

DECLARATION FOR A DEMOCRATIC AND OPEN DIGITAL EDUCATION

Guidelines to amend digital competences frameworks and programmes

Barcelona, July - September 2022

This working document proposes a series of recommendations aimed at a democratic and open digital education. To prepare it, twelve reference frameworks [1] that currently define Catalan educational policy in the digital sphere were analysed. The recommendations, therefore, arise from the analysis of this documentation and are limited to the regional sphere, but many of the proposals can be extrapolated to other contexts and to wider contexts.

FRAMEWORK

Taken together, the frameworks analysed show a move towards an increasingly complex and enriched conception of the digital reality, and also reflect a progression towards a democratic digital education that fosters increasingly solid and informed citizens' knowledge. However, we have identified seven issues that have led us to propose the following recommendations.

WHO AND WHY

Point 1: Human rights and democracy should be incorporated as the foundation and horizon of digitalisation in education

In general, the reference frameworks analysed assume the dual approach of focusing on social integration and the professional development and accommodation to labour market demands of European citizenship as the basic objectives of lifelong learning. In other words, the starting point is a social framework, focused on the integration and social cohesion of citizens through the acquisition of basic knowledge and skills, and an economic framework, centred on the labour market and European competitiveness at a global level. However, although there are indirect and occasional references, there is no explicit assumption of a framework that is openly committed to democratic digitalisation [2] and places human and digital rights as the basis for digital education and the acquisition of digital competences.

Suggested courses of action:

- 1.1.** Guarantee legal safeguards for data and content sovereignty of students, families, teachers and schools.
- 1.2.** Guarantee educational and pedagogical sovereignty outside the corporate and commercial interests of large technology companies.
- 1.3.** Promote and raise awareness of digital rights as human fundamental rights within the educational community by guaranteeing that they are represented at the core of the competence frameworks and programmes.

Point 2: The public administration should be considered as a subject of competence to guarantee digital rights

The consulted documents refer often to the digital competence of students, teachers, citizens and even schools themselves. Likewise, the public administration should be considered as a subject that should also be digitally competent. Public administrations have their own fundamental tasks, the fulfilment of which should be guaranteed through specific reference frameworks and mechanisms, starting with legislation itself. Given that it is currently the

competency frameworks that are being imposed as univocal and accrediting references with respect to digital achievements, we consider it necessary that the educational administration training pathways on the digital competence, even in its political structure, must be equalised with students, teachers, citizens and schools. We need to avoid disconnection between the authority and the practices of the educational communities.

The lack of skills and digital competency of the administration increases the pressure on teachers when deciding on training for them with additional workload instead of updating and strengthening their skills, abilities and knowledge on digital fundamental human rights.

Suggested courses of action:

2.1. Ensure that the competency framework for public education administrations incorporate excellence in democratic digitalisation, both in theory and in practice. Genuine public administration competencies would include, for example, the proactive promotion of democratic digitalisation and digital rights in education based on the deployment and practical use of auditable digital infrastructures and tools.

2.2. In line with the principle of *public money, public code*, ensure that all software technologies promoted and/or funded by public administration are Free/Libre Open Source (FLOSS) to guarantee its auditability and promote its replication and extension.

2.3. The educational communities should not be a setting for product placement. The administration should ensure that the digital tools they recommend for teaching, learning, communication and academic management are necessary, effective, efficient, reliable and updated.

2.4- Provision of access to the Internet for educational communities should respect net neutrality and not unduly block access to content.

Point 3: All actors involved in digital society and education should be critically considered to ensure digital and pedagogical sovereignty

The documentation analysed does not usually consider the public and private actors involved in digital education in an exhaustive way. There are references to students, teachers, schools, educational administrations and even "malicious actors". But in very few cases are considered tech companies and other relevant actors who also intervene with their own agendas directly or indirectly. This means that the interests of certain stakeholders (such as UNESCO, the OECD, the World Bank or Big Tech) are reflected by action or omission in the frameworks and not others that are equally or more relevant from the point of view of a democratic digital era.

The omission of such actors leads, among other things, to: the neglect of relevant problems produced by imbalanced influence of private economic interests, for example in the design of educational agendas or in digitalisation and digital surveillance; the failure to comply with the requirements of informed consent regarding the use of digital technologies; and, finally, the promotion of a technological determinism in educational and curricular approaches that inverts the relationship between socio-economic actors and technology, with the latter being considered responsible for socio-economic dynamics and not the other way round.

Suggested courses of action:

3.1. Broaden the framework of education policies beyond public administrations and international bodies linked to corporate interests. When drawing up these policies, critically consider the intervention of Big Tech and other private actors. Take as a reference point the contributions of the educational community and the organised civil society that work for a democratic digitalisation, in addition to basic frameworks for the defence of rights such as the Convention on the Rights of the Child.

3.2. Design and implement education policies that critically consider corporate interests - with a special focus on Big Tech - and that guarantee school sovereignty (educational, data, content and funding) and human fundamental digital rights outside these interests.

WHAT

Point 4: A comprehensive conception of digital culture and digital literacy should be applied. Tools, code and digital society

Broadly speaking, in the frameworks analysed we can identify three complementary levels of understanding the digital:

a) A functional instrumental approach which understands digital as multifunctional technologies and which has been the initial approach promoted and most popularised among the educational community;

b) A notational instrumental approach which understands digital as programming language and computational thinking whose teaching/learning is so fundamental that it would be comparable to that of reading, writing or calculus and which is beginning to be increasingly introduced into the curriculum;

c) Finally, a cultural approach which understands the digital as a complex social and cultural reality and which implies, on the one hand, the acquisition of substantive knowledge about concepts, subjects and facts specific to the digital society and, on the other, the acquisition of critical and creative thinking strategies with regard to realities such as information management, datification, artificial intelligence or open knowledge.

In the documentation analysed as a whole, there is a positive progression from purely instrumental approaches towards a cultural approach and a more complex conception of the digital society and digital education.

Suggested courses of action:

4.1. Balancing digital learning so that one approach is not overemphasised over the other and, given the preponderance of the technological-instrumental in recent years, placing special emphasis on the other two digital approaches: work on computer literacy, and knowledge of digital society and culture.

4.2. In the functional instrumental approach, which promotes the practical use of digital technologies, digital rights and democratic digitalisation should be guaranteed, starting first and foremost with the use of basic and complementary digital infrastructures that ensure the sovereignty of data and content and the informed knowledge of pupils, teachers and families in the data processing involved.

4.3. In the notational instrumental approach that promotes computational thinking, consolidate its teaching/learning at compulsory stages. This incorporation should imply a complete curricular development, similar to the rest of the areas or subjects (objectives, contents, materials, methodology, evaluation...), the inclusion of new professional teaching profiles in schools (as happened with music or gymnastics) and an adequate provision of technological resources.

4.4. In the cultural approach, digital culture should acquire the same status as has been given to literature or history, and digital subjects should be consolidated that ensure the acquisition of comprehensive competences at compulsory stages. When dealing with digital culture: encouraging a constructive approach based on knowledge and enjoyment of digital culture and not just a critical approach based on protection and fear; encouraging a structural knowledge of digital social dynamics in order to be able to frame personal experiences and actions in global explanatory coordinates and to be able to critically identify all the agents, concepts and facts that intervene in digital society; encouraging a grounded knowledge of the actors in digital society, their approaches and interests; encouraging a substantive knowledge of digital society and not just a procedural one.

Point 5: A comprehensive conception of competences that explicitly includes substantive knowledge of first-order concepts about digital society and culture should be applied

Conceiving competences as operational skills that do not involve substantive knowledge but, above all, teaching/learning of action-oriented procedures (such as information management, communication, creation, protection and problem solving) is problematic because:

- a) It distorts the knowledge of the digital as a social, economic and cultural reality;
- b) It does not go into the fundamentals of the digital society in depth or addresses issues in a partial way, making the teaching/learning process incomplete, meaningless and in some cases contradictory (for example, in cybersecurity training content, protection measures are often taught directly without addressing in depth the structural and contextual causes that lead to taking these measures or the actors that provoke them);
- c) Finally, curricular revisions and updates of classic disciplinary subjects and those linked to digital technology are only carried out in methodological and instrumental terms, as if the digital perspective should not also be applied to the concepts, facts and subjects taught in each subject.

The reduction of competence learning to operational knowledge to the detriment of substantive knowledge is a far-reaching debate that goes beyond the digital sphere and, therefore, beyond the scope of this document. Suffice it to say that we position ourselves as advocates of substantive knowledge and its implementation at the curricular level with contents in line with contemporary challenges. In the documentation analysed, in fact, progress has been detected in this sense, and from the merely instrumental digital competences of DigComp and its curricular deployments, we have moved on to DigComp 2.2 digital competences that detail much more substantive knowledge - among others, about AI, algorithms and behavioural modification - and denote a more complex understanding of the reality of the digital society.

Suggested courses of action:

5.1. Administration should facilitate that the educational community has tools and training to review the substantive content (not procedural or attitudinal) from the digital perspective. This should be done over the different curricular areas/subjects in order to incorporate those topics, facts and subjects which, from these disciplines and in the contemporary context, should be the object of teaching/learning. For example, in non-strictly-digital areas/subjects (such as History and Geography, Biology and Geology, Physics and Chemistry, Mathematics, etc.), the curricular content should include the History of ICT (invention of the Internet, emergence of technological monopolies, etc.), the Geography of ICT (current geopolitics, global telecommunications, Big Tech, oligopolies and large operators), environmental challenges of

ICT (extraction of raw materials, global warming, server farms), etc; the use of digital resources and infrastructure to it should also respect human digital fundamental rights. On the other hand, digital areas/subjects (such as Technology and Digitalisation, Technology, Digitalisation, Robotics and Programming), should give greater weight to positive teaching/learning of digital ecosystems, should focus on the cycle of information/surveillance market, on the importance of technological and economic actors and, finally, should focus on knowledge of digital rights.

5.2. Promote and incorporate specific training for teachers and pupils to gain a critical understanding of all the agents involved in the digital society and culture, with an explicit treatment of the technological actors, including relevant systemic and structural problems, and related social challenges. This training must take place, appropriate to children's age and evolving capacity, to support children's competence and in accordance with parental rights and permissions as required by law for data management.

Point 6: Digital infrastructures in schools should be incorporated as a central part of education policies and strategies

Leaving aside the problems related to Internet access itself, when talking about the digital infrastructures of educational organisations, we can distinguish three main groups:

- a) Basic digital infrastructures, which consist of the integral technological packages of email, cloud space, Virtual Learning Environments (EVA or LMS), office tools, etc.;
- b) Administrative digital infrastructures, which are those developed specifically for the management of educational organizations;
- c) Instrumental classroom digital infrastructures that include digital programmes used in the day-to-day running of the classroom as dynamic, creative, evaluative or communication tools relating to blogging, students response systems, messaging, gamification, etc.

Although some frameworks address their importance, digital infrastructures are not generally considered to be central to the digital strategies of administrations and schools. There are various reasons for this: the starting point is a digital technology paradigm prior to the cloud and the massive deployment of software as a service; the real presence of digital infrastructures is blurred by justifying their constant and transversal use; the digital infrastructure of the school or educational institution is reduced to Virtual Learning Environments (VLE or LMS) in an exercise of substitution that creates confusion; and in the case of public administration and governments, the financing of digital infrastructures is missing from public budgetary planning.

However school digital infrastructures involve the digitalisation and processing of very critical data of the entire educational community. In the current moment of the digital society and in contrast to other periods, digital infrastructures have emerged as the foundation of the information market and of new types of power. Everything that surrounds them - their ownership, their development, the expert knowledge of their use, the use itself, their location, etc. - must therefore be the focus and starting point of any public policy, as the digital rights of the educational community and democratic digital education come into play.

Suggested courses of action:

6.1. The public administration should take responsibility for financing and providing democratic digital and administrative infrastructures: auditable in a distributed way, interoperable, efficient and usable to guarantee democratic digitalisation and digital and pedagogical sovereignty. It should not, therefore, omit this responsibility under the guise of figures such as school autonomy.

6.2. The public administration must ensure a rights' respecting environment in the educational setting with regards to the digital infrastructures that are instrumental to the classroom in terms of data sovereignty and the safeguarding of digital rights. The accountability required with respect to the collection, use, and storage of data and contents and the disclosure of student data, and the decisions made about the technologies (including apps) required for students' use should be proved, transparent and accessible.

6.3. The public administration and teachers must be made aware of the pedagogical importance of the digital infrastructures of schools - especially the most invisible, i.e. basic and administrative ones - as they act as a model to others, hidden curriculum and product placement of software.

6.4. Students, teachers and families must be made aware of the differences between auditable FLOSS and proprietary software and the digital cultures to which they are linked.

Point 7: Open knowledge should be pursued and promoted

While in many respects the documentation analysed shows progress towards a democratic digital education that respects digital rights, in terms of open culture (open access and cultural sovereignty) there is a clear step backwards in favour of excessive copyright industry interests. In fact, restrictive copyright is often overrepresented issue in the digital frameworks and programmes. Other forms of copyright, open knowledge and knowledge dissemination are underrepresented.

There is also a clear cognitive dissonance: on the one hand, the framework for recognising authorship outside the educational community is overstepped, while at the same time it is omitted that a large part of the educational material in daily use is generated by the teaching staff and the educational community itself, which should be able to see this authorship recognised and be able to use this material without restrictions.

Suggested courses of action:

7.1. The public administration should be involved in and should promote open education as a strategic educational policy.

7.2. Administration and teachers should promote the use of open educational resources and the use of free licences by default (public domain, creative commons BY-SA or others).

7.3. The educational sphere should be promoted as an open space for cultural consumption, avoiding restrictive and fanatical interpretations of the Law.

7.4. The recognition of the authorship of the educational community's (teachers and students) content should be respected and encouraged.

Conclusion

The failure to take a holistic and systemic approach to all aspects of digitalisation means that in general education policies and the concrete actions of schools are partial and even incoherent from the point of view of data sovereignty and democratic digital education. The fragmented and selective view is a strategy of some interest groups to override the structural understanding of the dynamics of the digital society. It needs to be banished through systemic analyses that ensure global understanding (including different data cultures in society) and pedagogical and democratic coherence across the board. This approach should be used when implementing the recommendations in this document.

[1] REFERENCE FRAMEWORKS

The institutional documentation analysed for the elaboration of the recommendations was the following (from the most recent to the oldest):

DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes (DigComp 2.2)

Date: March 2022. Issuer: European Commission. Scope: European. Link:

https://publications.jrc.ec.europa.eu/repository/bitstream/JRC128415/JRC128415_01.pdf.

The most recent version of the European reference framework for digital citizenship competences. It maintains the five competence areas structure of DigiComp 2.1 (2017), but gives much greater prominence to issues such as AI, algorithms and behavioural modification and, unlike DigiComp 2.1, in addition to grading the levels of achievement of digital competences, it details the substantive knowledge and procedural and attitudinal skills that citizens should acquire. This last point - especially the detailing of substantive knowledge - denotes an advance in the complexity of what digital education entails.

Esborranys de DECRET XXX, de XXX d'ordenació dels ensenyaments de l'educació bàsica (DOEEB)

Date: February 2022 (in the process of approval). Issuer: Departament d'Educació. Author: Direcció General de Currículum i Personalització, Subdirecció General d'Ordenació Curricular. Scope: regional. Link: <https://participa.gencat.cat/processes/decret-educacio-basica>

Draft decree on the teaching of basic education drawn up by the Department of Education on the basis of the conditions established by the state LOMLOE and the regional LEC. It therefore defines the curriculum policy of the Catalan government with regard to the education of primary and secondary school pupils. Although it is in the process of being designed and approved, or precisely because of this, its content is of particular value for gauging the strategic lines of the Generalitat de Catalunya in terms of digital education.

Formació Interna de Centre d'Estratègia Digital de Centre (FIC EDC)

Date: 2022. Issuer: Departament d'Educació (Generalitat de Catalunya). Scope: regional. Link: <https://odissea.xtec.cat/course/view.php?id=90397>

Contents of the internal and compulsory training for Catalan primary and secondary educational organisations established by the Catalan Digital Education Plan presented in September 2020. It therefore reflects the key knowledge that the Department of Education of the Generalitat de Catalunya considers that all teachers working in the Catalan education system should have. Once again, it is also based on the conditions established by other frameworks such as the LOMLOE and the MRCDD (see below), while placing special emphasis on some content considered strategic for the Department of Education.

Marco de referencia de la competencia digital docente (MRCDD)

Date: January 2022. Issuer: INTEF. Instituto Nacional de Tecnologías educativas y de Formación del Profesorado (Ministerio de Educación y Formación Profesional). Author: Grupo de Trabajo de Tecnologías del Aprendizaje (GTTA). Scope: state. Link: <https://intef.es/Noticias/actualizacion-del-marco-de-referencia-de-la-competencia-digital-docente/>

Framework that establishes the basic knowledge that teachers must have in order for their digital competence to be adjusted to European and national regulatory conditions and to contemporary educational challenges, especially intensified after the pandemic. It is the most recent binding document of state scope, which makes it particularly relevant with regard to the (new) strategic lines of digital education policy. In fact, it explicitly incorporates issues such as AI, algorithms and computational thinking, which appeared to a lesser extent in previous documents.

Estratègia Digital de Centre (EDC)

Date: March 2021. Issuer: Departament d'Educació (Generalitat de Catalunya). Author: Direcció General d'Innovació, Recerca i Cultura digital. Àrea de Cultura digital. Scope: regional. Link: <https://educacio.gencat.cat/web/.content/home/departament/publicacions/colleccions/pla-educacio-digital/estrategia-digital-centre/estrategia-digital-centre.pdf>

Basic contents of the digital strategy that Catalan schools must define in a compulsory manner in the coming academic years in accordance with the Catalan Digital Education Plan presented in September 2020. It establishes, therefore, how the digital education policy should be implemented in each school or high school in accordance with the guidelines imposed by the Department of Education, while at the same time acting as a mechanism to force each organisation to reflect on its strategy.

Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación (LOMLOE)

Date: december 2020. Issuer: Cortes Generales. Scope: estatal. Link: <https://www.boe.es/eli/es/lo/2020/12/29/3>.

Spanish Organic Law on Education. It is compulsory in all the autonomous regions of the Spanish state. It establishes certain margins of manoeuvre at the regional level. It is the law that follows the controversial LOMCE, popularly known as the Wert Law, which was passed in December 2013. The repeal of the LOMCE was demanded by many social agents since its approval, but in the end it has not been repealed but modified by this law.

Proposta de nous continguts competencials aprovada pel Consell Rector l'1 de desembre de 2020 (ACTIC2)

Date: December 2020. Issuer: Consell Rector de l'ACTIC. Scope: regional (pending official publication, has no normative value). Link:

https://actic.gencat.cat/web/.content/01_informacio/documents/arxiu/proposta_continguts21.pdf.

Proposal to update the competency contents of citizenship which, in the Catalan sphere, are subject to official ACTIC accreditation. This update of competency content is pending approval and its regulatory precedent, which is still in force, dates from April 2016 (see ACTIC1). The interest of this update lies in its adaptation to a common post-pandemic framework and in the fact that it allows us to analyse the strategic lines of updating the Catalan government's digital competences in the post-confinement context.

Pla d'Educació Digital de Catalunya 2020-2023 (PEDC)

Date: September 2020. Issuer: Departament d'Educació (Generalitat de Catalunya). Author: Direcció general d'Innovació, Recerca i Cultura Digital. Scope: regional. Link:

<https://educacio.gencat.cat/web/.content/home/departament/publicacions/colleccions/pla-educacio-digital/pla-educacio-digital-catalunya/pla-educacio-digital.pdf>

Digital education plan presented by the Department of Education of the Generalitat de Catalunya in September 2020, six months after the COVID-19 confinement. It is, therefore, a reactive plan arising from the shock of the pandemic and the educational dynamics it generated. It reflects the general strategic lines and the specific proposals for action of the Catalan government in terms of digital education, based on the key actors in digital education: students, teachers and schools.

Marco de Competencias Digitales para la Ciudadanía. Con ocho niveles de competencia y ejemplos de uso (DigiComp 2.1)

Date: 2017. Issuer: European Commission. Scope: European. Link:

<https://www.aupex.org/centrodocumentacion/pub/DigCompEs.pdf> (English:

<https://publications.jrc.ec.europa.eu/repository/handle/JRC106281>).

European reference framework on digital citizenship competences valid until April 2022. It included the structure in five competence areas originating from DigComp and basically focused on detailing the indicators of levels of achievement of digital competences.

Continguts de les competències ACTIC (Ordre de 2016). Vigents des del 15 d'abril de 2016 (ACTIC1)

Date: April 2016. Issuer: Generalitat de Catalunya. Scope: regional. Link:

https://actic.gencat.cat/web/.content/01_informacio/documents/arxius/Continguts-ACTIC-ordre-2016.pdf.

In Catalonia, the acquisition of competences in information and communication technologies is accredited through the ACTIC, a standard of "accreditation of competences in information and communication technologies". This accreditation is regulated, among other things, by this 2016 order which specifies the specific contents of the ICT competences to be acquired. These skills (and their corresponding accreditation) are aimed at citizens in general (including students and teachers) with a view to their digital training and the promotion of citizen training and retraining. In December 2020, the ACTIC Governing Board made a proposal to update the contents, which is pending approval (see ACTIC2).

Promoción de un Aprendizaje Eficaz en la Era Digital Un Marco Europeo para Organizaciones Educativas Digitalmente Competentes (DigCompOrg)

Date: 2015. Issuer: European Commission. Autor: Panagiotis Kampylis, Yves Punie, Jim Devine.

Scope: European. Link: <https://sede.educacion.gob.es/publiventa/promocion-de-un-aprendizaje-eficaz-en-la-era-digital-un-marco-europeo-para-organizaciones-educativas-digitalmente-competentes/ensenanza-recursos-digitales/21199>

Framework defining at European level the digital competences of educational organisations. Unlike the citizenship competences (DigComp 2.2, 2022) and teaching competences (MRCDD, 2022), this framework was developed before the pandemic and is still in force, making it particularly interesting with regard to some shortcomings and, above all, the inclusion of issues such as digital infrastructures or the promotion of open knowledge, which do not appear in other documents.

Llei 12/2009, del 10 de juliol, d'educació (LEC)

Date: July 2009. Issuer: Parlament de Catalunya. Scope: regional. Link:

<https://dogc.gencat.cat/ca/document-del-dogc/?documentId=480169>

Catalan autonomous law on education. It is mandatory in Catalonia. It was passed with the consensus of the political parties but without the consensus of the educational community, which questioned it from the beginning.

[2] DEFINITIONS

Democratic digitalisation: a digital transition based on human rights and cooperation, by design and by default.

Sovereign digitalisation: a digitalisation where even the smallest actor in the democratic architecture - that is, every citizen - can control in a disintermediated way the use and destination of the content created and the data generated.

Definitions based on Levi, S. et al. (2022) *Proposal for a Sovereign and Democratic Digitalisation of Europe*, Brussels: Publication Office of the European Union. Link:

<https://op.europa.eu/en/publication-detail/-/publication/dae77969-7812-11ec-9136-01aa75ed71a1>

Rapporteur: Cecilia Bayo on behalf of Xnet

This document was reviewed by a working group composed by: Xnet, Institute for democratic digitalisation; Cecilia Bayo; Arnau Monterde, Director of Democratic Innovation of the City Council of Barcelona; Andrea G. Rodríguez, Researcher in digital policy; Jen Persson, Director of Defend Digital Me; Nick Couldry, Professor of Media Communications and Social Theory at the London School of Economics and Political Science; Renata Ávila, director of Open Knowledge Foundation; Artur Serra, Deputy Director of the i2cat Foundation and Research Director of Citilab; Florencio Cabello, Professor of Communication Technology at the University of Malaga; Juliana Raffaghelli, Research group in Education and ICT at Open University of Catalonia; Fernando Posada, ICT Coordinator at CEIP Costa Teguisse-Lanzarote; Inga Klas, Member of Unsere Digitale Schule; Valerie Steeves, Professor of Criminology at the University of Ottawa and co-led of The eQuality Project; Francisco Vico, Professor of Artificial Intelligence at University of Malaga; Peter Raffery, Digital Teacher and Etherpad team; Arsgames, international non-profit organisation for the positive impact of video games; Geo Saura, expert in Education Policy at the University of Barcelona; Roberto Cuillo, Staff to the Vice-President of the European Parliament.

This document was created during the 1st International [Congress on Democratic Digital Education and Open Edtech](#) (July 2022) organised by Xnet with the support of the postgraduate course in Technopolitics and Rights in the Digital Age, the University of Barcelona, the Open Knowledge Foundation, Federated Associations of the Students' Families of Catalonia (aFFaC) and Union of Teachers (Ustec) and with the financial support of Barcelona City Council, the Cultural Initiative Support Office of the Generalitat de Catalunya and the Diputació de Barcelona. The Congress has been considered teachers's training by the Education Department of Catalonia.

Open EdTech tool related to the 1st International [Congress on Democratic Digital Education and Open Edtech](#): DD, agile, scalable and comprehensive infrastructure for everyday digital activity in education.

See more [here](#).

