

DRAFT:

Open Education and Educational Resources – National policy and executive plan by the higher education and research community in Finland:

Policy component 1 – Open access to educational resources

DRAFT

Strategic principles

Principle 1: In addition to openness, the quality and reliability of education and educational resources developed in connection with it are monitored.

Principle 2: When developing and using open education and open educational resources, copyright and other relevant rights are respected.

Principle 3: When developing open education and open educational resources, their versatile suitability for diversity of learners will be taken into account.

Principle 4: The work for developing open education and open educational resources is appreciated in the merit criteria and in the planning of job responsibilities.

Strategic objectives

By 2025:

Objective 1: The whole teaching staff of all organisations developing open education have the basic capacity to prepare open educational resources and have tried the preparation of open educational resources.

Objective 2: The reserve of open educational resources at higher education level has been significantly increased in terms of quantity and made better suited to education in terms of quality.

Objective 3: According to research, the open educational resources of an average Finnish higher education institution are used and valued more than the open educational resources of the higher education institutions in other EU countries on average.

DRAFT

Introduction

Openness is a part of responsible research and education based on research. Openness is one of the core values of science and research and education based on it. The objective of immediate open access to researched information and openness of education based on research is to improve the quality of science and increase its social impact. The policy for open education and open educational resources was created to serve these primary objectives of research and research-based education.

This policy is a powerful statement in favour of openness in the Finnish higher education and research community for the next four years.

Objective: Creation, use and collaborative development of open educational resources and other open educational practices are part of daily life in higher education and enable lifelong learning.

Research and education have always been closely linked. Research brings to light new information, which is disseminated more widely and made part of individual learner's own capabilities by education. Open science and research is therefore inherently linked to the open education.

In order that the public has genuine ability to use open research results, they generally need to be processed into a form that serves and facilitates the learning and internalisation of the results. The open access to resources developed for the needs of education, i.e. educational resources, thus serves to promote research results.

Open access to educational resources also increases the opportunities to improve their quality. A sufficiently open licensing of educational resources enables other than the author to modify them and adapt them to different educational contexts. In this way, the development of educational resources will, at best, become more and more communal.

Open educational resources and, for example, new kinds of open educational practices offered by digitalisation reduce the need to bind education to a specific time and place. Open education is thus a natural part of a new kind of education, where everyone has more opportunities to learn new things, regardless of their life situation and place of residence.

Open education also gives learners wider opportunities to participate in the production of information that is open to all, for example in the co-development of open educational resources. Thus, learners will be better able to highlight and

DRAFT

increase their own expertise already during their studies and to utilise methods of peer learning.

Freedom of the teacher and the researcher

This policy is a result of collaboration within the Finnish higher education and research community, constituting a shared view of the direction open education and open educational resources should take. Its goal is to achieve openness in a way that supports and increases the higher education teacher's and researcher's freedom and opportunities to share researched information. The purpose of education and educational resources is to disseminate research-based information in the whole society. Teachers and researchers should be able to choose best means for this purpose in their education and educational resources. The higher education and research community should guarantee the incentives and structures for open education and educational resources in a way that supports the work and equality of teachers and researchers and respects their work for developing education and educational resources. This policy guarantees that Finnish higher education teachers and researchers will be able to open their education and educational resources without setbacks for their career.

International transformation

The roots of open education date back to the end of the 1990s, when several major universities (e.g. MIT) decided to open their course wares openly to everyone. Open course wares in higher education were such an important phenomenon that UNESCO organised a forum on the subject in 2002. The Forum resulted in the concept of open educational resources (OER).

At a very early stage, it was understood that open educational resources are only part of the wider opening of education. Indeed, the Cape Town Open Education Declaration (2007) explicitly stated:

” However, open education is not limited to just open educational resources. It also draws upon open technologies that facilitate collaborative, flexible learning and the open sharing of teaching practices that empower educators to benefit from the best ideas of their colleagues. It may also grow to include new approaches to assessment, accreditation and collaborative learning. Understanding and embracing innovations like these is critical to the long term vision of this movement.”

In addition to open educational resources, Massive Open Online Courses (MOOC), which opened up higher education to large groups of people, became a significant

DRAFT

phenomenon in the 2010s. High-quality MOOCs have also been produced in Finland, for example in the field of computer science at the University of Helsinki, and they have been utilised successfully in student selections.

In 2012, the Paris OER Declaration was formally adopted at the UNESCO World Open Educational Resources Congress. The declaration emphasised the role of open educational resources in order to make education more inclusive and globally equal.

In the 2010s, the concept of Open Educational Practices (OEP) has become increasingly important in open education. For example, the European Commission's *Practical Guidelines on Open Education for Academics: Modernising higher education via open educational practices* (2019) raises as an important factor alongside open educational resources and other openly accessible education pedagogical methods based on learner centred education and peer learning as well as new types of assessment systems that enable flexible learning pathways.

A significant milestone in the development of open education was UNESCO Recommendation Concerning Open Educational Resources (2019). The Recommendation calls on UNESCO Member States to pursue five objectives:

- (i) to develop capacities related to open educational resources;
- (II) to develop policies supporting open educational resources;
- (III) to encourage the development of inclusive, equitable and high quality open educational resources;
- (iv) to nurture the creation of economically sustainable models of open educational resources; and
- (v) to facilitate international cooperation on open educational resources.

The growing importance of open education and open educational resources has also been understood at national level. Significant projects in this field include the Finnish Library of Open Educational Resources, developed by the Ministry of Education and the Finnish National Agency for Education and coordinated by the CSC – IT Center for Science¹, as well as the shared vision of the digitalisation of higher education institutions by Arene and UNIFI².

Risks and threats

Open science and research have well-known challenges in terms of cost distribution, and open education is not an exception. Although open educational resources and other openly accessible education are available free of charge, their production

¹ Gradually introduced from 2019 to 2020, more information at aoe.fi

² More information in Finnish at <https://wiki.eduuni.fi/x/NKELBw>

DRAFT

requires a wide range of resources. There is therefore a risk that costs will accumulate on those individuals and organisations that are particularly active in opening up educational resources and education, while the benefits of opening up may be disproportionately focused on organisations that do not invest in opening up education and educational resources.

The publishers' concern is that open access to educational resources adversely affects their business. Similar concerns also exist in commercial educational organisations and organisations engaged in education export. However, publishers of educational resources and commercial trainers have their place in the education market, for example in creating diverse educational services.

In particular, with regard to education export, open educational resources and other openly accessible education offer marketing opportunities. In fact, high-quality open educational resources or online courses (e.g. MOOC) can be a sign of a high-quality educational organisation in an international environment, thus attracting learners to take advantage of the organisation's commercial products and services.

Teachers may be concerned that education will be opened irresponsibly by force. However, coercion is already protected by the Copyright Act, which gives the author of educational resources above the threshold of originality a right to decide whether to open their own resources. Moreover, an obligation to open all educational resources would not even be reasonable, as some of the educational resources may not work well outside a given teaching situation. Instead of compulsion, the best way to open up education is to encourage, for example, by recognition and merits for opening up education and educational resources.

Another threat arises from the belief that open educational resources and other openly accessible education could be the basis of education on their own and replace interactive contact teaching. Belief can lead to concerns that organisations or teachers would not invest in the creation of their own high-quality educational resources for reasons of savings when learners have access to open educational resources and other openly accessible education created by others. The quality of education must not be overlooked when promoting openness. Open education and open educational resources can also provide an opportunity to improve the quality of education. When open educational resources are accessible, teachers can more efficiently use time in developing their courses when it is not spent in preparing their own educational resources.

Identifying risks helps to avoid their realisation. In order to avoid risks, it helps, for example, to take into account the development of educational resources as teacher's merit, to increase funding for the development of educational resources and their support services, to clarify copyright issues through guidance emphasising the author's decision-making power, and to carefully monitor the quality of education.

DRAFT

Collaboration and trust

At the core of the policy work is our trust that the common direction and joint actions will provide the best opportunity to promote open education and educational resources for the benefit of the research and the society at large. We are not alone, as an increasing number of international actors and governments are setting open education and educational resources as a key objective in their education policy. It is difficult to promote this important issue without ambitious goals. The national strategic principles and objectives for open education and educational resources have been formulated through collaboration between the Open Science National Steering Group in Finland and the Open Education Expert Panel. These strategic principles and objectives will determine the shared direction of open education and educational resources for the Finnish higher education and research community.

The policy was drafted by a working group instigated by the Open Education Expert Panel, whose members included:

- Kaisu Clarot (University of Oulu)
- Minna Fred (Laurea University of Applied Sciences)
- Susanna Hasiwar (University of Oulu)
- Janniina Heinonen (The Trade Union of Education in Finland, OAJ)
- Aino Helariutta (Laurea University of Applied Sciences)
- Ilmari Jauhiainen (Federation of Finnish Learned Science)
- Joni Kajander (National Union of University Students in Finland)
- Anne Kärki (Satakunta University of Applied Sciences)
- Leo Lahti (University of Turku)
- Anna Lindfors (CSC – IT Center for Science)
- Jouni Markkula (University of Oulu)
- Paula Merikko (Finnish National Agency for Education)
- Minna Niemi-Grundström (University of Tampere)
- Seliina Päällysaho (Seinäjoki University of Applied Sciences)
- Maria Rehbinder (Aalto University)
- Jarkko Toikkanen (University of Oulu/The Finnish Union of University Researchers and Teachers)
- Tarmo Toikkanen (Open Knowledge Finland / Creative Commons Finland / The Association of Finnish eLearning Centre / IT-kouluttajat)
- Tarjaleena Tuukkanen (Häme University of Applied Sciences)
- Marjo Vallittu (University of Jyväskylä)

The drafting of the policy was based on an advance survey aimed especially at higher education teachers, which surveyed teachers' experiences of open

DRAFT

educational resources as well as hopes and fears about the future policy. 108 replies to the survey were received.

The working group has endeavoured to comply with the following values in the policy work:

- **Humanity** - policy aims to adapt structures to the needs of learners and teachers rather than learners and teachers to structures
- **Communality** - efforts have been made to involve all relevant stakeholders, such as teachers, learners and organisations
- **Diversity** - policy aims to enable many alternative ways to implement open education.

Structure of the policy

The policy supports the mission and vision of open science and research mentioned in Declaration for Open Science and Research 2020-2025³ and specifies the objective of open education and open educational resources set out in the Declaration. The organisations that have signed the Declaration are committed to promoting the objective as part of their own strategy and steering work, taking into account the specific features of their organisation and supporting and encouraging the daily work of the actors in their organisation in order to achieve the objective as specified in the policy.

This policy is composed of principles and (a) policy component on open access to educational resources and (b) policy component on open educational practices, which determine objectives and actions.

The principles define the general terms under which open education and open educational resources should be promoted. They consist of important principles for the higher education and research community that must be adhered to in the effort to achieve openness. The objectives are more time-dependent goals, which involve concrete actions. Objectives and their associated actions will respond to a changing international environment more readily than the principles.

The implementation of the principles and objectives will be supported by specific recommendations, with which the higher education and research community will create more detailed rules to regulate the promotion of open education.

³ <https://doi.org/10.23847/isbn.9789525995251>.

Implementation and follow-up

The policy is applied in higher education and in various forms of continuous learning, in which the organisations of the higher education and research community participate, for example, as organisers or partners. If necessary, the policy can also be utilised in the design of practices for open education and open educational resources by other educational organisations.

The rules and practices of implementing the principles and objectives of the policy will be jointly agreed by the higher education and research community to the extent necessary and sensible. The primary facilitator of joint agreement is the Open Science Coordination organised by the Finnish Federation of Learned Societies (TSV). Individual organisations promoting open education apply these commonly agreed rules and practices in a way that suits their characteristics.

The policy comes into force on 1.1.2021. The details of this policy will be further specified by recommendations, the first of which – recommendation on contractual, copyright, licensing and data protection issues - will be published as an annex to this policy. The planned publication schedule for other recommendations is:

- Recommendation on the accessibility of educational resources – 2021
- Recommendation on how to take into account the diversity of learners and the responsibility of the content in developing open education and educational resources – 2022
- Recommendation on practices and tools to ensure the findability, interoperability, reusability and further development of open educational resources – 2022
- Recommendation on good practices on how the development of open education and educational resources should be taken into account in the work and meriting of teachers – 2023

The implementation of the guidelines is monitored by the Open Science Coordination, which also determines annually the adequate monitoring levels by utilising the expertise of the Open Education Expert Panel. Monitoring tools include:

- a) maturity level survey organised every two years for organisations developing open education;
- b) data provided by Finnish Library for Open Educational Resources on the number of higher education resources stored in the library and the number of higher education resources downloaded from the library;
- c) a biennial survey for teachers in different fields of higher education on the suitability of openly accessible education and open educational resources to the needs of education;

DRAFT

- d) research project on the quality, quantity, use and appreciation of open educational resources in the European Union countries.

The policy will be updated in 2025.

Definitions

Opening education or Open Education means widening access and participation to education for everyone by lowering barriers for learning and making education more accessible, abundant, and learner centred. It offers multiple ways of teaching and learning, building, co-creating and sharing knowledge, and connects methods of formal and non-formal education

Although open education often takes place using digital technology, it means not the same as digital education.

Open Educational Resources (OER) mean learning, teaching and research materials in any format and medium that

- reside in the public domain or
- that have been released under an open license, that permits no-cost access, re-use, re-purpose, adaptation and redistribution by others.

Although research publications can be used as educational resources, especially at higher levels of education, and thus the openness of research publications makes them open as educational resources, this policy applies above all to educational resources that are not primarily research publications.

Open Educational Practices (OEP) refer to practices that promote Open Education, for example:

- by supporting the development, use, re-use, co-development and sharing of Open Educational Resources and other openly accessible education;
- by promoting the introduction and sharing of innovative pedagogical models and teaching and learning methods that make use of openness
- by supporting and strengthening learners in continuous, life-long learning, e.g. through more open methods of assessment and validation.

This outline includes principles, objectives and actions set for itself by the Finnish higher education and research community. The Finnish higher education and research community consists partly of the same actors as the Finnish research community defined in the Declaration for Open Science and Research⁴, but

⁴ The Finnish research community consists of:

DRAFT

especially from the point of view of education. Placing higher education together with research emphasises that research and education are not separate from each other, but affect each other in many ways – the results of the research generate new education and research may also arise in educational contexts.

mutta erityisesti opetuksen näkökulmasta katsottuna. Korottamalla linjauksen nimeen tutkimuksen lisäksi korkeakoulun korostetaan, etteivät tutkimus ja opetus ole toisistaan irrallisia, vaan vaikuttavat toisiinsa monilla tavoin - tutkimustulokset synnyttävät uutta opetusta ja opetustilanteissa saattaa syntyä myös tutkimusta.

More specifically **Finnish higher education and research community** includes:

- Finnish universities and universities of applied sciences defined in Finnish legislation
- individual teachers and researchers affiliated with Finnish universities and universities of applied science, together with the support personnel of research and education
- Finnish service providers that develop the infrastructure of open higher education and open science, including CSC – IT Center for Science
- other actors of Finnish research community (for instance, research institutions, learned societies and research libraries), especially when they participate in the development of education and educational resources
- learners in Finnish universities and universities of applied sciences, especially when they participate in the development of education and educational resources.

Developing open education and open educational resources requires a wide range of activities, including:

- the development of open educational resources or other openly accessible education, either individually or in cooperation
- the evaluation of the quality of open educational resources and of openly accessible education made by others
- further development of open educational resources and openly accessible education made by others

-
- Individual Finnish and foreign researchers and doctoral candidates affiliated with Finnish research organisations, and researchers with personal funding affiliated with Finnish research organisations or funded by a Finnish research funder;
 - Finnish research organisations such as universities, universities of applied sciences and research institutions, including their research teams and individual researchers, as defined in the Finnish legislation;
 - Finnish research funders that specialise in funding research, including the Academy of Finland, Business Finland, and numerous private foundations and funds;
 - Finnish service providers that develop the infrastructure of open science, including CSC;
 - Learned societies in Finland;
 - Academies and national scientific boards and committees in Finland;
 - Research libraries and archives in Finland
 - Scholarly publishers in Finland.

DRAFT

- the development and distribution of new open educational practices.

Universities and universities of applied sciences participate primarily in the implementation of the principles and objectives, but also all other organisations in the higher education and research community that prepare or otherwise develop open educational resources, other openly accessible education and open educational practices. The policy refers to these organisations as **organisations developing open education**.

DRAFT

Policy component for Open Access to Educational Resources

Strategic principle and the associated responsibilities

Principle 1: In addition to openness, the quality and reliability of education and educational resources developed in connection with it are monitored.

Ensuring the realisation and monitoring of the principle:

- A) Review of the initial situation: Starting from 2021, Open Science Coordination develops quality criteria for open educational resources and other openly accessible education and provides guidance to organisations in their implementation.
- B) Continuous monitoring: In a regular maturity level survey, Open Science Coordination will examine how quality criteria are applied in organisations developing open education and update the criteria if necessary.
 - a) Universities and universities of applied sciences ensure in their own quality systems that investments in the preparation and utilisation of open educational resources and other openly accessible education do not interfere with the overall quality of teaching and that quality contact teaching does not suffer due to the wide availability of open educational resources and education.

Principle 2: When developing open education and open educational resources, copyright and other relevant rights are respected.

Ensuring the realisation and monitoring of the principle:

- A) Review of the initial situation: Open Science Coordination produces (2020) a recommendation on the contractual, copyright, data protection and licensing issues to be remembered when opening educational resources. The recommendation emphasises that the opening of educational resources is voluntary and based on the decision of the author. The recommendation also suggests that the authors of open educational resources and their rights holders should license the materials under Creative Commons or, where applicable, with corresponding open source software licences, and that the rights of collaborative educational resources should be already agreed upon at the time of design.
- B) Continuous monitoring: In a regular maturity level survey, Open Science Coordination will examine how the recommendation is applied in

DRAFT

organisations developing open education and updates the recommendation as necessary.

- a) Federation of Finnish Learned Societies will launch a study on intellectual property rights of research outputs (including educational resources based on them) in the course of 2021 with a view to clarifying ownership and contract issues.

Principle 3: When developing open education and open educational resources, their versatile suitability for diversity of learners will be taken into account.

Ensuring the realisation and monitoring of the principle:

- A) Review of the initial situation: By 2022 at the latest, Open Science Coordination will draw up a recommendation on how to take into account the diversity of learners and the responsibility of content in open education and educational resources. The recommendation will consider, among other things, the inclusiveness, equality, accessibility, non-discrimination and gender sensitivity of education and educational resources.
- B) Continuous monitoring: In a regular maturity level survey, Open Science Coordination will examine how the recommendation is applied in organisations developing open education and updates the recommendation as necessary.

Principle 4: The work for developing open education and open educational resources is appreciated in the merit criteria and in the planning of job responsibilities.

Ensuring the realisation and monitoring of the principle:

- A) Review of the situation: By 2023 at the latest, Open Science Coordination will draw up a recommendation on good practices on how to take the development of education and educational resources into account in the work and meriting of teachers. The recommendation emphasises the possibility for teaching staff to use their working time to develop open education and educational resources, and recommends that the authors of open educational resources be adequately reimbursed or otherwise provided with the necessary resources for their work.
- B) Continuous monitoring: Open Science Coordination science develops indicators and information bases supporting the implementation of the recommendation, examines in a regular maturity level survey how the recommendation is applied in organisations developing open education and updates the recommendation if necessary.

DRAFT

- a) On the basis of the recommendation, indicators and information base, organisations developing open education will draw up their own guidelines on how the development of open education and educational resources will be taken into account in teacher's merits and in working time plans.
- b) Organisations that develop open education create practices how to take in account the development of open education and open educational resources in salary and rewarding.

DRAFT

Objectives and the required actions

By 2025:

Objective 1: The whole teaching staff of all organisations developing open education have the basic capacity to prepare open educational resources and have tried the preparation of open educational resources.

Actions required by the objective:

- a) at the latest in 2021, Open Science Coordination will create and introduce a maturity level survey for organisations promoting open education which assesses their abilities to produce open educational resources and makes recommendations for developing these abilities.
- b) at the latest in 2021, Open Science Coordination will draw up a recommendation on the accessibility of educational resources.
- c) at the latest in 2022, Open Science Coordination will draw up a recommendation on practices and tools to ensure the findability, interoperability, re-usability and further development of open educational resources. The recommendation calls primarily for the Finnish Library of Open Educational Resources to be used in the open distribution of educational resources and recommends the use of existing resources for the production of new open educational resources.
- d) on the basis of this policy and the recommendations that specify it, the organisations developing open education will draw up their own guidelines on open educational resources, for example on contractual matters, licences, tools for opening educational resources, recommended sharing places, and finding and utilising open educational resources.
- e) organisations developing open education provide support and training for the authors of open educational resources on issues related to licensing, openness and its practical implementation.

Objective 2: The reserve of open educational resources at higher education level has been significantly increased in terms of quantity and made better suited to education in terms of quality.

Actions required by the objective:

- a) Open Science Coordination creates and introduces a process to monitor the quantity and quality of open educational resources at higher education level.
 - i) Open Science Coordination monitors the amount of higher education resources stored in and downloaded from the Finnish Library of Open Educational Resources each year at different disciplines.

DRAFT

- ii) every two years, Open Science Coordination organises for teachers of different disciplines a survey, whether there are enough open educational resources that support education well in their field.
 - iii) Open Science Coordination determines yearly levels of adequacy for the results of points (i) and (ii) on the basis of developments in previous years, using the know-how of the Expert Panel on Open Education.
 - iv) Open Science Coordination publishes an annual report on development in the open accessibility of educational resources in the higher education and research community. The report contains a list of the organisations of the higher education and research community that have produced the most and the best open educational resources.
- b) Open Science Coordination examines funding mechanisms for the development of open educational resources by comparing international examples.
 - c) Open Science Coordination develops an annual award to a person or group distinguished in the development of open education and educational resources.

Objective 3: According to research, the open educational resources of an average Finnish higher education institution are used and valued more than the open educational resources of the higher education institutions in other EU countries on average.

Actions required by the objective:

- a) Open Science Coordination will start a research project funded by the Academy of Finland to examine the quality, quantity, use and appreciation of open educational resources in the European Union countries.
 - i) Results of the research project will be published in an open access channel with at least rating 2 in Publication Forum.
- b) Open Science Coordination communicates in Finland and internationally about open educational resources, this policy and joint recommendations, as well as services and projects related to open educational resources.
- c) Organisations developing open education provide information on open educational resources and related practices within the organisation, as well as to their partners and the wider public.
- d) Organisations developing open education design and implement joint projects to promote the capacity of all participants to produce open educational resources, to increase the quality and quantity of open educational resources for all participants, and to disseminate information about the open educational resources of all participants.