



# Open Education and OER

2nd World Open Educational Resources (OER) Congress

OER for Inclusive and Equitable Quality Education: From Commitment to Action

I FEEL  
SLOVENIA

## Open Education and OER Slovenian case: From Commitment to Action

This is a call for action to the global community and countries participating at the 2nd World Open Educational Resources (OER) Congress. As the co-organizers, Slovenia wishes to make a change in the field of OER, achieve progress and learn from the success and experience of other UNESCO member states.

We have made a pledge and became active, now join us in this opportunity to reinforce your own commitments to action. The showcase of the Slovenian approach could be helpful and a starting point for the debate at the congress.

*Republic of Slovenia, Ministry of the of Education,  
Science and Sport  
H.E. Dr. Maja Makovec Brenčič Minister*

### ***Validate***

the unique and holistic approach Slovenia has taken on Open education and OER

### ***Lets support***

the international community and Member States in addressing Open Education and OER

### ***We encourage***

all Congress participants to take concrete steps based on the Slovenian approach

### ***Let's mobilize***

all stakeholders to exchange experiences and collaborate on joint projects and activities

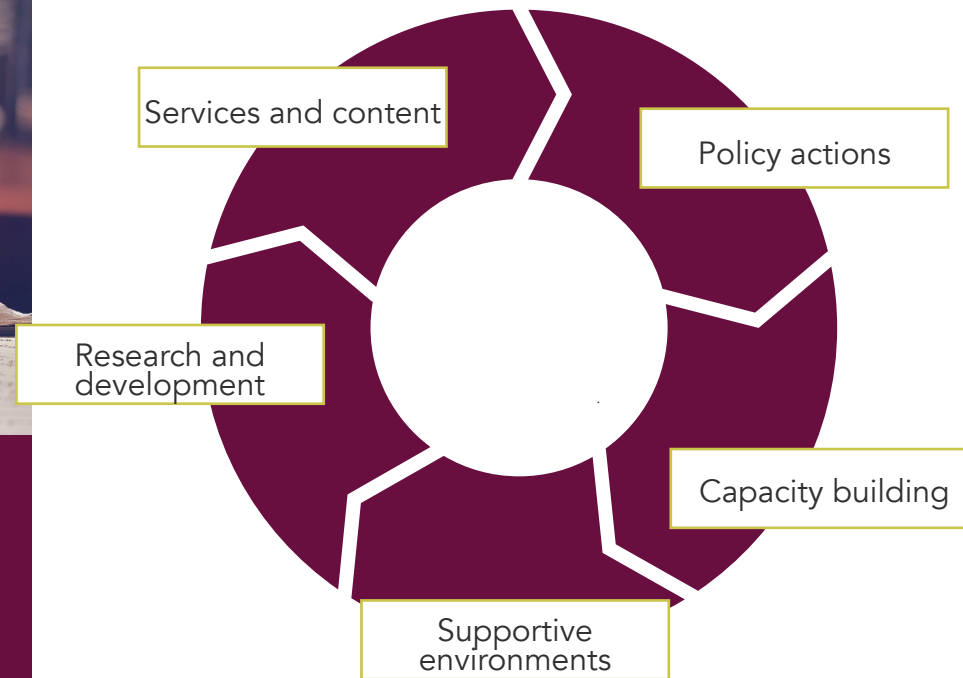
### ***Let's organize and build a network***

of Member States and stakeholders prepared to explore and lead future actions on OER policies, solutions, practices and more.



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## Slovenian approach to Open Education and OER in five key exemplar areas



### Policy actions

Defining a vision and implementing it with efficient strategies

### Capacity building

Improving skills, competences and collaborative leadership

### Services and content

Creating education materials and enhancing e-services

### Research and development

Exploring new pedagogy and technologies for content creation and collaboration

### Supportive environments

Efficient mechanisms of scalability and sustainability



## Overview

### *Defining goals, identifying success stories and overcoming challenges*

Fully and clearly understanding what is open education and OER from the standpoint of government - its added value, integration in the educational system and introduction of innovative learning and teaching through new technologies and OER content.

### *Understanding the background*

In 2006, the Ministry of Education and Sport issued its first tender to explore the development and implementation of educational interactive e-materials under Creative Commons licenses.

In January 2014, the Slovenian government decided to carefully examine the possibilities that open education along with OER could deliver to its educational system.

The goal was to understand on a systemic level whether such an approach was feasible and created a long-term objective to involve stakeholders in discussing, researching, developing, implementing, testing, validating and sharing good prac-

tice on open education and 'openness beyond education'. We called this the OpeningupSlovenia Initiative.

By August 2017, the government had delivered a range of world-changing actions, addressing hundreds of experts, teachers, researchers, technologists and entrepreneurs in Slovenia and abroad in pushing the open education agenda nationally, regionally and internationally.

Sixty projects were started, many are still in development, and five exemplary areas of transformation were defined. These are the building blocks

for a sustainable and scalable OER environment.

The governments has lead three major development phases in adopting and implementing open education and OER, starting with the Pre-phase (1993 – 2005), Phase I (2006 – 2013) and the current Phase II (2014 – 2022).

## *Digital transformation*

*Open Education and OER are part of the larger picture in the digital society and economy*

### FOCUS:

#### Clarity

A clear view of the value of the connected portfolio of "openness" at all levels of government.

#### Alignment

Enable digital transformation through open which in turn delivers added value to all educational stakeholders.

#### Insight

Our experience can facilitate others' design, development and research decisions based on facts not assumptions.

#### Promotion

We have created a unique and comprehensive approach to open up education in Slovenia.

#### Confidence

Support countries and the international community in addressing Open Education and OER.

#### Value

Understanding the power to mobilize all stakeholders to exchange experiences and collaborate.



Interested in collaboration?  
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## Policy Actions

### *Defining a vision and implementing it with efficient strategies*

Policy innovations have supported educational institutions in developing new educational models, facilitate research, test large-scale innovative pedagogies, curriculum development and skills assessment and encourage new business models.

### *Delivering Insights*

Government has realized that a novel approach should be created for addressing policy development and implementation.

The optimal way was to find synergy between a top-down and a bottom-up approach, delivered through the OpeningupSlovenia model. This assumed government was simply one of the involved stakeholders.

However, we decided not to have one specific governmental policy document regulating this space, but instead integrate it in a portfolio of high level and sector specific policy documents, allowing it to be more dynamic and mainstream at all

levels of government and influence the European Union and beyond.

In 2016 open education was introduced in the Strategic guidelines for further implementation of ICT in the Slovenian education system until 2020. It describes open education, as a support mechanism to the digital transformation in different education sectors within the education system.

### *Key Achievements*

- Facilitate research and policy exchange in EU and UNESCO Member States
- Increasing awareness of the latest technological developments among policy makers
- Making stakeholders aware of the current and future policy and regulatory framework
- Mobilize all stakeholders (teachers, learners, economic and social partners) to implement policies at their educational institutions

### *Challenges*

- To reform and complement key legislation
- To design the appropriate policy framework and stimulus to enable a comprehensive introduction of formal and informal education
- To be actively involved in national, regional and international governmental policy-making mechanisms
- To develop and implement a worldwide vision for mainstreaming OER

## FOCUS:

### Clarity

A clear OER policy approach has mapped all stakeholders needs and empowered government to make effective decisions.

### Alignment

Our national, regional and international policy activities in line with EU, UNESCO, and COL are enabling the digital transformation of stakeholders.

### Insight

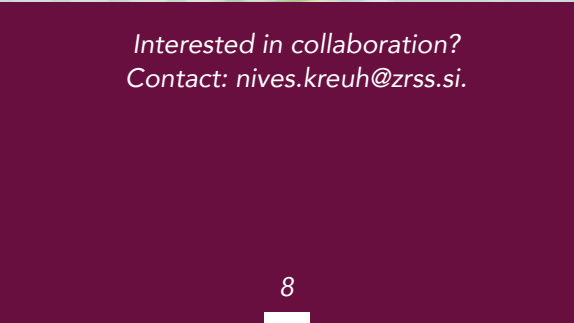
Mixed international policy teams developed design and implementation recommendations for us based on direct experience.

### Agility

Policies should be lightweight and dynamic allowing for constant iteration, enabling a fast reaction to real-life changes as they arise.

### Confidence

We are introducing UN SDG4 education for all in the Strategy 2030 Slovenia.



# Capacity Building

*Improving skills, competences and collaborative leadership*

Capacity building in “openness” showed signs of sustainable social and economic development and enabled and invigorated a common clear ethos of “open” across all stakeholders.

## Building on competencies

In Slovenia the goal of capacity building for open education and OER is to facilitate its integration into existing digital skills and competency frameworks.

It aims to strengthen the links between society, academia, research and business and to reinforce the systemic impact of openness, through structured cooperation, exchange of experience and good practices.

It involves all stakeholders in learning about and exploiting the potential of open education and OER and how it can be used to build social capital and trust, develop 21st century key skills with special attention to digital skills and attitudes.

Such an approach to capacity building has cultivated the creation of a somewhat new organizational culture and a set of skills which enabled organizations to set objectives, achieve results, solve problems, and create strategies which enable them to survive in the long run, based on open.

## Key Achievements

- E-competent teacher framework
- 38,000 participations of educators in 3-day courses
- Entrepreneurship and Interdisciplinary activities all around Slovenia
- Around 2,000 young volunteers introduce the basic computer skills to around 5,000 elders every year

## Challenges

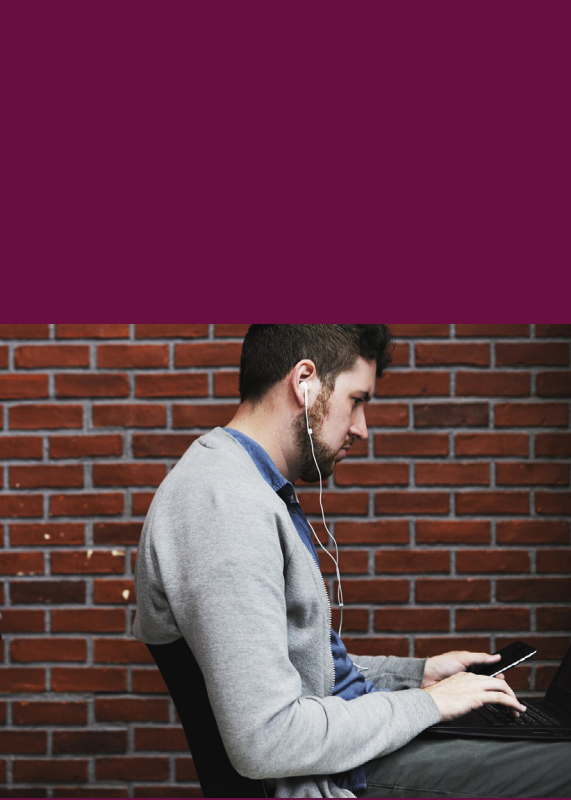
- To improve international comparable skills of learners
- To develop skills at higher cognitive levels (including computational thinking)
- To participate actively in the process of international certification of digital skills and apply international recommendations

## FOCUS:

<p>Consistency</p> <p>Raising the level of digital skills and enhance the use of ICT within the overall educational system.</p>	<p>Value</p> <p>Improvement of key competences and 21st century skills of students at all levels of education by using OER.</p>
<p>Alignment</p> <p>Comprehensive development of competences of educators and leaders through effective forms of training.</p>	<p>Engagement</p> <p>Our approach is aimed to increase educator and learner engagement in participation of different courses and programs.</p>
<p>Agility</p> <p>Technology for educators should be lightweight allowing for constant iteration, enabling a fast reaction to changes as they arise.</p>	<p>Quality</p> <p>Strengthening the professional (e-)communities, active exchange of good practice and peer learning and coaching.</p>

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# Services and Content

*Creating education materials and enhancing e-services*

We are exploiting synergies between the participation of teachers, learners and content connected through open educational environments. We are building new services around pedagogies and content aggregation, annotation, mash-ability, verification, analysis, search, media sharing and recommendation.

## Going beyond digital products

Government decided to open up possibilities of education in an open, innovative and sustainable learning environment facilitated by innovative use of ICTs.

This will enable individuals to gain knowledge and develop skills, key competences, as well as competences of the 21st century that are essential for a successful integration in society.

The goals are to develop high quality didactical aids or tools, (e.g. multimedia and interactive e-material, mobile and web based applications, e-portfolio), and accordingly, adapt the existing educational approaches.

Set up an open platform of information technology, e-content, e-services, pedagogical concepts and approaches, added-value models, as well as motivation mechanisms.

And finally, raise the level of digital competence and enhance the use of ICT within the overall educational system.

## Key Achievements

- 4 million views of OER via VideoLectures.Net worldwide
- 43 e-textbooks under Creative Commons license
- More than 130 projects for development of multimedia and interactive e-materials
- Science Atlas – service for researchers’ competence and collaboration diagrams
- More than 22.000 educators participated in e-communities to exchange and discuss new pedagogies

## Challenges

- To develop new services as a consequence of the convergence of OER, broadband, broadcast and social media
- To support and promote innovative open and OER based pedagogical approaches for mobile and www platforms
- To implement existing OER materials and e-services to support personalized and collaborative learning
- To develop new business models for OER

## FOCUS:

### Quality

Developing open multimedia and interactive e-material for students and teachers on different platforms.

### Agility

Enabling access through various educational portals and creation of e-services for formal and non-formal education.

### Confidence

Stakeholders can be confident the solutions have both business, research and user needs integrated.

### Equity

Provide suitable e-services from basic to advanced for each particular institution and individual.

### Consistency

working within an agreed “open” technical framework ensures consistency across projects and people.

### Reduced Risk

Building and adding on already successful and widely used services is a rewarding approach.



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# Research and Development

*Exploring new pedagogy and technologies for content creation and collaboration*

The main challenge we have identified is to make the best use of technology for reaching out to new audiences, adapting to the digital era and thriving in the connected possibilities of the Web.

## Crafting Solutions

Government is supporting the research community to create a strong agenda around open education and OER, especially in the areas of open practices and technology.

Exceptional results are coming from artificial intelligence research in demonstrating and validating new technologies, services and solutions through large scale demonstrations, pilots or close-to-market prototypes.

Already existing technologies are being tailored to open education and OER, addressing interoperability and integration between different e-services. These enable to collect users' behavior through several feedback channels facilitating hyper-person-

alised services, forms of participatory content and advanced content management for OER.

Such opportunities open to great improvements on content accessibility for people with different types of impairments (due to e.g. aging or disabilities).

## Key Achievements

- 70% of schools participating in R&D projects
- Deployment of research results in real-life settings
- Requirement for consortia to include all stakeholders in projects
- Involvement of OER in national strategic projects following European Smart Specialization Strategy
- Majority of results are CC licensed

## Challenges

- To move closer to a fully personalised and interactive user experience;
- To increase the use of ICT technologies in the education industry
- Solutions that can clear barriers for the success of the policy actions from the content and media perspective
- Make all results CC licensed

## FOCUS:

<p>Consistency</p> <p>Digital transformation of education must include OER at its centre.</p>	<p>Value</p> <p>Develop and test innovative pedagogical approaches, models and strategies of student-centred learning and teaching.</p>
<p>Alignment</p> <p>Research and development of all levels (policy, educational services, open content, infrastructures).</p>	<p>Agility</p> <p>Experiment in new areas and business models: municipalities and cities, factories of the futures, circular economy, e-government, e-mobility, e-health, cyber security and cyber defence.</p>
<p>Engagement</p> <p>Increase active participation of all major stakeholders in the sector.</p>	<p>Quality</p> <p>To create a high quality agenda in OER research, collaboration of different stakeholders is a necessity.</p>





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# Supportive Environments

## Efficient mechanisms of scalability and sustainability

Triggering large-scale sustainable and scalable changes requires shared efforts and focused actions, engaging all stakeholders, national, international and regional along with learners, teachers, educational policy makers and research communities.

## Embedded value

The key for success depends on governments, but each stakeholder in the educational arena has a crucial role to play in co-creating these mechanisms. The government's role is to enable and facilitate.

New technologies, policy experimentation and services for OER are results of a diverse portfolio of stakeholders in the educational sector and can often solve big problems. However, without the institutional capacity to support, maintain, and manage these actions, big problems can grow in both size and complexity.

A functional supportive environment is a placeholder to promote best practices and support exchanges

across countries. It can deliver benefits from all economies and interoperability, thus avoiding fragmentation.

The supporting environment is needed if government wants to develop, test and run pilot projects before mainstreaming them into the educational system. It can support the deployment and availability of mechanisms through financial support, public-private partnerships and recommendations.

## Key Achievements

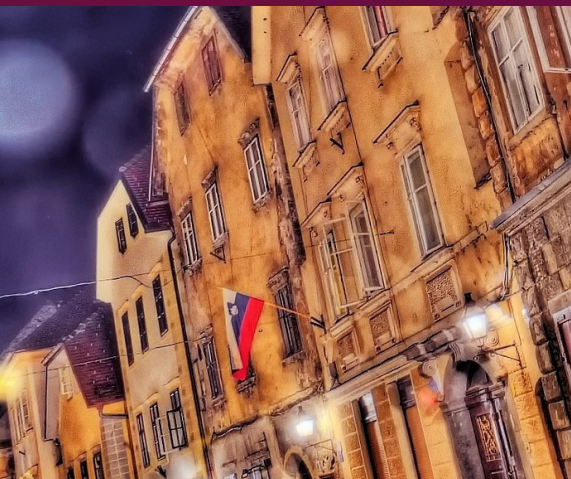
- Created an appealing environment where stakeholders feel comfortable exchanging ideas
- Establishment of UNESCO Chair in OER
- Clear, monitored and effective launch of open education and OER across all government
- Launch of wider initiatives like OpeningupSlovenia
- Fast lane to government and other stakeholders
- Creation of stable and supportive mechanisms for OER agenda

## Challenges

- To set-up an inter-government and cross-government projects, coalitions and alliances
- To create an operations agenda based on the Ljubljana Action Plan
- To launch a Dynamic Coalition in OER with the purpose of mainstreaming OER in participating countries and disseminate benefits to all stakeholders

## FOCUS:

<p>Alignment</p> <p>Dynamic coalition OER coordinated by Slovenia which aims to have a set of stakeholders to rapidly understand OER mainstreaming.</p>	<p>Compliance</p> <p>Support teachers' professional development through open online courses and OER, innovative teaching and learning environments.</p>
<p>Productivity</p> <p>Platforms of partnerships and alliances of all stakeholders at local, regional, national, EU, international level.</p>	<p>Confidence</p> <p>International events to provide upgrades of strategies and visions.</p>
<p>Viability</p> <p>Supportive environment for schools and other training institutions, e-services; leadership and pedagogical support.</p>	<p>Quality</p> <p>It is critical that when an OER service becomes available, it lasts forever and is of high quality.</p>



REPUBLIC OF SLOVENIA  
MINISTRY OF EDUCATION,  
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