

OPEN

GLAM

& EDUCATION

REPORT 2022

**➔ Teacher's and educator's
perspective on digital
culture resources**





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The study was conducted by Centrum Cyfrowe
in partnership with Europeana and EuroClio

**Centrum Cyfrowe Foundation**

We support users of digital technologies in
improving their skills and competencies related
to openness and cooperation. We collaborate
with institutions to make sure that they work in
an open manner in order to carry out their social
mission. We work towards adjusting regulations
and using legal tools to support the needs
and rights of users, as they participate in open
circulations of resources online. We diagnose
social and cultural changes taking place in our
society with the influence of digital technologies.
We introduce a perspective of civic responsibility
and caring about openness and the common
good to the public debate on technology.

Europeana

Europeana provides cultural heritage enthusiasts,
professionals, teachers, and researchers with
digital access to European cultural heritage
material. Why? To inspire and inform fresh
perspectives and open conversations about our
history and culture. To share and enjoy our rich
cultural heritage. To use it to create new things.

EuroClio

EuroClio supports the development of responsible
and innovative history, citizenship, and heritage
education by promoting critical thinking,
multiperspectivity, mutual respect, and the
inclusion of controversial issues.

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➔ INTRODUCTION

This report presents findings of the Open GLAM & education research project which attempts to understand the importance of online heritage-based tools, resources and digitised collections for formal and non-formal education in the EU countries. The research results served as a base for creating relevant recommendations on the development of heritage-based open educational resources and online collections for educational use.

By publishing this report and recommendations we would like to encourage discussion among a wide range of stakeholders including policymakers, open education and open culture communities as well as cultural heritage institutions on policies and programmes regarding the support for the development of open educational resources by cultural institutions.

According to the 2021 study *Remote education during the pandemic: Teacher's perspective*¹ 38% of teachers from EU countries (n=1682) use tools and materials created by cultural institutions during the period of remote education. Also some documents such as [European Commission recommendations on a common European data space for cultural heritage](#), [Policy Analysis of Value Chains for CHIs in the Digital Single Market](#) point out the benefits of cooperation between cultural heritage institutions and education sector as well as the advantages of use and reuse of heritage-based resources for educational purposes.

The study reveals that heritage-based educational tools & resources (part of which are open educational resources) provide **an important support for formal and non-formal education in the EU countries**. Therefore it is crucial to ensure and support the creation of tailored open digital tools & resources and online collections for educational purposes.

Cultural heritage institutions provide resources and serve as places where the public can enjoy access to the full diversity of cultures and knowledge². There is a wide consensus on the positive impact on our life and benefits flowing from arts and culture. For example, firstly, cultural engagement helps shape

1 Magdalena Biernat, Agnieszka Urbańska, Teresa Nobre, LL.M., dr Alek Tarkowski, dr Maja Bogataj LL.M., LL.M., *Remote education during the pandemic: Teachers' perspective*, 2021

2 [Towards Better Sharing of Cultural Heritage — An Agenda for Copyright Reform](#) A Creative Commons Policy Paper

reflective individuals; secondly, participation in arts and culture may produce engaged citizens; thirdly, cultural interventions help peace-building and healing after armed conflict; fourthly, participation in arts and culture can improve health and wellbeing. **In the educational sector, arts and culture can contribute positively to learning, and the development of cognitive abilities, confidence, motivation, problem-solving and communication skills³.**

This research report and recommendations aim at supporting the implementation of the:

- 2019 UNESCO Open Educational Resources (OER) Recommendation that calls on governments and institutions to create enabling Open Educational Resources and Open Education policies and to carry out relevant research.

The recommendations are also in line with the following documents:

- Creative Commons Policy Paper Towards Better Sharing of Cultural Heritage – An Agenda for Copyright Reform which provides recommendations about better open sharing of cultural heritage resources.
- European Commission recommendations of November 10, 2021 on a common European data space for cultural heritage which call on Member States to take all the necessary measures to support and raise awareness of Europeana among the general public and particularly in the education sector and schools, including through educational materials, and point out that Member States should support partnerships between the cultural heritage sector and other sectors, such as higher education and vocational education and training.
- Policy Analysis of Value Chains for CHIs in the Digital Single Market (InDices) which emphasises the role of promotion of digital cultural resources and their reuse among different sectors.
- Recommendations for a European Member States and Commission supported digital aggregation strategy (Europeana) which aim at ensuring that cultural material digitised with public funding is made available through national and international aggregating platforms.

Open GLAM & education is an exploratory research project consisting of qualitative and quantitative parts. The sample size for the quantitative part of the study is 227 teachers and non-formal educators that declare the usage of heritage-based tools & resources and online collections for conducting educational activities. Most of the surveyed teachers are part of Europeana, EuroClio, Creative Commons or UNESCO communities (we reached out to them via mailing groups and newsletters of the above organisations). The findings from the quantitative phase of the study were then further explored during 5 in-depth interviews with 5 teachers and non-formal educators. Taking into account the limited sample size, the exploratory character of the research and the importance of the topic for formal and non-formal education, this issue requires further exploration and research.

We encourage researchers and institutions to use the methodology and research tools for further research. You can download the questionnaire, charts and diagrams in the PNG format and spreadsheets with collected data. All materials are available under the Creative Commons Attribution-Share Alike 4.0 International licence. You are free to:

- share - copy and redistribute the material in any medium or format,
- and adapt - remix, transform, and build upon the material for any purpose, even commercially.

3 Understanding the value of arts & culture, The AHRC Cultural Value Project, Geoffrey Crossick & Patrycja Kaszynska

➔ PARTNERS' VOICES

Brigitte Vézina
Creative Commons

GLAMs are unique spaces that fulfil a crucial mission: ensure the public can access, experience, and interpret their collections in order to bring new perspectives and generate new meanings. Part of our goal at Creative Commons is to transform GLAMs, to move them from closed to open, to propel them forward towards better sharing of cultural heritage, i.e. sharing that is impactful, generative, equitable and resilient.

This eye-opening report sheds light on GLAMs' vast and varied contribution to education and demonstrates how better sharing is an essential ingredient for activating the fundamental right to education (Article 26 of the Universal Declaration of Human Rights). It shows some of the far-reaching positive impacts of open access to GLAM content: the possibility for researchers, scholars, teachers, educators, and learners globally to reuse content in novel and engaging ways; the opportunities to harness cutting-edge digital technologies; and the potential for GLAM collections to be included in high-quality learning materials, especially Open Educational Resources (OER) in a wide diversity of subjects.

This report will be of interest to GLAM practitioners, open education stakeholders, copyright experts and all those interested in cross-fertilization opportunities in the cultural and education sectors. Its recommendations will help shape policy at the European level and are bound to guide positive reform in the public interest on a global scale.

Isabel Crespo
Europeana

Digital education came to European classrooms before covid and is here to stay. Research like this one shows the importance of building capacity among educators and facilitating access to high-quality materials for more engaging and effective teaching. If an educator (regardless of the subject they teach) knows where to find the proper resources, they 1) will integrate them regularly in their practice, 2) will look at different platforms from all over the world enriching themselves and their students' perspectives, 3) will feel that their lessons are more creative and innovative, and 4) will become a curator and producer of their lessons (likely transferring the prosumer skill to students).

Thanks to the strong digital European policy agenda (e.g. Digital Education Action Plan) a significant number of teachers in Europe seem to be ready for a new learning paradigm. Are also cultural heritage institutions ready to supply their demand?

Cultural heritage institutions, as custodians of primary sources and endless amounts of knowledge, should capitalise on their assets for educational purposes in the digital environment. Digitisation of cultural heritage content was and still is key, but the design of sustainable learning products and services, co-created by and for educators and their students, with enriched accurate metadata and clear terms of use, should be the next horizon for the GLAM sector. The good news is that institutions like Europeana, EuroClio or Wikimedia, with their respective initiatives in education, are here to support and make this transition possible.

Alice Modena
EuroClio

In the four years and a half that I have spent at EuroClio, I have had the privilege to talk with history, citizenship, and heritage educators from all across Europe and beyond. Despite different local contexts, there are a few challenges that have always been mentioned as obstacles that hinder the development and delivery of high quality educational resources. One of these is the reduced access to high quality resources that are not only free, but also easy to use in the educational context. For us at EuroClio, this report represents a leap in the right direction: bringing together educators and actors in the cultural heritage sector, it makes a compelling case for capacity building, new open access tools and resources, and the prioritisation of support to cultural heritage institutions in bringing their materials closer to the classroom. Going a step forward, it provides practical input on how these recommendations can be achieved. We are looking forward to continuing the conversation on this topic, and to seeing the results sparked by this research.

CONCLUSIONS & RECOMMENDATIONS

Recommendation on the development of heritage-based open educational resources and online collections for educational use

Based on Open GLAM & education. Teacher's and educator's perspective on digital culture resources research.

Target groups of the recommendation

- Cultural heritage institutions
- Networks of cultural heritage institutions
- Policy makers at the EU, national and local levels involved in policy regarding cultural heritage institutions.



1. Ensure and support the creation of tailored digital tools & resources and online collections for educational purposes by cultural heritage institutions

OPERATIONALISATION OF RECOMMENDATION 1

- Creation of open and accessible tools & resources for education (formal and non-formal) should be at the heart of the operational processes of cultural heritage institutions active in the digital realm. They should be tailored to the needs of relevant communities and reflect on the role of cultural heritage institutions of putting in their actions societal and public purposes first.⁴
- EU, national, regional and community level strategies and financial programmes regarding digitisation of cultural heritage should explicitly support creation of tools & resources dedicated to educational (formal and non-formal) purposes and digital collections open for educational reuse.
- Cross-sectoral collaboration leading to creation of fit-for-purpose heritage-based open educational tools & resources should be ensured. The exchange of knowledge and best practices between different cultural heritage institutions and educational institutions, as well as technology developers should be encouraged and supported to maximise the quality and impact of the newly designed resources.

EVIDENCE

Heritage-based educational tools & resources (most of which are open educational resources) provide an important support for formal and non-formal education in the EU countries.

According to the 2021 study *Remote education during the pandemic: Teacher's perspective*⁵ 38% of teachers from EU countries (n=1682) use tools and materials created by cultural institutions such as galleries, libraries, archives and museums etc.

4 For more information on this approach, see: Drabczyk, M., Janus, A., Strycharz, J., Tarkowski, A., and Cetera, N. (2021) *Policy Analysis of Value Chains for CHIs in the Digital Single Market*.

5 Magdalena Biernat, Agnieszka Urbańska, Teresa Nobre, LL.M., dr Alek Tarkowski, dr Maja Bogataj LL.M., LL.M., *Remote education during the pandemic: Teachers' perspective*, 2021

The 2022 *Open GLAM & education. Teacher's and educator's perspective on digital culture resources* study reveals that heritage-based tools & resources are used by teachers and non-formal educators to teach a great variety of subjects:

- reading, writing and literature (35% of surveyed teachers & educators),
- history (35% of surveyed teachers & educators),
- arts education (25% of surveyed teachers & educators),
- foreign language (25% of surveyed teachers & educators),
- natural sciences (23% of surveyed teachers & educators),
- media education and digital literacy related classes (23% of surveyed teachers & educators),
- ICT (15% of surveyed teachers & educators),
- technology (13% of surveyed teachers & educators),
- mathematics (12% of surveyed teachers & educators).

Furthermore, 94% of surveyed teachers and non-formal educators agree that digital heritage-based tools & resources are important and help teachers and non-formal educators perform educational activities, and 84% of them say that each cultural heritage institution should develop such interactive materials and digital resources.

70% of the surveyed group declare that they use heritage-based tools & resources because they help them prepare engaging and creative lessons and to complement the existing textbooks with inspiring sources. During the in-depth interviews teachers and non-formal educators pointed out that heritage-based tools & resources enable them to teach, for instance, about shared European cultural heritage, to provide context or to introduce a theme crucial for good understanding of the subject, to teach about the history of the subject (methods, materials, tools used throughout the time) or famous contributors.

There are still many teachers who are not aware of the existence of heritage-based tools & resources. But if they do know them, they use them frequently. 72% of surveyed teachers and non-formal educators use heritage-based tools & resources at least several times a month.

2. Make heritage-based tools & resources for education open and accessible

OPERATIONALISATION OF RECOMMENDATION 2

- Copyright law should not constitute a barrier for teachers and non-formal educators preventing them from the access, use, reuse, adaptation, public performance and dissemination of heritage-based tools & resources for any educational purpose⁶
- Heritage-based tools & resources for education should be free and available under open licences or as public domain with clearly labelled, easy to find and user-friendly rights statements and terms of use. The above-listed provisions should be easy to understand and to implement by teachers, non-formal educators, students and pupils.
- An awareness-raising strategy facilitating promotion and communication about the availability of existing heritage-based tools & resources for educational purposes should be orchestrated among various educational institutions at local, national and international levels.
- Actions aimed at making heritage-based tools & resources less dispersed, easier to find and search should be prioritised. It is also essential to ensure that cultural material digitised with public funding is made available through national and international aggregating platforms (such as Europeana⁷).
- Heritage-based tools & resources for education should be accessible to people with disabilities, thus it is necessary to follow accessibility guidelines while creating them.
- Heritage-based tools & resources for education need to be made available transnationally, thus, to ensure international access to digitised cultural heritage creation of multilingual resources should be strengthened.

6 For more detailed recommendations about better sharing of cultural heritage resources see: [Creative Commons Policy Paper: Towards Better Sharing of Cultural Heritage — An Agenda for Copyright Reform](#)

7 For more detailed recommendations about digital aggregation strategy see: [Europeana Recommendations for a European Member States and Commission supported digital aggregation strategy](#)

EVIDENCE

The 2022 *Open GLAM & education. Teacher's and educator's perspective on digital culture resources* study reveals crucial barriers regarding access to educational resources.

There is a significant lack of copyright knowledge. Only 53% of teachers and non-formal educators claim they usually know the legal status of educational heritage-based tools & resources they use (16% do not know and 26% claim that it is hard to say).

Furthermore, 42% of teachers and non-formal educators declare that the unclear copyright status had in the past prevented them from using interactive materials, digital resources and online collections for educational purposes.

Huge dispersion and difficulty with searching and finding heritage-based tools & resources and online collections are the major barrier for teachers and non-formal educators (40% of the respondents believe "they are hard to find", 32% claim "they are not gathered in one place, platform, catalogue", and 32% state "they are not well promoted").

On the other hand, more than half (52%) of teachers and educators claim that the most important advantage of heritage-based tools & resources is that they are free of charge and easy to access.

The use of foreign sources is very common. 70% of surveyed teachers and non-formal educators use heritage-based tools & resources from EU countries other than their country of origin and 42% from countries outside of the EU.

The collected data confirms the huge dispersion of heritage-based tools & resources and online collections. Teachers and non-formal educators, when asked for links to their favourite heritage-based tools & resources or online collections, provided 21 links to Europeana resources, 9 to Historiana, 6 to Wikimedia, 5 to Polona, 5 to Google Arts and Culture and 70 links to other sources.

3. Prioritise the creation of engaging, inspiring and cutting-edge heritage-based tools & resources for education and provide training for employees of cultural heritage institutions

OPERATIONALISATION OF RECOMMENDATION 3

- Evidence-based standards and guidelines for the creation of heritage-based tools & resources for educational purposes should be developed in order to ensure high quality of newly created materials.
- The creation of engaging, inspiring, cutting-edge heritage-based tools & resources for education requires knowledge of the latest technological trends, digitisation standards, accessibility guidelines and other. Thus, it should be accompanied by relevant training and programmes for the employees of cultural heritage institutions.
- The process of creation of heritage-based tools & resources for education should put the end-users' needs first. Actors from different sectors should be involved early in the process of creating and relevant research about end-users needs to be carried out.
- Heritage-based tools & resources for education should encourage reuse of the materials and enable teachers and non-formal educators to create their own educational materials which meet end-users' specific needs. Heritage-based tools & resources should be engaging, inspiring and enable teachers and non-formal educators to prepare innovative and activity-based lessons.
- Cross-sectoral, creative cooperation between cultural heritage institutions, educational institutions, technology developers and other actors should be encouraged in order to enable the creation of innovative solutions regarding the creation of heritage-based tools & resources.

EVIDENCE

The 2022 *Open GLAM & education. Teacher's and educator's perspective on digital culture resources* study reveals that high quality of heritage-based tools & resources should be of highest priority.

Among the most important reasons for using heritage-based tools & resources teachers and non-formal educators mention that they help them prepare more engaging and creative lessons (70% of surveyed teachers & educators),

they represent modern approach to education (55%), they inspire teachers and non-formal educators to create their own materials (54%), they are innovative (52%), they are of high quality (48%).

The types of tools & resources most frequently used by teachers and non-educators require specific technical competence when it comes to their creation. This includes videos (57%), online quizzes (34%), online games (31%), virtual trips/tours (30%).

Heritage-based tools & resources and online collections provide a basis for the creation of teachers' and non-formal educators' own resources. 70% of surveyed teachers and non-formal educators claim that they create their own educational materials in order to meet the specific needs of their pupils. Flexibility, reusability and the adaptability of educational resources to different audience needs were listed by teachers during the in-depth interviews as key advantages.

4. Facilitate capacity building for teachers & educators to turn them into competent users and creators of heritage-based educational resources

OPERATIONALISATION OF RECOMMENDATION 4

- Relevant training for teachers and non-formal educators should be provided in order to enable them to fully understand and benefit from the great potential of heritage-based tools & resources for conducting educational activities.
- It is crucial to provide teachers and non-formal educators with the competencies and knowledge needed for the effective searching strategies of heritage-based tools & resources and the knowledge about national and international aggregating platforms (such as Europeana).
- Apart from the actions aimed at making the heritage-based tools & resources free and available under open licences or as public domain with clearly labelled, easy to find and user-friendly rights statements, copyright training should be provided for teachers and non-formal educators. Such training is crucial for encouraging them to use heritage-based tools & resources broadly.

EVIDENCE

The 2022 *Open GLAM & education. Teacher's and educator's perspective on digital culture resources* study reveals that providing training about the benefits and potential, existing repositories and copyright is essential for encouraging teachers and non-formal educators to use heritage-based tools & resources and online collections.

Only 53% of teachers and non-formal educators claim they usually know the legal status of educational heritage-based tools & resources they use (16% do not know and 26 % claim that it is hard to say).

Furthermore, 42% of teachers and non-formal educators declare that the unclear copyright status had in the past prevented them from using interactive materials, digital resources and online collections for educational purposes.

Huge dispersion as well as difficulty with searching and finding heritage-based tools & resources and online collections are the major barriers for teachers and non-formal educators (40% of respondents claim "they are hard to find", 32% state "they are not gathered in one place, platform, catalogue").

In-depth interviews further prove that training for teachers is essential: "there are plenty of heritage-based tools & resources, but limited training opportunities. Yet teachers love to discover digital culture resources."



KEY FIND- INGS

Please note that the sample size is 227 and consists only of teachers and non-formal educators that declare the usage of heritage-based tools & resources and online collections for conducting the educational activities. We reached out to the teachers and non-formal educators via Europeana, Euroclio, Creative Commons and Unesco mailing lists and newsletters.





THE WAY TEACHERS AND NON-FORMAL EDUCATORS USE HERITAGE-BASED TOOLS & RESOURCES AND ONLINE COLLECTIONS PUBLISHED BY CULTURAL HERITAGE INSTITUTIONS

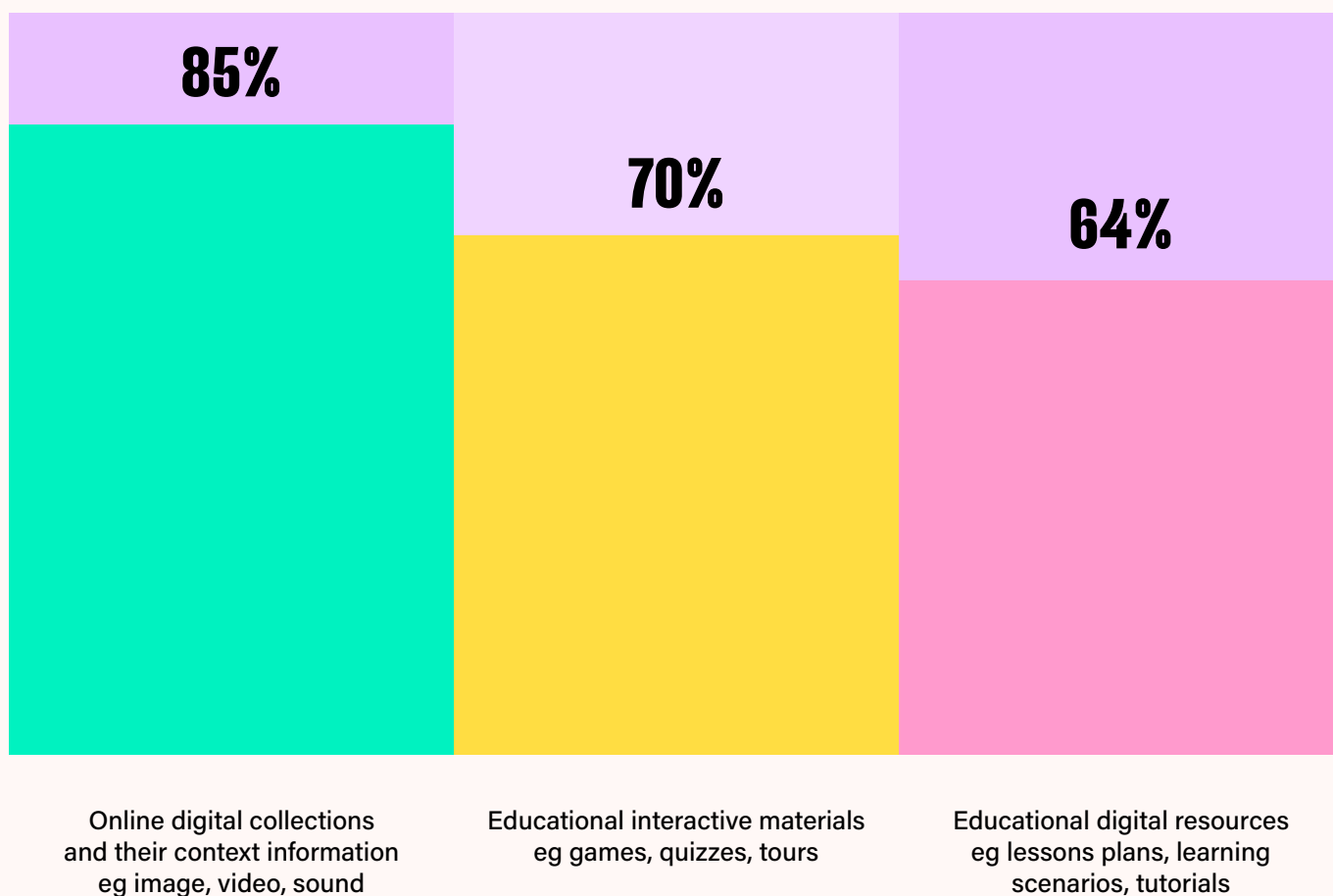
Types of digital culture resources used by teachers and non-formal educators

Key findings:

Online digital collections and their context information are the most frequently used resources published by cultural heritage institutions - 85% of surveyed teachers and non-formal educators use them while conducting educational activities. 70% of respondents confirm the use of educational interactive web-based materials (games, quizzes, virtual tours), while 64% admit that they use educational digital resources (lesson plans, learning scenarios, tutorials).

QUESTION:

What kind of resources provided by any type of GLAM institutions (galleries, libraries, archives, museums) do you use while conducting educational activities?



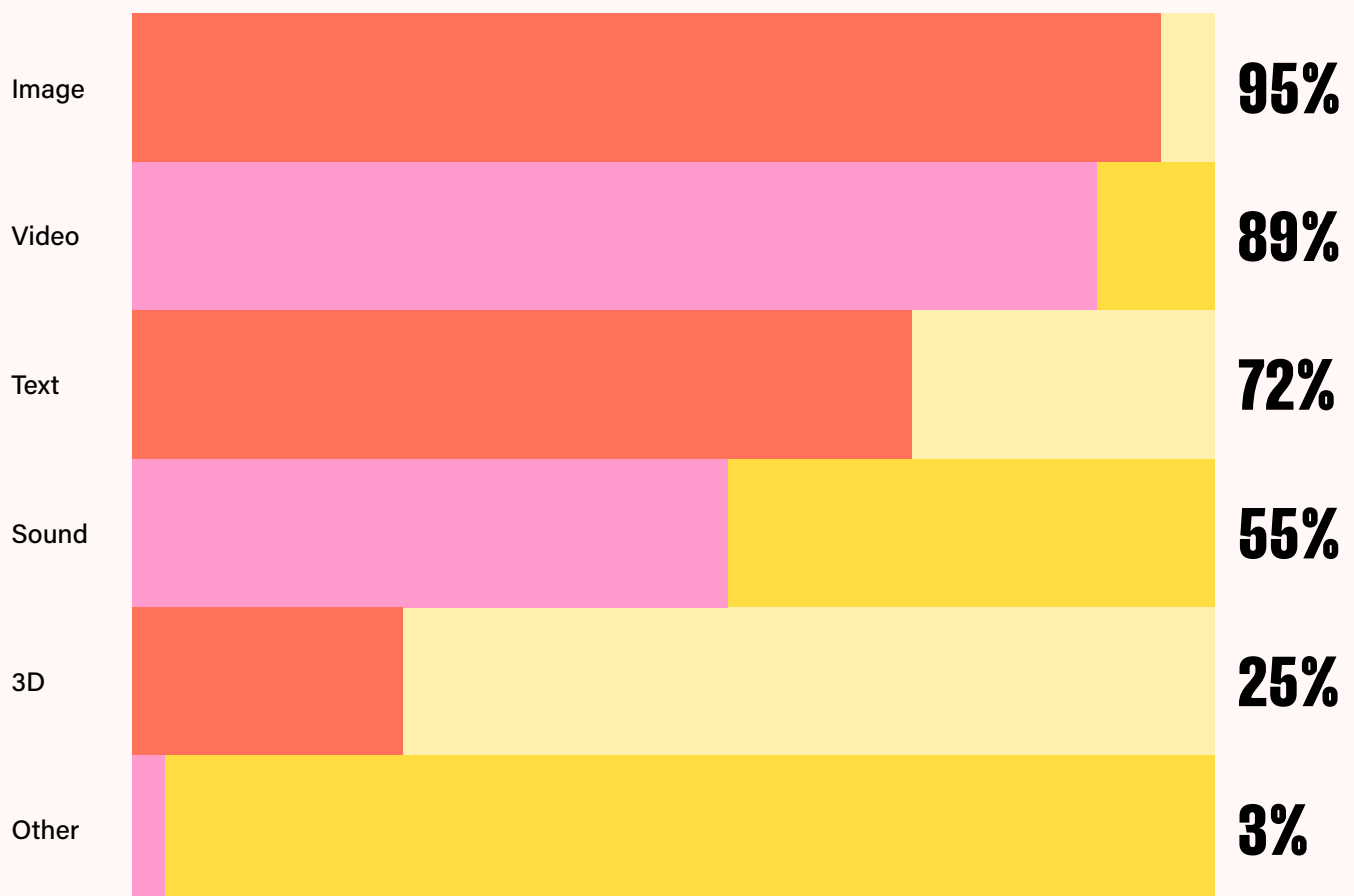
Types of objects from online collections of cultural heritage institutions used most frequently for educational purposes

Key findings:

Among objects from digital collections published by cultural heritage institutions - image (95%), video (89%), and text (72%) are most frequently used by teachers and non-formal educators. Sound (55%) and 3D (25%) are considerably less popular.

QUESTION:

What kind of media from online collections provided by GLAM institutions (galleries, libraries, archives, museums) do you use for educational purposes? N = 192



Types of heritage-based tools & resources used most frequently for educational purposes by teachers and non-formal educators



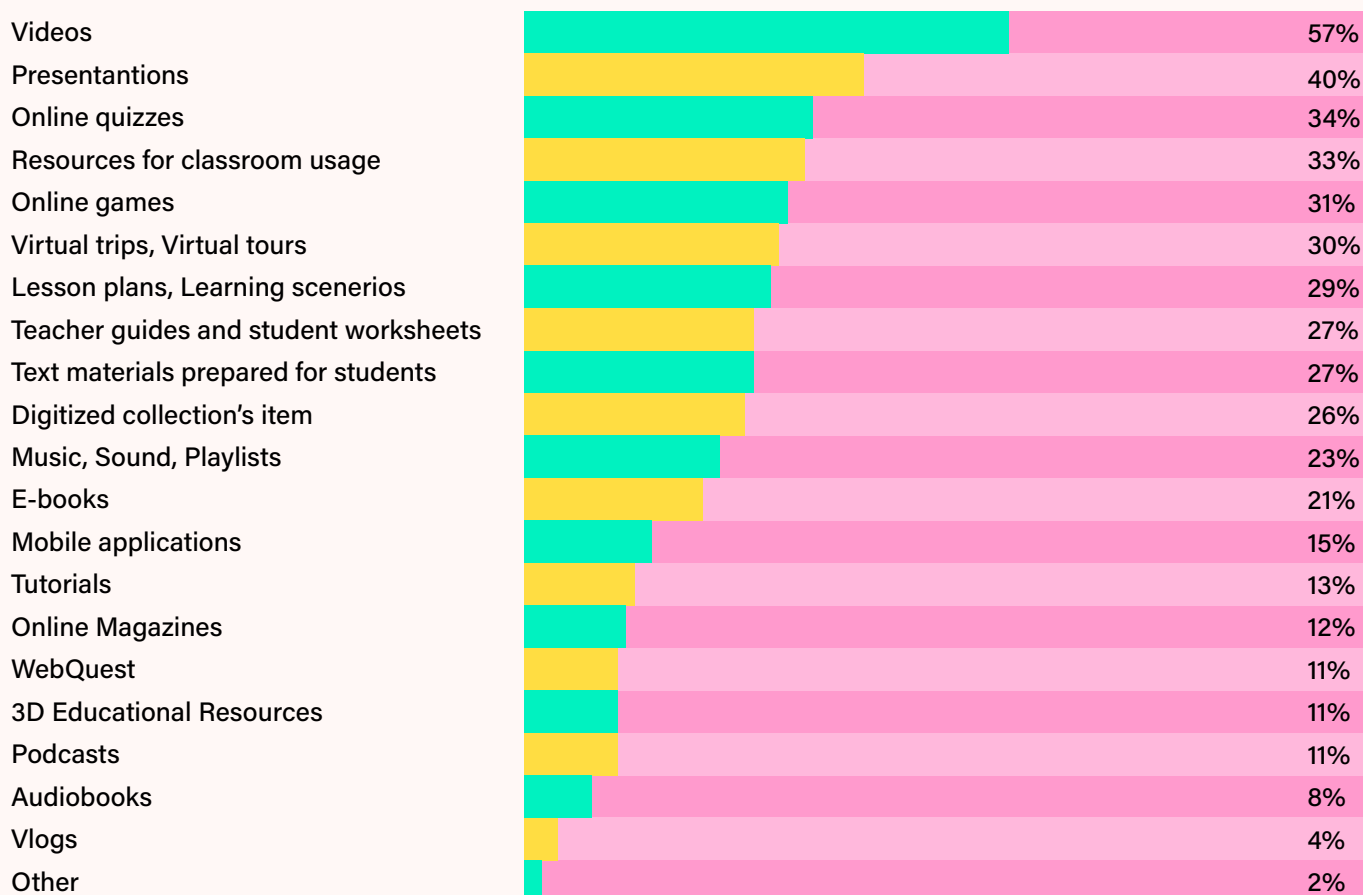
Key findings:

Most of the types of tools & resources most frequently used by teachers and non-educators require specific technical competences when it comes to their creation. This includes videos (57%), online quizzes (34%), online games (31%), virtual trips/tours (30%).



QUESTION:

Now please indicate interactive materials and digital resources provided by GLAM institutions (galleries, libraries, archives, museums) that you use MOST FREQUENTLY for educational purposes. Please choose all that apply. N = 227



Subjects in which teachers and non-formal educators use heritage-based tools & resources



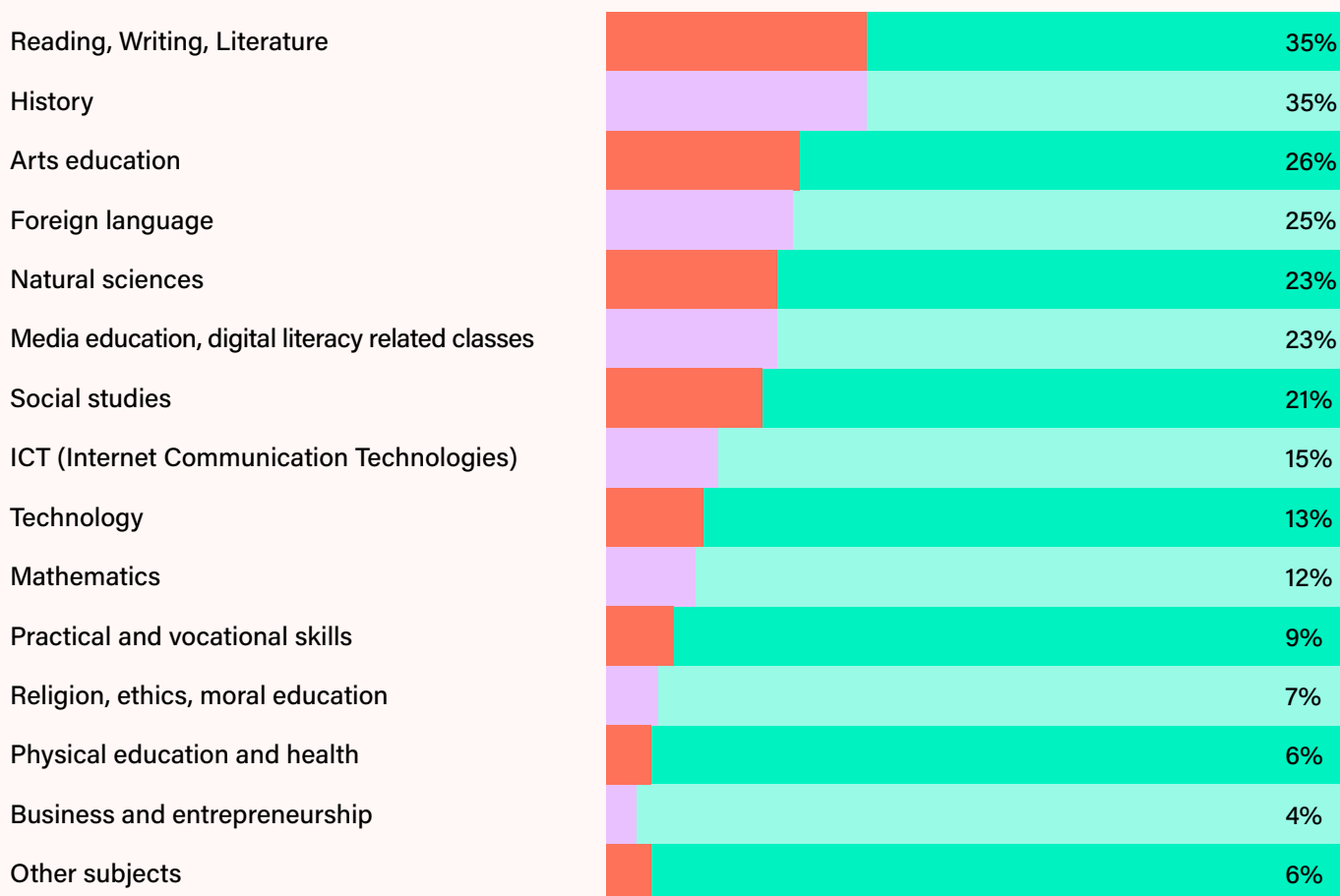
Key findings:

The collected data reveals that heritage-based tools & resources are used by teachers and non-formal educators to teach a great variety of subjects.



QUESTION:

In which subjects or fields do you use interactive materials and digital resources provided by GLAM institutions (galleries, libraries, archives, museums)? Please choose all that apply. N = 227



Frequency of use of heritage-based tools & resources by teachers and non-formal educators

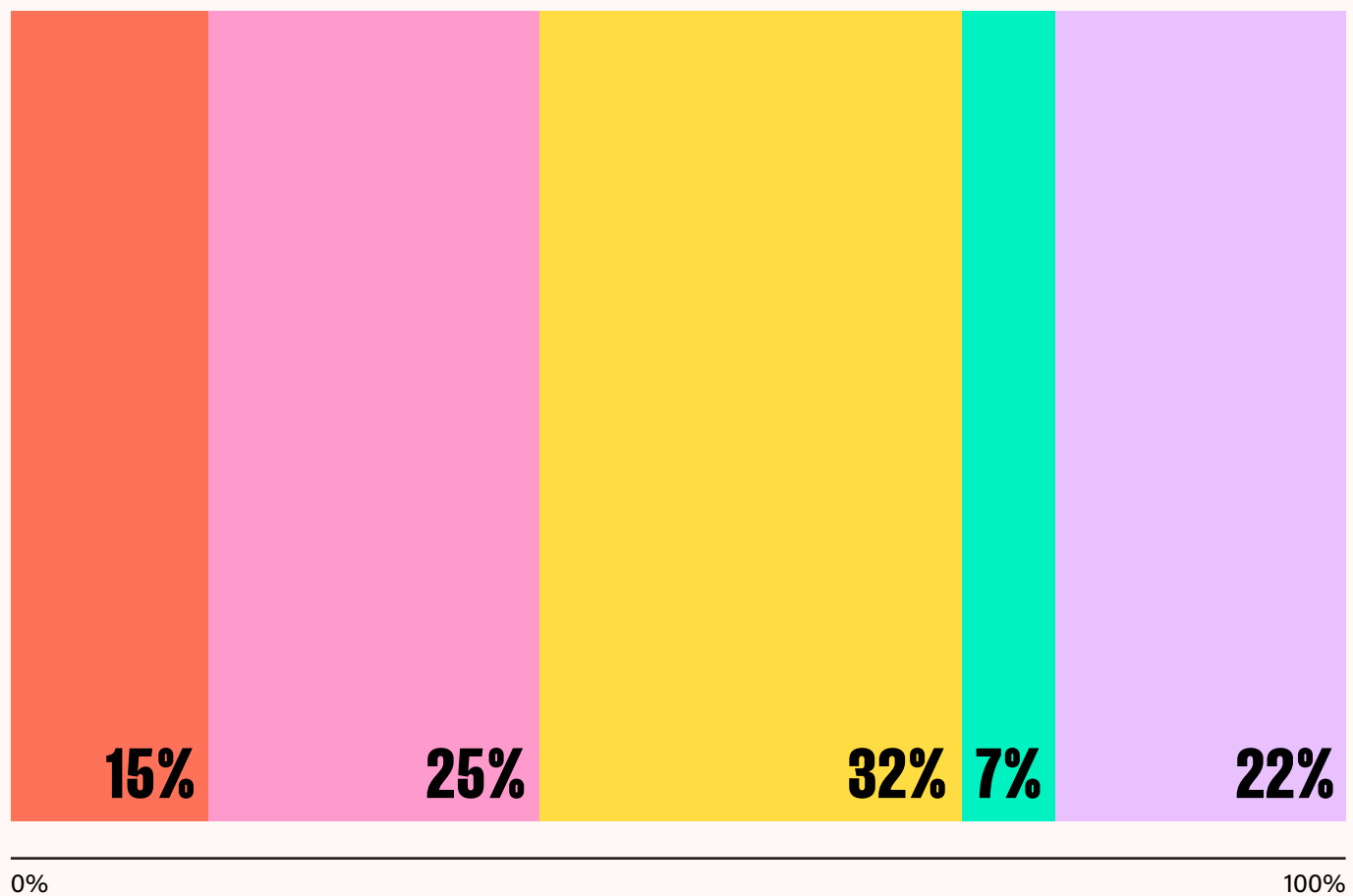
Key findings:

Teachers who are aware of the existence of heritage-based tools & resources use them frequently. 72% of surveyed teachers and non-formal educators use heritage-based tools & resources at least several times a month.

- Everyday
- A few times a week
- Several times a week
- Once a month
- Ad hoc

QUESTION:

HOW OFTEN do you use interactive materials and digital resources provided by GLAM institutions (galleries, libraries, archives, museums) for educational purposes? N = 227



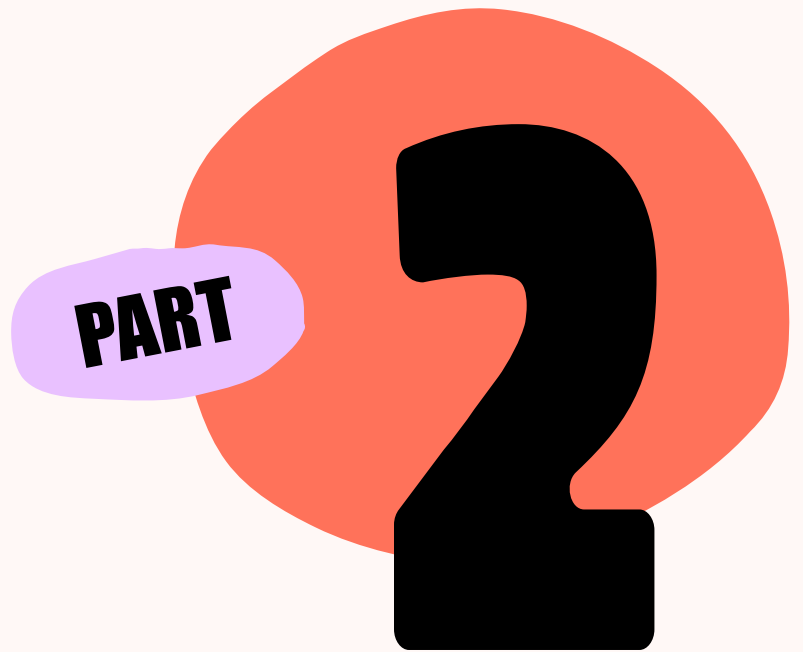
Types of heritage-based tools & resources used at least once versus used most frequently by teachers and non-formal educator



QUESTION:

Now please indicate interactive materials and digital resources provided by GLAM institutions (galleries, libraries, archives, museums) that you use MOST FREQUENTLY/AT LEAST ONCE for educational purposes? Please choose all that apply. N = 227

	TRIED	USED FREQUENTLY	SHARE
Videos	71%	57%	80%
Online games	41%	31%	76%
Resources for classroom use	44%	33%	75%
WebQuests	15%	11%	73%
Presentations	56%	40%	71%
Digitized collections item	37%	26%	70%
Lesson plans, learning scenarios	42%	29%	69%
Text materials prepared for students	40%	27%	68%
Online quizzes	51%	34%	67%
Music, Sound, Playlists	35%	23%	66%
Teacher guide and student worksheets	42%	27%	64%
Virtual trips, Virtual tours	50%	30%	60%
3D Educational Resources	19%	11%	58%
Audiobooks	14%	8%	57%
E-books	37%	21%	57%
Tutorials	24%	13%	54%
Podcasts	21%	11%	52%
Vlogs	8%	4%	50%
Online Magazines	26%	12%	46%
Mobile applications	37%	15%	41%



MAIN BENEFITS AND MOTIVATION FOR USING HERITAGE-BASED TOOLS & RESOURCES AND ONLINE COLLECTIONS BY TEACHERS AND NON-FORMAL EDUCATORS

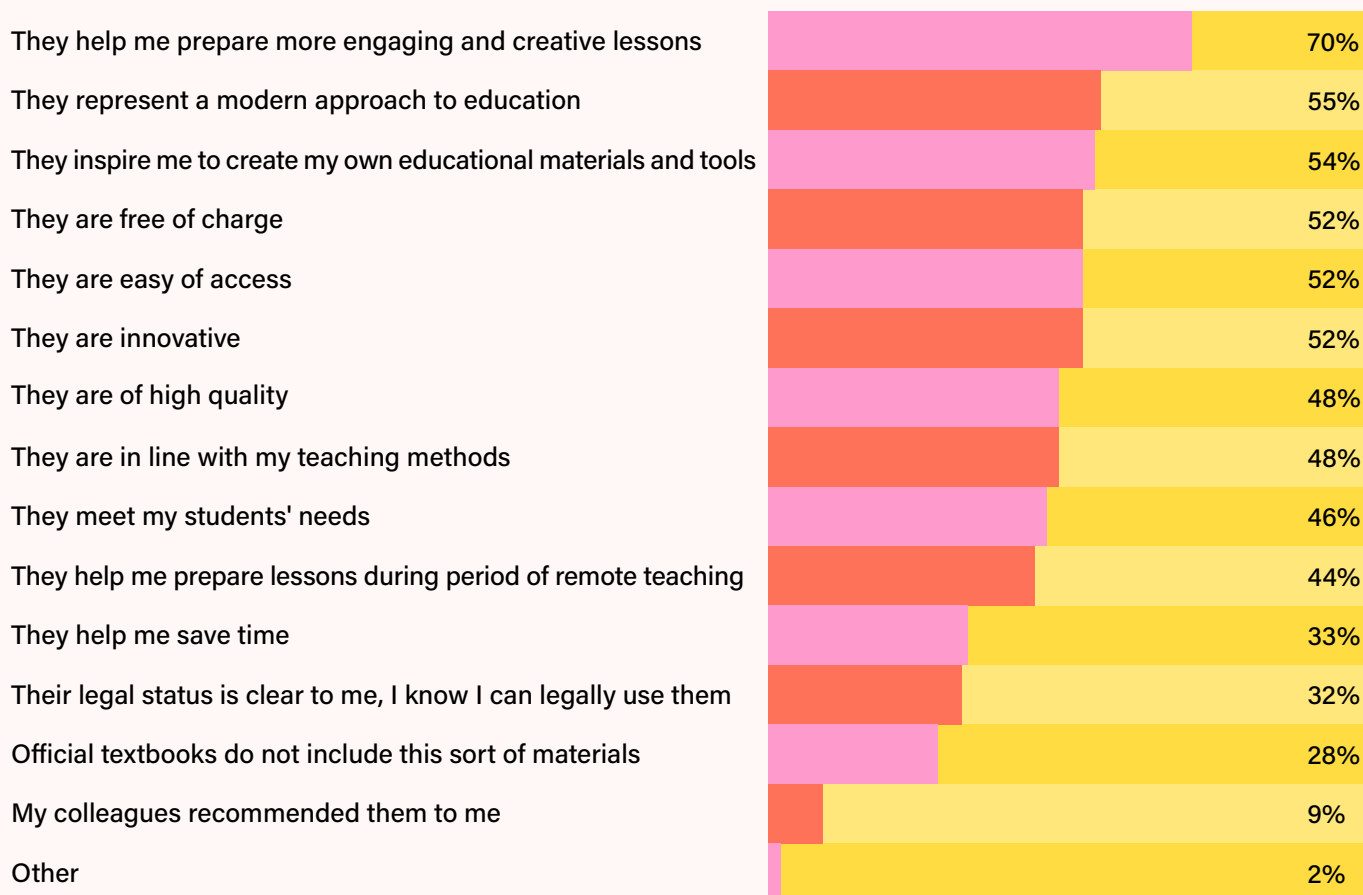
Benefits and advantages of the usage of heritage-based tools & resources stated by teachers and non-formal educators

Key findings:

The surveyed teachers and non-formal educators point out many advantages of heritage-based tools & resources. 70% of them declare that they use heritage-based tools & resources because they help them prepare engaging and creative lessons, 55% claim that they are modern, 52% that they are innovative, and 54% admit that they inspire them to create their own resources.

QUESTION:

Why do you use educational tools or educational resources online collections provided by GLAM institutions (galleries, libraries, archives, museums)? Please choose all sentences that are true for you. N = 227



Teachers' and non-formal educators' perception of heritage-based tools & resource

Key findings:

According to the teachers and non-formal educators, the more heritage-based tools & resources and online collections are available for educational purposes the better. 94% of surveyed teachers and non-formal educators agree that digital heritage-based tools & resources are important and help teachers and non-formal educators perform educational activities, and 84% of them claim that each cultural heritage institution should develop such interactive materials and digital resources.

QUESTION:

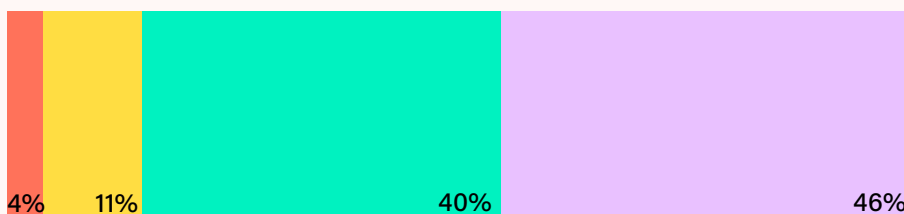
Please indicate to what extent you agree with the following sentences:

N = 227

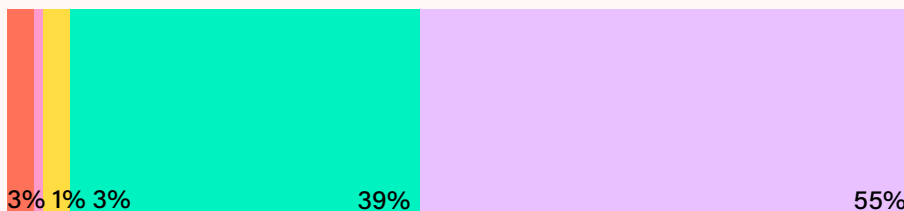
Interactive materials, digital resources and online collections provided by GLAM institutions (galleries, libraries, archives and museums) help me in implementing the curriculum or educational programmes



Each cultural institution should develop interactive materials, digital resources for teachers and non-formal educators



Interactive materials, digital resources and online collections provided by GLAM institutions (galleries, libraries, archives and museums) are important and helpful tools for teachers and non-formal educators



● Strongly disagree ● Disagree ● Neutral ● Agree ● Strongly agree

Reuse of of heritage-based tools & resources and online collections



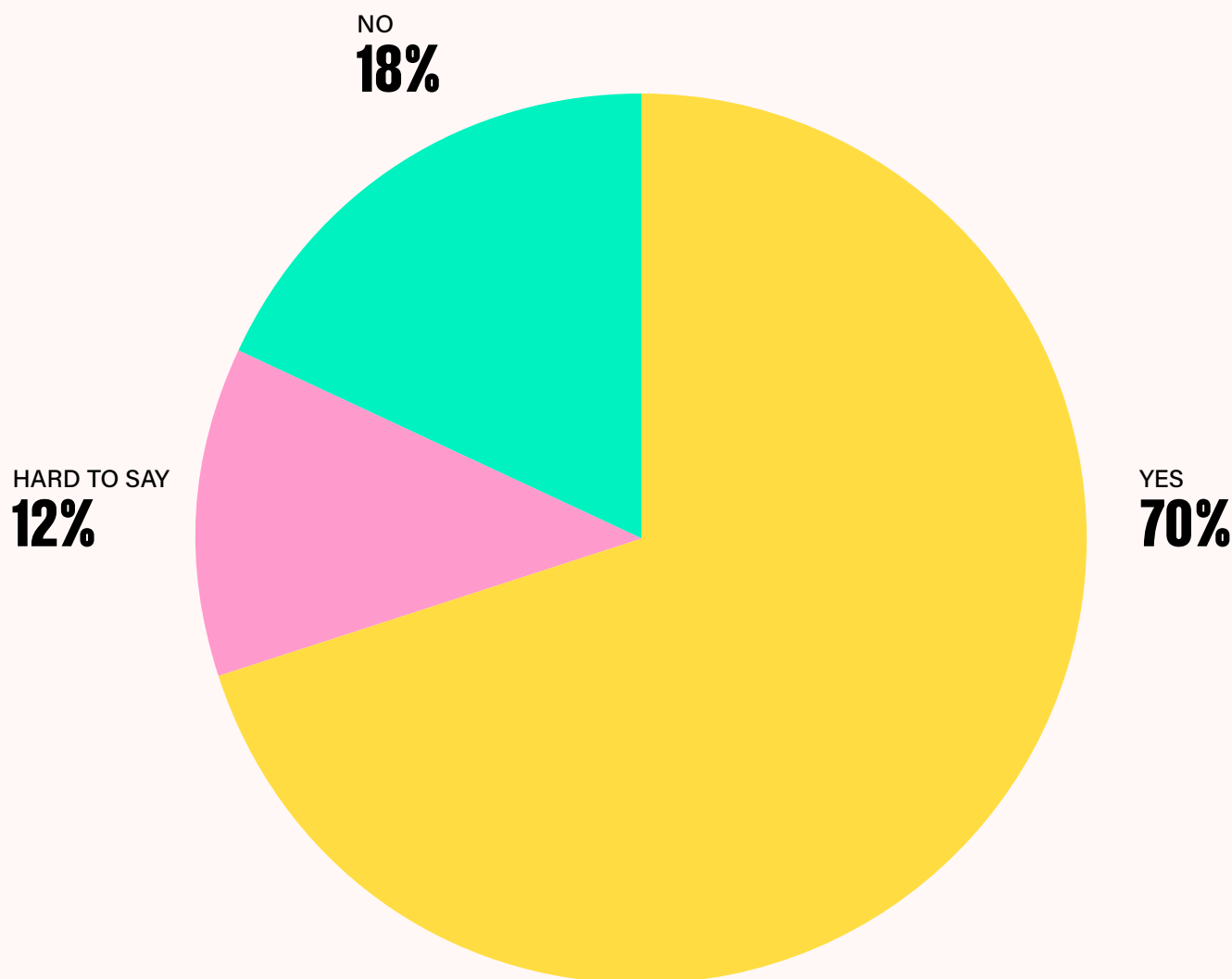
Key findings:

Heritage-based tools & resources and online collections provide a basis for creation of teachers' and non-formal educators' own resources. 70% of surveyed teachers and non-formal educators claim that they create their own educational materials in order to meet the specific needs of their pupils. Flexibility, reusability and the adaptability of the educational resources to different audience needs, were listed by teachers during the in-depth interviews as key advantages.



QUESTION:

Have you ever created your own educational resources based on interactive materials, digital resources or online collections provided by GLAM institutions (galleries, libraries, archives, museums)?
N = 227



PART

3

MAIN BARRIERS TO THE USE OF HERITAGE-BASED TOOLS & RESOURCES AND ONLINE COLLECTIONS BY TEACHERS AND NON-FORMAL EDUCATORS

The most frequently mentioned disadvantages and barriers to the use of heritage-based tools & resources and online collections

Key findings:

Huge dispersion and difficulty with searching and finding heritage-based tools & resources and online collections are the major barriers for teachers and non-formal educators (40% of respondents claim "they are hard to find", 32% state "they are not gathered in one place, platform, catalogue", and 32% believe "they are not well promoted").

QUESTION:

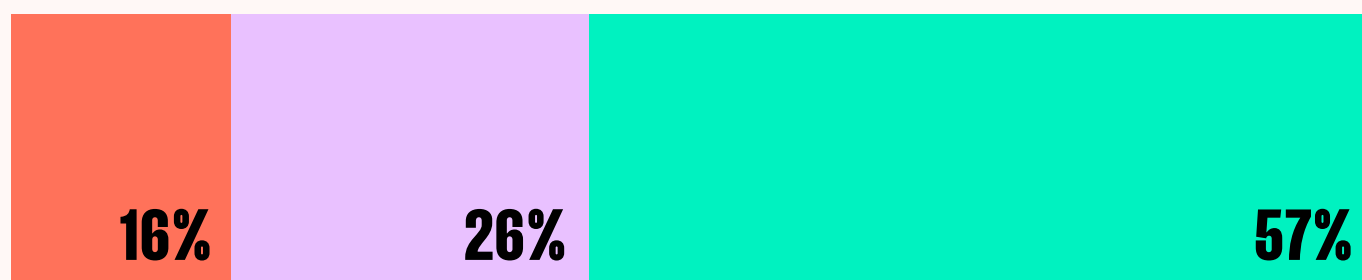
What, according to you are the main disadvantages of interactive materials, digital resources and online collections provided by GLAM institutions (galleries, libraries, archives, museums) that may stop others from using them? N = 227



Perception of legal status of heritage-based tools & resources and online collections and copyright knowledge of the teachers and non-formal educators

Key findings:

There is a significant lack of copyright knowledge. Only 53% of teachers and non-formal educators claim they usually know the legal status of educational heritage-based tools & resources they use (16% do not know and 26% claim that it is hard to say). Furthermore, 42% of teachers and non-formal educators declare that unclear copyright status had in the past prevented them from using interactive materials, digital resources and online collections for educational purposes.

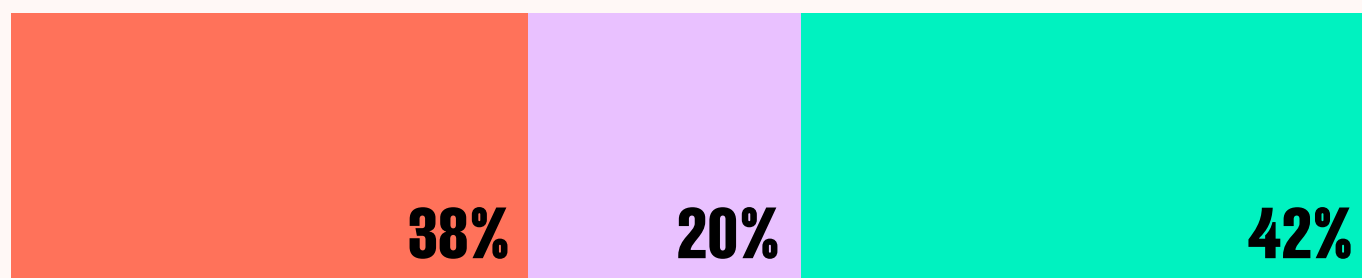


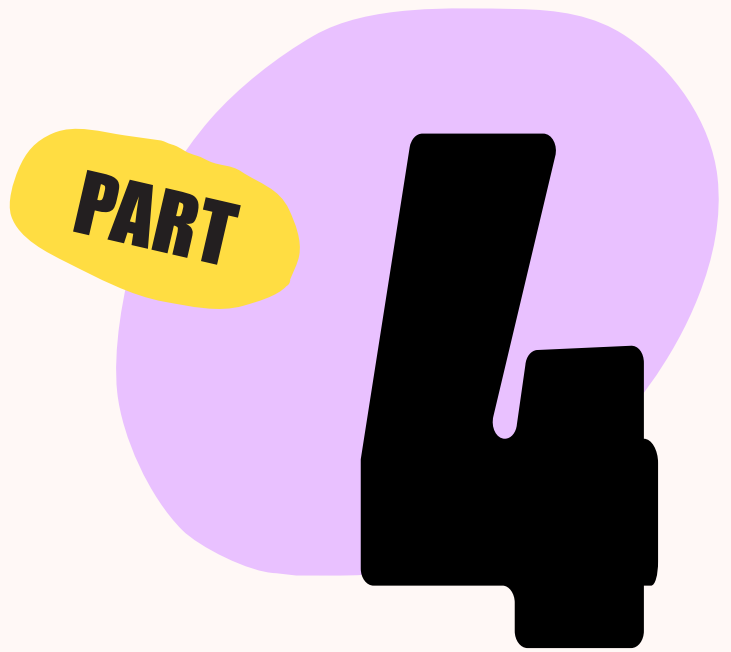
QUESTION:

Do you usually know the legal status of copyright interactive materials, digital resources and online collections provided by GLAM institutions (galleries, libraries, archives, museums), that you use? N = 227

QUESTION:

Has ever unclear status of copyright prevented you from using interactive materials, digital resources and online collections provided by GLAM institutions (galleries, libraries, archives, museums) for educational purposes? N = 227





THE WAY TEACHERS AND NON-FORMAL EDUCATORS SEARCH FOR HERITAGE- -BASED TOOLS & RESOURCES AND ONLINE COLLECTIONS OF CULTURAL HERITAGE INSTITUTIONS

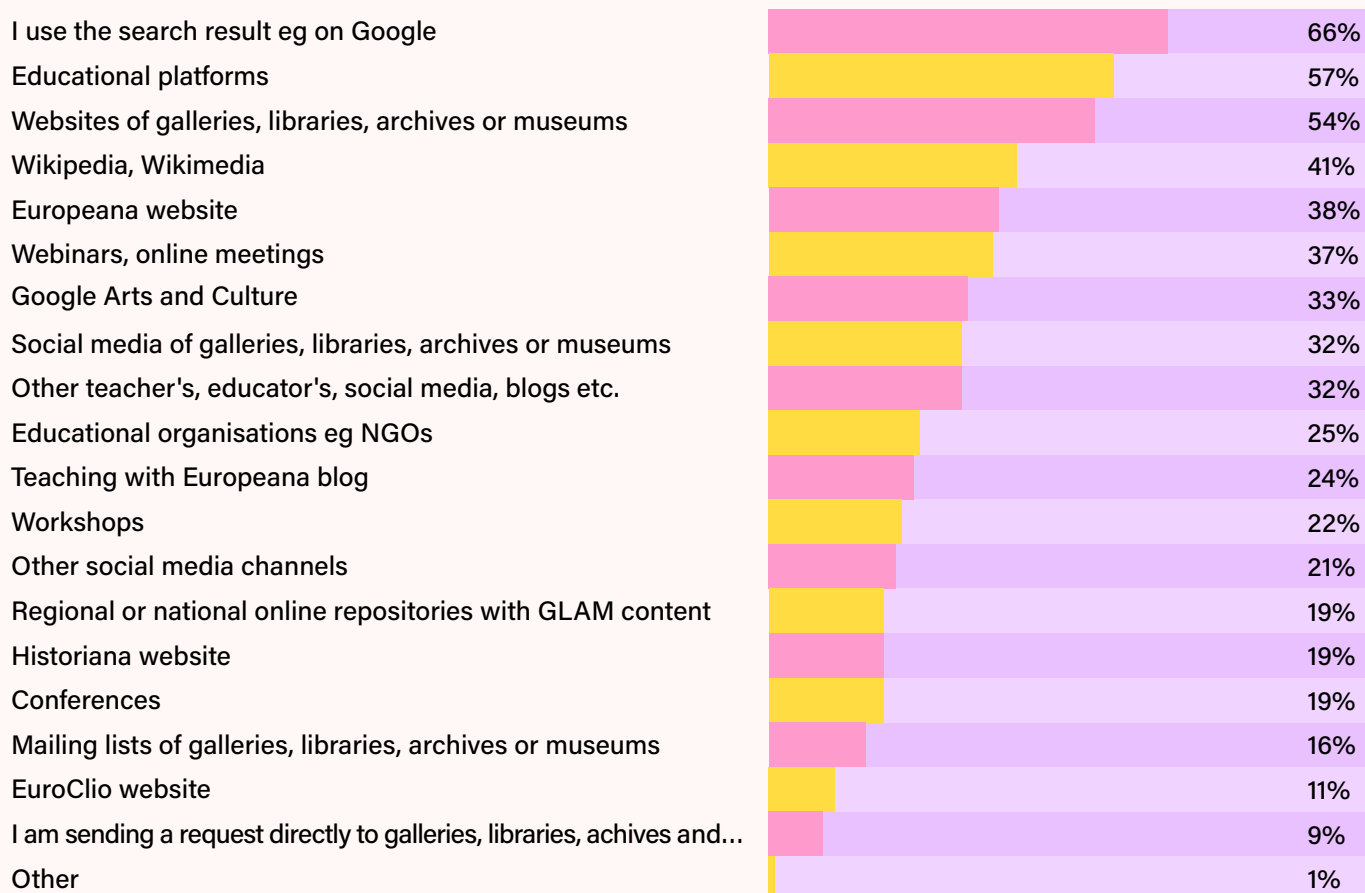
Searching strategies used by teachers and non-formal educators to find heritage-based tools & resources and online collections

Key findings:

Heritage-based tools & resources and online collections are, according to the respondents, highly dispersed. Therefore, they use different searching strategies, with the most popular being: search engines (66%), different educational platforms (57%), websites of cultural heritage institutions (54%), Wikipedia/Wikimedia (41%) and Europeana (38%).

QUESTION:

What platforms, websites, sources do you use most often when YOU SEARCH FOR interactive materials and digital resources provided by GLAM institutions (galleries, libraries, archives, museums) on the internet? Please choose all that apply.
N = 227



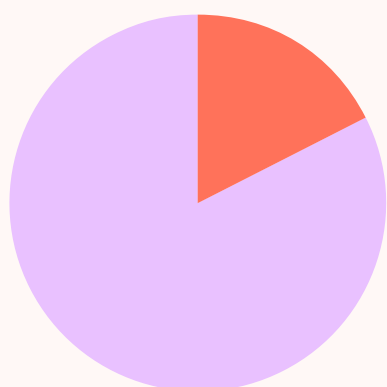
Platforms and websites used as sources of heritage-based tools & resources and online collections used by teachers and non-formal educators

Key findings:

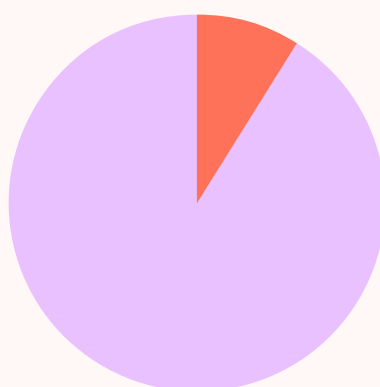
The following data confirms huge dispersion of heritage-based tools & resources and online collections. Teachers and non-formal educators, when asked for links to their favourite heritage-based tools & resources or online collections, provided 21 links to Europeana resources, 9 to Historiana, 6 to Wikimedia, 5 to Polona, 5 to Google Arts and Culture and 70 links to other sources.

QUESTION:

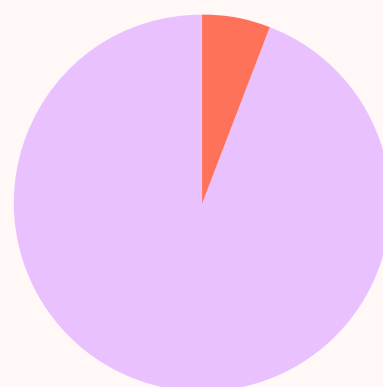
Please share with us one or two links to your favorite interactive materials, digital resources and online collections provided by GLAM institutions (galleries, libraries, archives, museums). N = 227



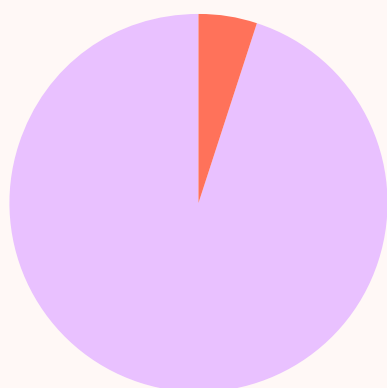
21 Europeana



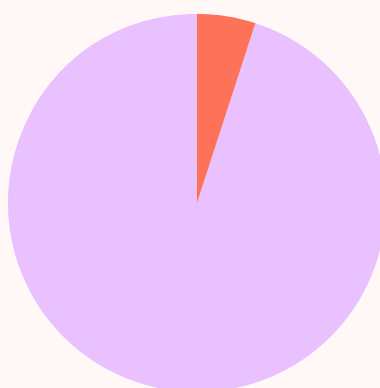
9 Historiana



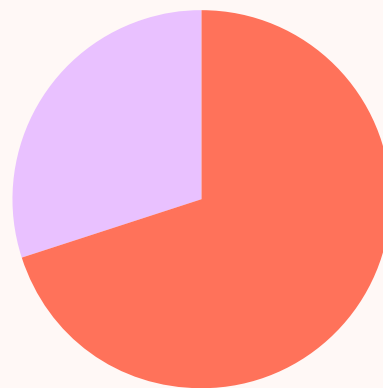
6 Wikimedia



5 Polona



5 Arts and culture



70 Other

Countries of origin of heritage-based tools & resources and online collections used by teachers and non-formal educators



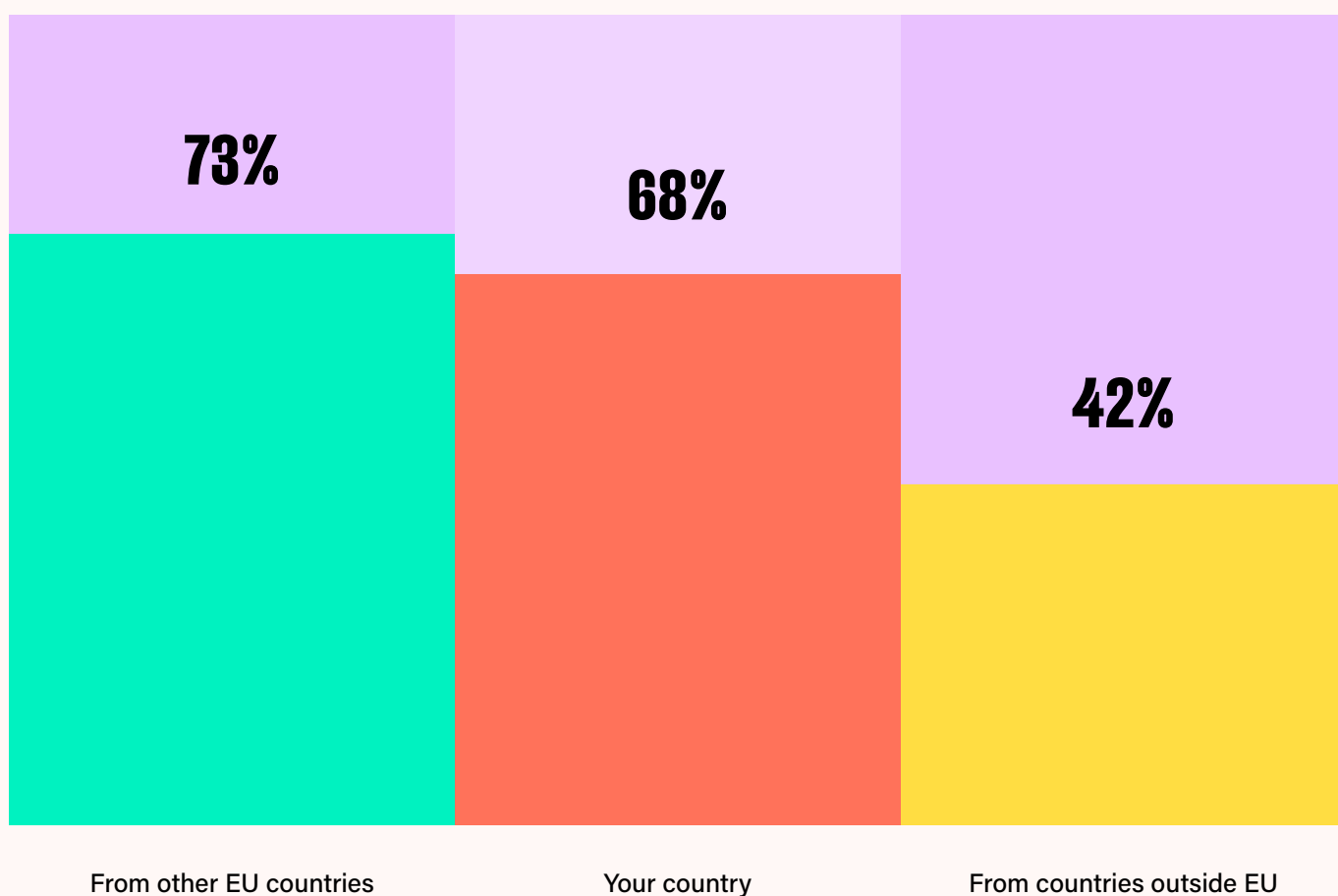
Key findings:

Use of foreign sources is very common. 70% of surveyed teachers and non-formal educators use heritage-based tools & resources and online collections from EU countries other than their country of origin and 42% from countries outside of the EU.



QUESTION:

Interactive materials digital resources and online collections provided by GLAM institutions (galleries, libraries, archives, museums) that you usually use more often come from institutions from. N = 227



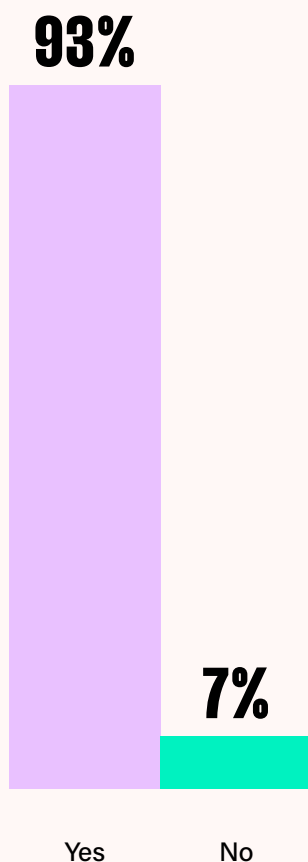
The COVID-19 pandemic and its impact on the usage of heritage-based tools & resources and online collections by teachers and non-formal educators

Key findings:

The COVID-19 pandemic and remote teaching have not had a significant influence on the frequency of the usage of heritage-based tools & resources and online collections by teachers and non-formal educators. 93% of surveyed teachers and non-formal educators used these resources during the period of remote teaching and 92% assert that they use them after the return to schools and educational institutions.

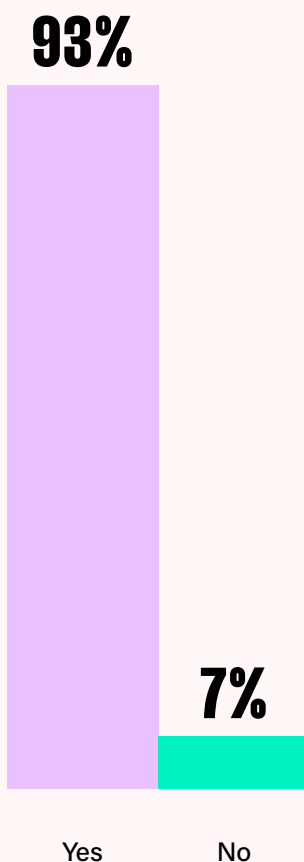
QUESTION:

Did you run educational activities remotely during the COVID 19 pandemic? N = 214



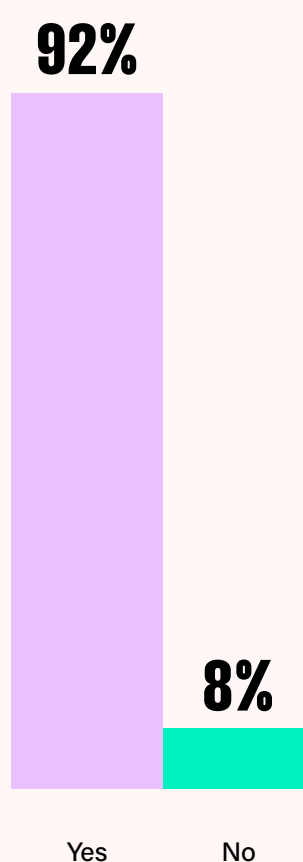
QUESTION:

Did you use interactive materials [...] during the period of remote education? N = 199



QUESTION:

Did you use interactive materials [...] while running educational activities in your institution not online during the last year? N = 214



➔ METHODOLOGY AND RESEARCH SAMPLE

The research was conducted by Centrum Cyfrowe Foundation, an NGO based in Warsaw, Poland with partners: Europeana and EuroClio. The study took 6 months, starting in April 2022 and ending in September 2022.

Taking the principle of triangulation of research methods into account, the research combines **qualitative research (Individual In-Depth Interview)** and **quantitative research (Computer-Assisted Web Interview - online questionnaire)**.

The research focuses on studying teachers' and non-formal educators' motivation, ways of use and barriers regarding the usage of digital culture resources developed and published by cultural heritage institutions.

PHASES OF THE STUDY

Phase I: May – June 2022
CAWI online questionnaire

In this phase, with the help of our partners (Europeana and EuroClio), the online questionnaire was sent out to teachers and non-formal educators - members of our partners' networks. We received answers from 227 teachers and non-formal educators who declare the use of heritage-based tools & resources and online collections.

Phase II: June – July 2022
Individual In-Depth Interview

In the second phase, we carried out 5 in-depth interviews with teachers and non-formal educators. The goal of this phase was to explore and deepen some topics from online questionnaires and concentrate more on teachers' and educators' attitude towards and perception of heritage-based tools & resources and online collections.

Phase III: July - September 2022
Data analysis & workshops

In this phase, we analysed the data from the online survey as well as from the in-depth interviews and together with research partners we discussed the final shape of the research report and recommendations based on the research.

Phase IV: August - September 2022 Final report & recommendations	This phase was dedicated to writing the final report, recommendations, proof-reading, editing and graphic design as well as coding the landing page of the research.
Phase V: September 2022 Presentation & discussion during the Open Education Policy Forum and beyond	The official presentation of the research data took place on September 14, 2022 during the Open Education Policy Forum. Other potential dissemination activities will be jointly discussed during the Open Education Policy Forum ensuring that the report is spread internationally and reaches out to target groups.

RESEARCH SAMPLE

CAWI online questionnaire	The sample size is 227 and consists only of teachers and non-formal educators (teaching pupils from 3 to 19 years old) that declare the usage of heritage-based tools & resources and online collections for conducting the educational activities. We reached out to the teachers and non-formal educators via Europeana, Euroclio, Creative Commons and UNESCO mailing lists and newsletters.
Individual In-Depth Interview	The sample size is 5 respondents. We chose 5 teachers and non-formal educators among those who answered the online questionnaire.



centrumcyfrowe.pl/en/open-glam-2022

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