a bag of coloured balls, you don't know which one you'll pull out. But if all balls are laid out in front of you so you can choose and/or arrange them, you have order and control. It's even better if you can see learning pathways in front of you connecting the balls and saying "You take this first and then that and that, then in the end, you could get to here". Technically speaking, micro-credentials are happening. The European Commission is working on it ⁹, and everything is moving/pushing towards micro-learning, including the pace of life and learning and the style of learning. Stacking and credential recognition will give an advantage to OERs because they are small and agile. But this might be my wishful thinking.

Dai Griffiths: Well, if we didn't have wishful thinking then this whole field wouldn't exist, would it?

Ildiko Mazar: Very true. I've seen enough to know that very often we just have to

⁹ <https://education.ec.europa.eu/education-levels/higher-education/micro-credentials>



persevere. If we believe in something, then we could make it happen.

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