

Development of an Austrian OER Certification for Higher Education Institutions and Their Employees

Sandra Schön, Martin Ebner, Elfriede Berger,
Gerhard Brandhofer, Sarah Edelsbrunner, Ortrun Gröblinger,
Claudia Hackl, Tanja Jadin, Michael Kopp, Kristina Neuböck,
Judith Proinger, Alexander Schmölz and
Hans-Peter Steinbacher

Abstract

The “Forum Neue Medien in der Lehre Austria” (fnma) is responsible for the development and introduction of a procedure to attest open educational resources (OER) competences and OER activities in higher education. The

S. Schön (✉) · M. Ebner · E. Berger · G. Brandhofer · O. Gröblinger · T. Jadin ·
M. Kopp · H.-P. Steinbacher
Forum Neue Medien in der Lehre Austria (fnma), Graz, Austria
e-mail: sandra.schoen@fnma.at

M. Ebner
e-mail: martin.ebner@tugraz.at

E. Berger
e-mail: elfriede.berger@AgrarUmweltpaedagogik.ac.at

G. Brandhofer
e-mail: gerhard.brandhofer@ph-noe.ac.at

O. Gröblinger
e-mail: ortrun.groeblinger@uibk.ac.at

T. Jadin
e-mail: tanja.jadin@fh-hagenberg.at

M. Kopp
e-mail: michael.kopp@uni-graz.at

aim is to develop and implement a convincing and recognized procedure that succeeds in sustainably promoting and making visible OER activities and OER competences at Austria's higher education institutions. Within this paper, the development of the Austrian OER certification approach, in other words its framework, will be addressed. A working plan and first results will be presented; among others, the competence framework and its compatibility with existing frameworks.

H.-P Steinbacher

e-mail: hanspeter.steinbacher@fh-kufstein.ac.at

M. Ebner · S. Edelsbrunner

Educational Technologies, TU Graz, Graz, Austria

e-mail: sarah.edelsbrunner@tugraz.at

E. Berger

Institute for Consultancy, E-Learning and E-Didactics, University College for Agrarian and Environmental Pedagogy, Vienna, Austria

G. Brandhofer

Department Media Education, PH Niederösterreich, Baden, Austria

O. Gröbinger

Department Digital Media and Learning Technologies, University of Innsbruck, Innsbruck, Austria

C. Hackl

Open Education Austria Advanced Center for Teaching and Learning, University of Vienna, Vienna, Austria

e-mail: claudia.hackl@univie.ac.at

T. Jadin

University of Applied Science Upper Austria, Wels, Austria

M. Kopp · K. Neuböck

Center for Digital Teaching and Learning, University of Graz, Graz, Austria

e-mail: kristina.neuboeck@uni-graz.at

J. Proinger · A. Schmölz

Austrian Institute for Research On Vocational Education and Training, Vienna, Austria

e-mail: judith.proinger@oeibf.at

A. Schmölz

e-mail: alexander.schmoelz@oeibf.at

A. Schmölz

Department of Education, University of Vienna, Vienna, Austria

H.-P. Steinbacher

Learning Center of FH Kufstein Tirol Bildungs GmbH, Kufstein, Austria

1 Introduction

The European Commission is promoting open educational resources (OER), with the aim of “opening up education” and improving the teaching of digital skills in schools and universities (European Commission, 2013). Some define and understand OER more generally as openly available resources – such as MOOCs (Stracke et al., 2019). According to the UNESCO recommendation (2019), openly licensed learning and teaching resources use so-called “open licences”: These licences ease the restrictions of copyright law by allowing everyone to modify, adjust, re-publish, or re-use materials with a few requirements such as attributing the original creator and describing changes. Within the last few years, the Creative Commons (CC) licences have become the dominant licence set in the field of educational resources, so that more and more people use and know the open licences CC BY, CC BY-SA, and CC 0.

International organisations such as UNESCO, OECD, and the European Commission, as well as national initiatives and strategy papers recommend OER development: OER are seen as a base for a more inclusive, open, and sustainable education and world (Orr et al., 2015; UNESCO, 2019). Higher education institutions (HEI) share such ambitions and add some more pragmatic aspects such as OER as solution for copyright issues in teaching, OER providing new teaching opportunities, or OER simply supporting lifelong learning and public relations (Schaffert, 2010; Ebner et al., 2016d).

The topic of OER in HEI is multifaceted, as OER touch many disciplines and different people and responsibilities - e. g., e-learning units, centres for university didactics, central IT services, or university libraries. They are matters of continuing education, of IT infrastructure, of strategies, and copyright issues. “Educational skills”, embedded in the EU’s open science policy (Open Science Skills Working Group Report, 2017) and its eight ambitions, are a key factor in the further development of the Austrian higher education sector. To facilitate open science and open education practices, it is recommended that all scientists in Europe be equipped with the appropriate skills.

To support the development of OER in Austria’s HEI, the project consortium “Open Education Austria Advanced” (OEAA) operates in close cooperation with e-learning centres, central IT services, and libraries of partner universities to generate synergies between open education and open science for the establishment of open practices. Besides the OERhub, a platform under development offering access to OER from Austrian higher education and the development of local institutional OER repositories, the OEAA project team develops and implements the

processes of a certification procedure to give OER activities of universities and OER competences more visibility: an OER certification for universities and their staff, i.e., lecturers and instructional designers. The Austrian OER certification project can, therefore, be seen as an accompanying measure to the establishment of a “distributed learning ecosystem” in Austrian higher education (see Otto & Kerres in this book).

2 Aim and Approach of the Article

The aim of this article is to describe the project of developing an OER certification for HEI and their staff to support similar projects to receive impulses and insights. The article is, thus, based on project documentation (partly published, see Schön et al. 2021a, Schön et al. 2021b; Kopp et al., 2021) and the authors’ development of a framework OER certification in Austria. The text is structured as follows: Firstly, we describe the background of the development of OER certification and secondly, the project phases. Then we describe the criteria for OER certification as well as insights into our analysis concerning Austrian stakeholders, OER certification, and certification in HEI. Finally, we will present our (preliminary) OER certificate titles, the development of our OER competence framework, and its compatibility to existing frameworks. We would like to point out that the project is in development and that there may still be changes to the preliminary results.

3 Background of the OER Certification, the Implementation Phases, and Criteria

3.1 OER in Austrian HEI

There have been several contributions describing the development of OER in Austria (Schön & Ebner, 2020; Schön et al., 2017); we focus here on the status of OER in relation to higher education. In general, Austria is a German-speaking country of about 8.8 million inhabitants. Most students are enrolled at HEI that are publicly funded and can be attended for comparatively low tuition fees - especially in international comparison - if one meets the formal admission requirements. Austria counts 22 public universities, 16 private universities, 21 universities of applied sciences, and 14 universities for teacher education.

Like the worldwide OER movement, individuals and groups started to develop and work on the idea of freely available and usable learning content in the first decade of the 2000s. A first Austrian milestone was the coordination of an international conference on open educational content in 2007 as the final activity of the first European project focused on OER (olcos.org; led by Salzburg Research¹). In general, Austria belongs to the countries where OER production or use are part of government policy (Orr et al., 2015, p. 129). OER have been mentioned in several Austrian national strategy papers in recent years. One example is the “General Austrian University Development Plan” (own translation), which is the planning instrument for the further development and strategic orientation of the 22 public universities (Bundesministerium für Bildung, Wissenschaft und Forschung, 2020, p. 40, cf. Schön et al., 2021c).

An essential institution for the exchange on the topic of OER in the Austrian higher education sector is the “Forum Neue Medien in der Lehre Austria” (fnma for short, see www.fnma.at), especially their special interest group (SIG) for OER. fnma is a non-profit organisation and the Austrian network for the development and implementation of strategies and recommendations in the field of digital learning and teaching in HEI. Nearly all Austrian higher education institutions are members of the association led by an executive board of six experts. These are elected by delegates of the member universities. The executive board of the non-profit organisation is supported by an executive director and several part-time employees. As the only Austrian inter-university interest group for the use of digital media in teaching in HE, fnma is also an important contact point for the Federal Ministry of Education, Science and Research and the public. Recommendations by the fnma special interest groups on various topics are also relevant for political decisions. The first meeting of the special interest group on OER took place in 2015.² All interested members of partner universities can participate in the fnma SIGs. Two joint contributions have been published: In one, recommendations for the introduction of OER in higher education are given (Ebner et al., 2016a, 2016b). In another, a certification of competences of university staff as well as of the universities’ activities is proposed (Ebner et al., 2017; Ebner, 2018). Representatives of the Federal Ministry of Science, Research and Economy and

¹Salzburg Research Forschungsgesellschaft mbH is a non-profit research organisation owned by the State of Salzburg, see <https://www.salzburgresearch.at/>.

²<https://www.fnma.at/arbeitsgruppen/open-educational-resources>.

the Association of Austrian Librarians were also active contributors to these publications.

The Austrian Ministry of Education, Science and Research funded a first project on OER infrastructure at Austrian universities, called “Open Education Austria”, with four partner universities in 2017. In May 2017, fnma organised the first Austrian OER festival for HEI at the University of Graz in cooperation with the Open Education Austria project. In 2020, the project “Open Education Austria Advanced” started to further develop OER infrastructures, such as OER repositories, OER training, services for lecturers for OER creation, and the [OERhub.at](https://oerhub.at), an Austrian one-stop shop for OER in higher education, hosted and developed by the University of Vienna.

Numerous smaller initiatives or OER projects at Austrian universities show that OER are becoming increasingly important and attracting. OER are more and more perceived as a field of action by Austrian universities, which is also reflected in the results of an analysis of the current performance agreements (valid for the period from 2019 to 2021) of the 22 public Austrian universities (Edlsbrunner, Ebner & Schön, 2021): Nine out of 22 performance agreements (41 percent) already describe concrete OER activities, three others at least mention OER or related concepts.

3.2 The OER Certification Implementation Project as Part of Open Education Austria Advanced

“Open Education Austria Advanced”³ started in April 2020 and will last for four years. The University of Vienna, the University of Graz, Graz University of Technology (TU Graz), and the University of Innsbruck work together with fnma and öibf⁴ (a non-profit research institute in the field of professional research) as smaller partners work together to expand their services for the development of OER in HEI. One work task of “Open Education Austria Advanced” is the implementation of an OER certification. It is seen as a service for the universities to intensify recommended OER activities while simultaneously evaluating these activities independently and making them visible. As project partner of

³<https://www.openeducation.at/ueber-uns/>.

⁴<https://oeibf.at/en/>.

the OEAA project, fnma, together with öibf and TU Graz, is responsible for the development of the OER certification development and implementation.

3.3 Project Aims and Phases

In cooperation with all Austrian stakeholders, the necessary procedures and processes have been set up and implemented since March 2020 and will be finished by February 2024. Latest by the end of the project period, all Austrian HEI should be able to apply for an OER certification for their staff as well as for the HEI itself. The aims of developing a certification procedure for HEI and their staff are to promote and to make visible the offer of continuing education on OER, the OER competence development of staff, and the OER development and OER activities of a HEI. Therefore, the project attempts to develop a convincing and recognised procedure that is not unnecessarily complex and does not need extensive documentation work, but rather a comprehensible framework and objective processes for HEI. The development phases of the OER certification are shown in Fig. 1.

For the entire duration of the project, it is planned to develop and implement the OER certification in close cooperation with the active members of the SIG OER, i.e., in regular meetings for development and discussion, and to make the development comprehensible for the public and present it in a national and international environment. Additionally, thinking beyond the project timeframe, we are also developing a business model that enables the long-term operation of a certification body beyond April 2024.

3.4 Criteria for the OER Certification

Regarding the criteria for certification - probably the aspect with which many would expect the project to start - the starting point was the mentioned publication by the SIG OER, “Concept of OER certification at Austrian universities”



Fig. 1 The project phases of the Austrian OER certification implementation for HEI. (Source: Own illustration)

(Ebner et al., 2017; Ebner, 2018). The concept for OER certification outlines the certification of both university staff and HEI and recommends the creation of a national certification body. To this end, the SIG OER has developed criteria that promote useful measures for HEI for building OER infrastructure and competences, while being comparatively easy to track. As shown in Fig. 2, the criteria for HEI are an existing offer of continuing education on OER for their staff and a public and strategic commitment to OER, an OER repository (or access to a joint solution), and a certain number of certified OER individuals. HEI can apply for an OER certification of members of their staff if there is proof of their participation in an OER training with an effort of one credit according to the European credit transfer system (ECTS) (about 25 h) and three published OER per person. (Ebner et al., 2017; Ebner, 2018).

It is not planned to validate existing competences of OER as part of the criteria, but proof of participation at a training with a certain extent (25 h) is required. In Austrian continuing education for university staff, participation is usually certified, but a final exam or validation of competences is rather rare. For an OER certification, the individual staff member must prove that they participated in a relevant comprehensive training measure and have published three OER.

As part of the OEAA project, fnma has been commissioned to establish the national OER certification body and processes for certification with the support of its project partners. At the beginning, in March 2020, there were only two HEI that already (potentially) met the requirements for one criterion: The University of Vienna (Marksteiner, 2008) as well as the Graz University of Technology have repositories where OER can be published and archived (Ladurner et al., 2020).

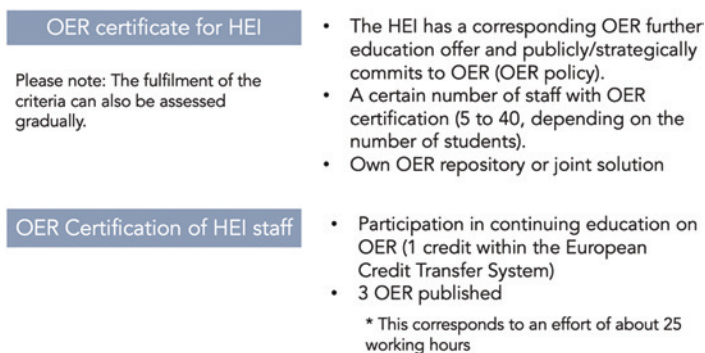


Fig. 2 The criteria for Austrian OER certification. (Source: Own illustration)

Other criteria, such as a public commitment to OER or an OER policy were not met by Austrian HEI at the project start. Nevertheless, as we know from the SIG OER meetings, several HEI—including universities of applied science and university colleges for teacher education—already offer continuing education on OER for their lecturers. For the most part, however, the training does not reach the extent of 25 h. This description of the status quo at the start of the project shows that the criteria for OER certification at universities are indeed challenging: No university met more than one criterion.

3.5 The OER Certification Implementation

At the start of the project, it was again scrutinized whether the criteria (Ebner et al., 2017; Ebner, 2018) were still well chosen. However, it was decided that the validation of competences could be part of future revisions. To better describe the prerequisites of continuing education on OER, it was decided that a competence framework was an important measure. For other criteria, too, it seemed necessary to define more precise descriptions and prerequisites, for example, what exactly is meant by “published OER”.

So, focusing on the OER certificate, as shown in Fig. 3, the situation at project start was as follows: We will build on the existing criteria, but need to specify them; it is necessary to determine the title of the certificate, how we will call the certificate holders, and the design of the certificates (from a logo to the possible technical implementation, for example, as an open badge), and to develop the process. A validation of informally acquired OER competences of individuals or a systematic extension of the certification to other target groups (such as students), educational sectors, or countries is explicitly not planned in the project.

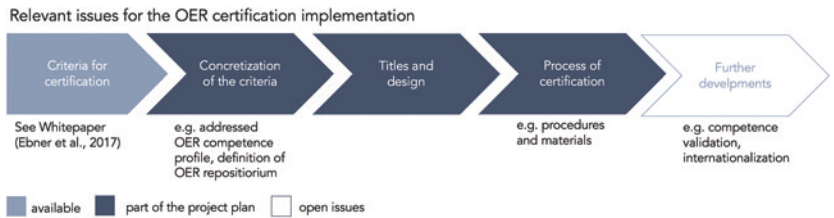


Fig. 3 Relevant issues for the OER certification implementation within the project time frame (2020–2024). (Source: Own illustration)

4 Related Analyses: OER Certification, Certification in HEI

The project included an internal stakeholder analysis to involve all relevant institutions and people in the development of the certification, to use their potential as multipliers or to be able to consider their needs and concerns at an early stage. Besides this, we searched for other OER certifications available at (Austrian) HEI.

4.1 Existing OER Certifications

Starting from our national context, we searched and collected examples of OER certifications for lecturers and adult educators worldwide. Among the examples we found (Schön et al., 2021b) were MOOCs where participants receive a certificate upon finishing, such as the first course on OER in German (Arnold et al., 2015), small OER training offers and, perhaps most prominently, the Creative Commons certification (Creative Commons, 2021). We were unable to find an OER certificate for HEI or other organisations that certifies an institution that is particularly concerned with OER and demonstrates activities according to defined criteria. However, we did find a few procedures that seem to be inspiring, such as a contribution describing a competence framework or activities of universities regarding “Opening Up Education” (Inamorato dos Santos et al., 2016) or the OERu network, where it is possible to participate for a fee. The network is primarily concerned with supporting and disseminating MOOCs that provide OER. It is, therefore, not a certification process in the strict sense (OERu, 2021). The collection has shown us that there are—and should be—strong efforts to make the requirements and processes transparent, especially in OER certification.

4.2 Certification of and Within Austrian HEI

An internal report compiled how Austrian HEIs are currently certified. The starting point was the institutions’ self-presentations. A large number of international certificates were found, e.g., for quality management and environmental protection, but also Austrian certificates for family-friendliness. Obtaining a certification is usually time-consuming for HEI; in addition to concrete activities, visits by commissions and extensive audits are necessary. We also looked more closely at how continuing education is organised in Austria for HEI members, particularly in the OER-related area of continuing education in technology-enhanced teaching.

The universities of applied sciences offer continuing education throughout Austria; moreover, regional cooperation for continuing education has been established among different HEI in Styria (Kopp et al., 2016). However, there is neither a common continuing education system in the field of technology-enhanced learning or higher education didactics for HEI in Austria, nor a structure where continuing education certificates are mutually recognised. The implementation of an OER certificate for individuals must, therefore, take place in several different organisations.

5 The OER Competence Framework and Its Compatibility with Other Frameworks

5.1 The Austrian OER Competence Framework for Individuals in HEI

In the first months of the project, a competence framework was created to establish a set of competences relevant for the certification. A competence framework is a model that lists the competences of individuals required to perform specific tasks within an organisation or sector (Marrelli et al., 2005). It includes a qualification description for the certificate holders, which was created based on a thorough review and comparison of existing OER frameworks and developed and agreed on by the fnma SIG OER and other stakeholders. Practically all OER courses and frameworks include open licenses, how to find OER, how to create OER, and how to remix OER (see, for example, the OLCOS tutorials from 2007: Córcoles et al., 2007). We, therefore, used existing OER competence frameworks for orientation (see below). Our wording of a “qualification description” and “learning objectives” is based on the specifications of the national qualification framework for Austria (NQR-Gesetz, 2016). In several discussion rounds, we adjusted the general qualification description and the learning objectives (see Fig. 4).

5.2 Comparison with Other Existing OER Competence Frameworks

Before we asked the SIG OER for final approval of the competence framework, we looked at how well our version is compatible with other competence frameworks, especially with well-known national and international competence frameworks. During our work, we discovered the following competence frameworks that deal with OER specifically:

| | |
|---------------------------|--|
| Qualification Description | The certificate holder can find, create, revise, compile and publish openly licensed educational resources (OER) independently and on her/his own responsibility, taking into account her/his professional disciplinary and didactic expertise. |
| Learning Objectives | <ol style="list-style-type: none"> 1. I can name and use different open licenses and their requirements and differences. 2. I can find openly licensed educational resources (OER). 3. I can create, revise and remix OER. 4. I can publish OER and make them available to other teachers. |

Fig. 4 The competence framework of the Austrian OER certificate for individuals. (Source: Own illustration.)

The Organisation Internationale de la Francophonie (2016) published an “Open Educational Resources Competency Framework OER”. This framework has five “fields of competences”, which are “becoming familiar with OER”, “searching for OER”, “using OER”, “creating OER”, and “sharing OER”. For each field of competences, the authors describe abilities and capabilities. For example, the competence field “searching for OER” lists the ability “Select appropriate OER”, which is described with the capabilities “1. Know the quality criteria of an OER, 2. Know the validation mechanisms of the quality of OER. 3. Identify some of the key data to correctly attribute an OER, 4. Recognize a license and know how to determine whether a resource has one” (p. 4f). A comparison of the learning objectives of the Austrian draft with this OER competence framework does not show any deviations, rather, the OER competence framework appears to be helpful in specifying capabilities.

Nascimbeni and Burgos (2016) developed the idea of an “open educator” in HEI and defined him/her in the following way: “An Open Educator choses to use open approaches, when possible and appropriate, with the aim to remove all unnecessary barriers to learning. He/she works through an open online identity and relies on online social networking to enrich and implement his/her work, understanding that collaboration bears a responsibility towards the work of others” (p. 4). The “open educator” is described by different characteristics and mentions four facets of open education, namely design, content, teaching, and assessment. OER are in the “content” facet (p. 9). Such an “OER expert” is characterised as follows:

- Re-shares resources that he/she has reused openly through social media and OER repositories.
- Uses resources created by others.
- Searches for OER through social media and repositories.
- Shares and promotes resources produced by his/her students.
- Shares links and resources beyond the classroom, through an open online identity.

In comparison, the characteristics in the Austrian OER competence framework are more concretely oriented towards the correct development and use of OER than towards characteristics of lecturers (“open educator”).

Ehlers & Bonaudo (2020) have also proposed a competence framework for “open educators” that consists of two components: competences related to OER and competences related to “Open Pedagogies” (p. 73ff). Regarding OER, they distinguish four competences:

- Use open licences
- Search for OER
- Create, revise, and remix OER
- Share OER

Ehlers & Bonaudo (2020) have, thus, merged the characteristics of the open educator from Nascimbeni and Burgos (2016) with concrete requirements for OER competences.

In summary, a congruence of existing OER competence frameworks and the Austrian OER competence framework is obvious.

5.3 Comparison with Other National Competence Frameworks for Teachers and Educators in HEI

There are several other competence frameworks that are interesting to compare to the OER framework for the Austrian and international context. In the following, we list some that are of special interest from an Austrian perspective:

- The research centre of the European Commission JRC has developed a competence framework for digital competences of teachers, the DigCompEdu competence framework (see Redecker & Punie, 2017, 2019). Teachers should

have certain competences regarding the use and creation of digital resources (Redecker & Punie, 2019, p. 15). This section is not exclusively about OER, but OER are explicitly mentioned, including the use of open licences. There are also further aspects of “digital resources” that play an important role for teachers in general, such as data protection. The description in DigCompEdu is, therefore, somewhat broader overall and does not only refer to OER, though it does mention them explicitly.

- The same is true for the Austrian framework for digital competences for teachers. In the Digi.kompP model, “creating digital materials” is described in “Category C”, which is “designing, modifying and publishing materials for teaching; use of works and copyright” (Onlinecampus Virtuelle PH, 2019). Thus, practically all competences of the OER certificate are also included in the Austrian competence framework of Digi.kompP for teachers, but it does not specialise on OER.
- The German competence framework for digital competences for university teachers does not mention OER specifically at any point but includes the creation of learning resources and, as such, aspects of open data and copyright (Eichhorn & Tillmann, 2018, Digitale Kompetenz bei Hochschullehrenden, n.d.).
- The “Digital Skills for Library Staff and Researchers Working Group” of the European Librarians’ Association LIBER (Ligue des Bibliothèques Européennes de Recherche - Association of European Research Libraries) has defined skills and abilities needed for Open Science. OER are also named in the “Open Science Skills Visualisation” several times as a partial aspect of Open Science (McCaffrey et al., 2020; cf. Stracke, 2020).
- Competences in the field of Open Education are also embedded in one of the eight ambitions of the EU’s Open Science policy as part of educational skills for researchers (O’Carroll et al., 2017). According to this policy, these skills in the context of training and lifelong learning enable researchers to perform a change in mind-set and culture, while also modernising the higher education sector. OER competences belong to the set of appropriate skills for facilitating Open Science, alongside open practices such as open access, open data, open peer review, and citizen science.

To sum up, there is intentionally congruence with other competence frameworks for teachers and researchers at universities, which makes it possible to use the OER certifications framework for continuing education programmes or validation schemes in the fields of digital competences of teachers and Open Science; nationally as well internationally.

6 The Certificate, Its Title, and the Further Development and Continuous Training Offers in the Project

6.1 Consensus-Based Decision on Titles

While the criteria for certification have already been described, work is currently underway to outline the processes and the design of a suitable digital environment. To increase the impact and incentives for the certificate, it is planned to meet as many standards as possible in the development and, thus, to create compatibility with national and international initiatives and certificates, among other things by considering the quality standards of the Deutsche Gesellschaft für Hochschuldidaktik (2020). Whether and how the certificate will also be awarded in the form of virtual “seals” or open badges is still open.

To determine the title of the certificate for individuals in HEI and the HEI themselves, a consensus-based online survey was conducted among the SIG OER and OEAA project colleagues. A long list of different options from “OER expert” to “OER master” was presented and respondents were asked how much they disagree with these options. The point of this survey was not to determine which title receives the highest approval, but which title receives the least opposition. The result – the title with the least opposition – was “OER practitioner”. For HEI, the title with the least opposition is “Certified OER university”. Both were approved as the titles for future certificate holders.

6.2 Development of Procedures

During the current phase, the concrete procedures and materials will be developed together with the pilot partners. The framework conditions include the fact that we need an independent advisory board that decides, for example, whether a continuing education program meets the requirements. So far, we have only set a competence framework and the requirement of one ECTS and would now like to see which and how pilot partners can present documents that also convince the advisory board. In practical terms, it is also a question of who must provide what data or information; for this, we need data protection declarations, etc.

6.3 Additional Support of Continuing Education on OER in HEI: Materials, a MOOC, and a Train-The-Trainer Model

OER certification can only be one building block in an OER landscape. Closely linked to this is the creation of suitable continuing education offers for teachers and other staff and the appropriate qualification of trainers. In cooperation with other Austrian universities, the University of Graz will revise the existing online course on open educational resources on the Austrian MOOC platform iMooX.at. This platform is itself dedicated to OER (Kopp & Ebner, 2015; Ebner et al., 2016c). Since 2015, courses on OER have been offered on the platform, and a special MOOC for OER in HEI was implemented in 2017 and has been offered three times since (see <https://imoox.at/course/coer2019>; Ebner et al., 2016c).

Within the Open Education Austria Advanced project, the MOOC in question will be re-developed and produced according to the competence framework described above. The MOOC and its contents - organised in four units with an estimated 16 videos (available on [YouTube.com](https://www.youtube.com)), materials such as an OER canvas, and quizzes - can be integrated partly into an OER training at a university. Participants who successfully complete the quizzes for each unit will receive a certificate of attendance and open badges for MOOC participation (Kopp et al., 2021).

In practice, in the last few years, several universities have organised their internal OER trainings for teachers and staff with a first half-day workshop, the MOOC participation as an online phase, and another half-day workshop to clarify open issues. HEI can, thus, verify that a person took part in continuing education to the required extent of one ETCS (25 working hours). Besides a self-study MOOC, an additional offer is planned to meet the requirement of one ECTS (25 working hours) of continuing education as defined in the certificate criterion. For this special course, the participants will use a specially implemented course space at the MOOC platform with assignments, feedback options, and peer reviews, which will require the time and effort needed for a certification.

HEI offering continuing education on OER are free to choose their lecturers and the precise contents. However, to have enough qualified people in Austria who can be hired by HEI, it is planned to offer a train-the-trainer course for the first time in 2023.

7 Developments Regarding the Criteria of the OER Certification and Outlook

In Sect. 3.1, we described that at the beginning of the project in April 2020, only some HEI fulfilled at least one of the OER certification criteria. Progress has already been made here (as of November 2021): After the project launch in March 2020, two universities have already published OER policies: The University of Graz was the first Austrian university to have its own OER policy by a decision of the rectorate in March 2020. It was followed by TU Graz in November 2020. At least two more universities will follow in 2021. Some recommendations have been published for universities that plan to develop OER policies (Ebner et al., 2020).

Concerning the OER repositories, two OEAA partner universities will implement their OER repositories in the project and other Austrian HEI are engaged in their own developments or potential joint solutions. OER repositories at Austrian HEI are currently available at the University of Vienna (Marksteiner, 2008) and at the TU Graz (Ladurner et al., 2020). At the University of Innsbruck and the University of Graz, such a development is part of the Open Education Austria Advanced initiative.

Although continuing education on OER is offered at several HEI, an OER training with an effort of about 25 h is still more extensive than currently available offers, compared with training in the field of technology-enhanced learning. It is not easy to convince the HEI management and the potential participants of this, and it is, thus, not quite easy to reach the number of individuals needed for certification (5–40 individuals per HEI).

To sum up, the development of an OER certification procedure for HEI in Austria is a balancing act: it is not just a simple matter of assessing and rewarding existing developments, but also of actively stimulating and promoting them. The selected criteria are, indeed, ambitious and cannot be completely fulfilled by a HEI during the project period without further adaptations or without difficulties. The certification criteria can also be seen as a measure to put the focus on important activities, for example, an OER repository that can be used by all Austrian HEI.

8 Aim for International Cooperation

With our activities and results,⁵ we are hoping to promote the Austrian development of OER certification for HEI in the long term, possibly also with transfers to other educational sectors, to create an international network and, thus, to make an essential contribution to good teaching and open education.

Acknowledgements The developments presented and this contribution were realised within the framework of the project “Open Education Austria Advanced” (funded by the Austrian Federal Ministry of Education, Science and Research, 04/2020-03/2024). We would also like to thank the two reviewers for their critical comments and suggestions for improvement.

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⁵ <https://www.fnma.at/projekte/vereinsprojekte/aufbau-der-nationalen-oer-zertifizierungss-telle>.

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