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# OPEN SCHOOLING DECLARATION


## Open Schooling ...

Opening Minds, Time and Doors to  
Better Outcomes for Students,  
their Communities and the Planet



Funded by the  
European Union





This is the first edition of the “Open Schooling Declaration” (OSD). It aims to accelerate the open schooling movement with resources, technologies, practices, and policies. The OSD consists of 10 principles, 14 recommendations and 42 actions.

OSD was created by the partners of the CONNECT project underpinned by three years of open schooling implementation with evaluation and will be discussed with the Open Schooling Together community and other open schooling networks in Europe and beyond.

OSD is addressed to governments and international organizations, education agencies and ministries, charities, universities, schools, STEM professionals and third sector organisations including museums and outdoor education.

**You are very welcome to contribute with your views and sign in this declaration. Join us in the online version of this document:**

<https://padlet.com/connectscience2020/declaration>

## 10 Principles

### What is Open Schooling?

1. Open Schooling is about transforming education to empower students towards a desirable future and a sustainable world.
2. Open Schooling brings young people together with scientists and citizens to solve real-life problems with scientific thinking.
3. Open schooling focuses not only on open access to resources and platforms, but, more importantly, on wellbeing and sustainability as core purposes.
4. Open schooling gives schools access to participatory scientific approaches for students to develop knowledge, skills, attitudes and values in real context.

### Why Open Schooling?

5. To build sustainable and desirable futures, curricula must be engaging, contextualized and meaningful.
6. Open schooling offers enjoyable and relevant approaches encouraging students to value science with and for society.
7. Students must be prepared to become active change agents, aware of how responsible research and innovation can shape their careers and future.
8. In a digital age, open schooling provides networks and pathways for open democracy, inclusion and social justice.

### How should Open Schooling be implemented?

9. Open Schooling is a recent EU concept, that builds on effective principles and practices from all forms of education.
10. To become a sustainable approach, it requires:
  - Close collaboration between schools, universities, enterprises, civil organisations and policy authorities
  - Open curricula that create opportunities for diversity, curiosity, innovation and action influenced by students' ideas of what is relevant to them.
  - Guidelines to support student engagement, reflection, competences and purpose in life enhanced by CARE-KNOW-DO framework.



## 14 Recommendations

1. Create sustainable research and innovation networks around Open schooling.
2. Link Open Schooling to real-world problem solving.
3. Collectively define shared visions for the resolution of local problems.
4. Design personalized and accessible IT solutions involving all participants.
5. Promote digital governance.
6. Seek funding from science-based industries, local authorities and other stakeholders.
7. Promote institutional change in schools.
8. Communicate the activities and challenges of Open Schooling.
9. Give recognition for teachers, students, scientists and inspiring practices.
10. Empower teachers, students and families for Open Schooling.
11. Ensure that the process considers equity, diversity and inclusive approaches for social justice.
12. Ensure that the process follows a transdisciplinary approach.
13. Ensure that the process promotes career awareness.
14. Ensure that the process promotes innovation in STEAM education.

## 42 actions

Recommendations	Examples of actions to implement the recommendations
<p><b>1.</b> Create sustainable research and innovation networks around Open schooling</p>	<ol style="list-style-type: none"> <li>1. <b>ADVOCATE:</b> Co-organize meetings with local, regional and national policy makers (e.g. science organisations, local authorities, Ministries of Education or Research) at various geographical levels (e.g. through Scientix’s Science Thematic Seminars) to advocate for projects to address specific societal or local challenges through partnerships</li> <li>2. <b>STAKEHOLDER ANALYSIS:</b> In collaboration with schools and families, perform stakeholder analysis to identify key participants in each Open Schooling context, and ensure that their perspectives are considered. Stakeholders could include school leaders, teachers, students, parents, scientists, researchers, administrators, and representatives of local communities.</li> <li>3. <b>ROLE OF RESEARCH:</b> engage researchers whose R&amp;I priorities are related to the challenge or to relevant educational topics and facilitate their interaction with students and families.</li> <li>4. <b>COLLABORATE:</b> Organize meetings &amp; workshops to promote collaborative evidence-based decision-making in Open Schooling contexts and create other opportunities for collaboration between schools.</li> <li>5. <b>POLICY MAKING:</b> Engage policy makers and other stakeholders during the whole Open Schooling process at early stage (e.g. with a webinar to get feedback and recommendations) to design/promote evidence-based policies</li> <li>6. <b>MUTUAL LEARNING:</b> Engage teachers and scientists in mutual learning processes within communities of practice</li> </ol>
<p><b>2.</b> Link Open Schooling to real-world problem solving</p>	<ol style="list-style-type: none"> <li>7. <b>NEEDS ASSESSMENT:</b> Engage stakeholders in needs assessments to identify: <ul style="list-style-type: none"> <li>• Specific needs and capacities of schools to implement Open Schooling</li> <li>• How much support is needed for schools to implement Open Schooling</li> <li>• Which local problems are more relevant to respective countries, areas and schools, with a special focus on those that affect disadvantaged students, vulnerable and under-represented actors.</li> <li>• Specific needs of researchers and policy makers such as funding providers, government agencies, and school administrators.</li> </ul> </li> <li>8. <b>PRIORITY SETTING:</b> Define the priority problems to address, in collaboration with schools, families, administrators and researchers.</li> </ol>
<p><b>3.</b> Collectively define shared visions for the solution of local problems</p>	<ol style="list-style-type: none"> <li>9. <b>SHARE VISION:</b> Engage all stakeholders to define a shared vision for the resolution of the problem, considering new trends, new perspectives and evidence-based criteria</li> </ol>
<p><b>4.</b> Design personalized and accessible IT solutions involving all participants</p>	<ol style="list-style-type: none"> <li>10. <b>DIGITALIZATION:</b> Promote more intensive and inclusive use of ICT to open up schools to science &amp; industry and to the wider community including also Special Educational Needs and Disabilities (SEND). Co-design and co-create solutions and digital outputs, based on evidence obtained from Open Schooling, that are accessible to all and based on participants’ needs and motivation.</li> </ol>

Recommendations	Examples of actions to implement the recommendations
<p><b>5.</b> Promote digital governance</p>	<p>11. <b>USE DIGITAL COLLABORATION AND COMMUNICATION TOOLS</b> to facilitate governance of Open Schooling and problem-solving activities.</p> <p>12. <b>PROMOTE COLLECTION, INTEGRATION AND ANALYSIS OF DATA</b> on the situation of young people and their communities at local, regional and international levels.</p> <p>13. <b>PROMOTE THE INVOLVEMENT</b> of young people and families in open governance processes.</p> <p>14. <b>EMPOWER YOUNG PEOPLE AND FAMILIES</b> to take control of data collection and analysis and use the results in governance processes.</p>
<p><b>6.</b> Seek funding from science-based industries, local authorities and other stakeholders</p>	<p>15. <b>EMPOWER FOR FUNDRAISING:</b> Support schools and stakeholders to increase their human and economic resources in relation to fundraising. Use different sorts of funding (e.g. national funding for mobility, funding from programmes that facilitate access to education resources at local, national and international levels, including local, regional, national and European sources</p>
<p><b>7.</b> Promote institutional change in schools</p>	<p>16. <b>INSTITUTIONAL CHANGE:</b> Integrate Open Schooling into existing education institutions and systems.</p> <p>17. <b>TIME FOR OPEN SCHOOLING:</b> Allocate protected time (weekly or monthly) for teachers to design, implement and participate in Open Schooling projects, in collaboration with other teachers and stakeholders.</p>
<p><b>8.</b> Communicate the activities and challenges of Open Schooling</p>	<p>18. <b>ALLIANCES:</b> Identify other EU projects focused on citizen science and participatory science to establish alliances for knowledge exchange and impact (e.g. <i>Open Schooling Together</i>).</p> <p>19. <b>IMPACT INITIATIVES:</b> Publish articles about Open Schooling in high impact social media and in print.</p> <p>20. <b>CO-ORGANIZE EVENTS</b> such as workshops, webinars or festivals (e.g. with Scientix, European Parents Association, Children’s Universities) taking advantage of World Days and other external events.</p> <p>21. <b>EDUCATION REPOSITORIES:</b> Publish Open Schooling resources in education repositories and ask teachers and organizations to recommend them.</p> <p>22. <b>POLICY REPORTS:</b> Write policy reports on CONNECT findings and benefits and circulate them in order to engage policy makers.</p> <p>23. <b>LEAFLETS:</b> Prepare a very clear one page leaflet per target audience on what we are offering, what the benefit are for them and how can they use CONNECT resources.</p> <p>24. <b>SCIENTIFIC PUBLICATIONS:</b> Publish articles about Open Schooling and its practices in scientific journals.</p> <p>25. <b>COMMUNITY AS COMMUNICATORS:</b> Communities, including youth, can report problems tackled and benefits gained.</p> <p>26. <b>STUDENTS AS SCIENCE COMMUNICATORS:</b> Increase local initiatives for students to present their scientific projects and ideas.</p> <p>27. <b>DISSEMINATE THE SHARED VISION:</b> Spread the vision as widely as possible.</p>

Recommendations	Examples of actions to implement the recommendations
<p><b>9.</b> Give recognition for teachers, students, scientists and inspiring practices</p>	<p>28. <b>AWARDS:</b> Give awards &amp; certificates (e.g. recognition at national level with the CONNECT Open Schooling open badges) for teachers and students</p> <p>29. <b>PERSUADE ORGANIZATIONS:</b> scientific organizations should recognise scientists and researchers participating in OS (e.g. in their communication campaigns)</p> <p>30. <b>INSPIRING PRACTICES:</b> Disseminate inspiring practices and Open Schooling resources through websites and other channels provided by CONNECT and its participating communities.</p> <p>31. <b>BENEFITS:</b> Disseminate benefits of inspiring practices with a focus on multistakeholder networks and collaborations</p>
<p><b>10.</b> Empower teachers, students and families for Open Schooling</p>	<p>32. <b>EMPOWER:</b> Empower participants to think critically, to engage in real problem solving, to learn transdisciplinary and ICT skills and to co-create Open Schooling resources with:</p> <ul style="list-style-type: none"> <li>a. Training (e.g. Open Science summer schools, training in schools by scientists, for students)</li> <li>b. Provide resources &amp; guidelines for training</li> <li>c. Set up Mentoring Schemes for students and families</li> </ul>
<p><b>11.</b> Ensure that the process considers equity, diversity and inclusive approaches for social justice</p>	<p>33. <b>INTERDISCIPLINARITY:</b> Engage researchers, especially PhD candidates, interested in equity, diversity and inclusion</p> <p>34. <b>DIGITAL INEQUALITIES:</b> Provide equipment and Internet connection to schools and students at home, if these are lacking.</p> <p>35. <b>GENDER EQUALITY:</b> Support gender equality in local situations, bearing in mind that boys, girls and other groups may be disadvantaged in different ways.</p> <p>36. <b>LEARNING INEQUALITIES:</b> Young people do not all learn at the same speed or in the same way.</p> <p>37. <b>SOCIAL INEQUALITIES:</b> Socio-economic disadvantage hinders learning, career progression and social mobility.</p>
<p><b>12.</b> Ensure that the process follows a transdisciplinary approach</p>	<p>38. <b>TRANSDISCIPLINARY SKILLS:</b> Ensure that Open Schooling resources facilitate the learning of transdisciplinary skills, e.g. combining sciences with arts and humanities subjects.</p>
<p><b>13.</b> Ensure that the process promotes career awareness</p>	<p>39. <b>CAREER AWARENESS:</b> Ensure that Open Schooling promotes awareness of the world of work, the need for generic skills and the widest possible range of opportunities, within and beyond STEAM based careers.</p>
<p><b>14.</b> Ensure that the process promotes innovation in STEAM education</p>	<p>40. <b>STEAM EDUCATION:</b> Promote innovation in STEAM education by identifying good practices that enable young people to increase their confidence, enjoyment, and wellbeing.</p> <p>Use phenomenon-based learning to build deeper understandings of the world and to increase young people's ownership of learning.</p>



## Organisations involved in the cocreation of this declaration

THE OPEN UNIVERSITY (OU),  
FUNDACIO PRIVADA INSTITUT DE RECERCA DE LA SIDA-CAIXA (IRSI)  
FONDEN TEKNOLOGIRAADET (DBT)

### National association of schools:

PERIFERIAKI DIEFTHINSI PROTOVATHMIAS KAI DEFTEROVATHMIAS EKPAIDEFSIS  
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### Universities:

UNIVERSITATEA VALAHIA TARGOVISTE (VUT)  
UNIVERSIDADE DO ESTADO DA BAHIA (UNEB)  
ASSOCIACAO PARANAENSE DE CULTURA APC (APC)

### Enterprises:

MASTERY SCIENCE LTD (MS)  
GLOBAZ, S.A. (LOBA)  
EXUS SOFTWARE MONOPROSOPI ETAIRIA PERIORISMENIS EVTHINIS (EXUS)

## How the declaration was created

The methodological approaches used to design, refine, and validate this declaration are respectively:

1. Mixed methods research including students, educators, professionals and families; led by the OU (see CONNECT policy report) to define the principles and policy strategies;
2. System-oriented dialogue model with consortium members and collaborators led by IRSI to identify the list of recommendations and actions;
3. Meeting stakeholder and expert consultation with external networks led by DBT to validate the declaration.

This declaration will be submitted to the European Commission in 2023 part of the research evaluation – policy report, final deliverable of CONNECT Project.



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