HUP HACKATHON

JOINT RESEARCH REPORT

Heritage Understanding & Participation Hackathon: Co-creating Cultural Heritage Experiences with and for youth
(Hup Hackathon)

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INSIGHTS FROM THE DESK RESEARCH

1. EXECUTIVE SUMMARY

This desk research report examines why youth engagement with cultural heritage declines and analyses how two complementary approaches - **Value-Based Heritage Interpretation (VBHI)** and **Design Thinking (DT)**, can address that gap. It draws on European statistics (Eurostat), policy frameworks (European Commission, UNESCO, Council of Europe), peer-reviewed literature (Smith, 2006; Falk & Dierking, 2013; Dawson, 2014), participatory museum research (Simon, 2010; Russo et al., 2008; Kidd, 2011), sector reports (Kids in Museums; European Heritage Hub, 2024), and national data across the five HUP countries (Netherlands, Portugal, Belgium, Greece, Slovenia).

The evidence does not support a simple narrative of declining youth interest. Instead, it consistently shows that youth disengagement reflects a **structural and institutional mismatch** between heritage systems and young people's identities, lived experiences, and expectations of participation. Across sources, five interrelated drivers of limited engagement emerge:

1. Low perceived relevance of heritage to everyday life and identity
2. Limited opportunities for meaningful participation and authorship
3. Structural barriers (cost, access, time, institutional formats)
4. Social and symbolic exclusion (class, migration background, geography)
5. Lack of continuity in engagement pathways

Laurajane Smith's *Uses of Heritage* (2006) provides the central theoretical framework, redefining heritage as a **cultural process of meaning-making in the present** rather than a static body of objects or expert knowledge. Participatory museum literature demonstrates that engagement deepens when audiences contribute to interpretation and content creation. However, sector reviews indicate that participation often remains **symbolic or consultative**, with limited transfer of decision-making power.

Core finding: Youth engagement improves not through increased information or access alone, but through **increased ownership, relevance, and participation in meaning-making processes**.

The report concludes that the HUP Hackathon has significant potential to close this gap by integrating Value-Based Heritage Interpretation (strengthening meaning, identity, and relevance) with Design Thinking (enabling structured co-creation and youth agency). Important caveats apply: short-term interventions without follow-up have limited long-term impact, and institutional structures must adapt for participation to be sustained.

This report directly feeds into:

- **D2.1 - Joint Research Report** (synthesising evidence and articulating the HUP conceptual model);
- **D2.2 - Learning Outcomes Framework** (LOF), defining what young people should know, feel and be able to do;
- **D2.3 - HUP Hackathon Manual** (Edition 1), setting design principles, facilitation guidance and process architecture;
- **Pilot design parameters** for hackathons in the five partner countries.

2. METHODOLOGY AND SCOPE

This desk research is an applied synthesis rather than a systematic review. It consolidates:

- European and national statistics (e.g. Eurostat cultural participation data; DESI country profiles; EU Kids Online 2020).
- EU and international policy frameworks (European Framework for Action on Cultural Heritage; https://inclusivemuseums.org/wp-content/uploads/2019/11/781371549eng.pdf and its national implementations).
- Academic and critical heritage literature (e.g. Smith, 2006, *Uses of Heritage*; Smith, 2021, *Emotional Heritage: Visitor Engagement at Museums and Heritage Sites* , Falk & Dierking, 2013, *The Museum Experience Revisited*; Dawson, 2014; Harrison, 2013, *Heritage: Critical Approaches*; Waterton & Watson, 2015, *The Palgrave Handbook of Contemporary Heritage Research*; Mignolo & Walsh, 2018, *On Decoloniality*, García Canclini, 2001, *Consumers and Citizens*; Abreu & Chagas, 2009, *Memória e patrimônio: Ensaios contemporâneos*; de Varine, 2017, *Museus, memórias e movimentos sociais.*
- Participatory museum, digital culture and audience engagement research Simon, 2010, *The Participatory Museum*; Russo et al., 2008; Kidd, 2011; Jenkins, Ito & boyd, 2016, *Participatory Culture in a Networked Era*; *New Principles for Audience Engagement in Museums*
- Sector reports and position papers (Kids in Museums – Hurdles to Participation; European Heritage Hub, 2024, Policy Review; ESACH Position Paper, 2023; OECD, 2021, *The Culture Fix: Creative People, Places and Industries*).
- National youth and culture policy sources (YouthWiki; Eurydice / Eurypedia – National Policies Platform; Compendium of Cultural Policies & Trends; and relevant ministry and museum programme pages in each HUP country).
- Case-study material from institutions and programmes in the five HUP countries and beyond (e.g. Blikopeners – Stedelijk Museum Amsterdam; Brikl'Young – Musea Brugge; Interpret Europe "Learning Landscapes"; Acropolis Museum – Educational Programmes; Benaki Museum – Education and Participation Programmes; School of Aristotle (Naousa); Naoussa Industrial Heritage Centre; Slovenian Ethnographic Museum).

2.1 DATA LIMITATIONS

The evidence base is uneven across countries and age ranges. Key limitations include:

- Different age brackets across datasets (e.g. 9–16 in EU Kids Online 2020; 15–29 in Eurostat and YouthWiki; broader general-population data in DESI and some national statistics).
- Limited youth-specific heritage participation studies in some contexts (notably Slovenia), requiring careful extrapolation from broader cultural participation and digital skills data (e.g. DESI Slovenia).
- Variation in how "heritage" and "cultural participation" are defined across surveys and policy frameworks (Eurostat; Eurobarometer; national statistics).
- Case-study material that is indicative rather than statistically representative.

These limitations are explicitly acknowledged in the interpretation of findings. The report uses case-study examples as illustrative evidence, not as exhaustive coverage, in line with the grant's expectation that the project develops and documents case-based practice.

3. HUP PROJECT CHALLENGE

3.1 WHY YOUTH ENGAGEMENT WITH HERITAGE MATTERS

Cultural heritage is increasingly framed not only as a resource for preservation and tourism, but as an active domain for identity, social cohesion, critical thinking and democratic participation. Policy frameworks (e.g. Faro Convention; UNESCO 2015 Recommendation on Museums and Collections; European Framework for Action on

Cultural Heritage) emphasise inclusive participation, cultural democracy and the right of all communities, including young people to engage with and shape heritage.

For Generation Alpha (roughly 10–16), heritage engagement intersects with:

- identity formation and belonging;
- values, emotions and memory;
- digital practices and participatory culture;
- civic and community engagement on issues such as climate, justice and migration.

The HUP project understands heritage as a dynamic, contested process of meaning-making in the present (Smith, 2006; Harrison, 2013; Waterton & Watson, 2015), rather than a static set of objects. Youth engagement therefore becomes a question of who gets to define heritage, how, and for what purposes.

3.2 THE ENGAGEMENT GAP

Across European and national data, the picture is consistent:

- Many young people value cultural heritage in principle (Special Eurobarometer 466 shows high perceived importance, with countries such as Greece at 95%).
- Yet participation is uneven and often stratified by income, education, geography and migration background (Eurostat culture participation data; national statistics).
- For 10–16-year-olds, participation is frequently mediated through formal school visits or one-off events, with few pathways into deeper, self-directed or co-creative engagement (YouthWiki; national cultural policy and museum education sources).

The core challenge can be summarised as a value–participation gap: heritage is recognised as important but is not consistently experienced as meaningful, relevant or "for" young people in their own terms.

4. EVIDENCE FOR THE CHALLENGE

4.1 PARTICIPATION PATTERNS AND INEQUALITIES

European-level statistics (Eurostat; Special Eurobarometer 466) show that:

- Participation in cultural activities, including museums and heritage sites, varies significantly by age, education and income.
- The participation rate among people with the highest incomes is at least twice that of those with the lowest incomes in many EU countries.
- Younger groups (often 15–29 in the data) do not necessarily participate more than older adults; socio-economic disparities remain pronounced.
- National statistics and YouthWiki data for the HUP countries confirm this pattern, with specific issues such as:
    - strong overall museum visitation driven by tourism rather than resident youth (e.g. Greece);
    - high reported "lack of interest" among youth (e.g. Portugal);
    - urban–rural disparities and fragmented institutional landscapes (e.g. Belgium, Slovenia);
    - inequality of access for youth from migrant or working-class backgrounds (e.g. Netherlands, Greece).

4.2 ATTITUDES, RELEVANCE AND EXCLUSION

Special Eurobarometer 466 reveals broad agreement that heritage is important, yet young people often report lower visit frequencies and cite barriers such as lack of time, lack of information, cost and limited perceived relevance. Sector literature and reports (Kids in Museums; European Heritage Hub, 2024; ESACH Position Paper, 2023) echo these findings, describing how youth frequently experience heritage institutions as remote, inaccessible or disconnected from everyday life.

Laurajane Smith's work on the Authorised Heritage Discourse (AHD) (Smith, 2021) and critical heritage studies (Harrison, 2013; Waterton & Watson, 2015 explain how expert-driven, object-centred narratives marginalise alternative voices and lived experiences, particularly those of young people, racialised communities and working-class groups. Dawson (2014) demonstrates how museums and science centres can reproduce exclusion through institutional design and assumptions about visitors' knowledge, language and finances.

Decolonial and Global South perspectives (Mignolo & Walsh, 2018; García Canclini, 2001; Abreu & Chagas, 2009; de Varine, 2017) further highlight the need to challenge dominant heritage narratives and foreground plurality, community agency and social justice.

4.3 YOUTH PARTICIPATION, DIGITAL PRACTICES AND POWER

Participatory museum literature (Simon, 2010; Russo et al., 2008; Kidd, 2011; Lynch, 2011) shows that engagement deepens when audiences move from passive reception to contribution, collaboration and co-creation — and when institutions share authority and treat communities as partners, not "audiences" to be managed. Recent audience engagement work (International Audience Engagement Network, 2023) reframes engagement as relational, inclusive and community-oriented, rather than a matter of attracting visitors to consume content.

At the same time, digital youth frameworks (EU Kids Online 2020; DigiComp 2.2) show that:

- Young people are highly active in digital environments and expect interactivity and participation.
- Digital competence includes content creation, collaboration and critical engagement, not just consumption.
- High levels of social media use do not automatically translate into digital cultural or civic engagement.

DESI country reports and national surveys (e.g. DESI Greece; DESI Slovenia; Greek Safer Internet Centre / FORTH) document gaps between basic digital use and advanced content-creation skills for cultural or civic purposes. Heritage institutions have often been slow to meet young people in these digital spaces in ways that feel authentic and participatory.

4.4 SYSTEMIC BARRIERS

Synthesising across sources, the report identifies interconnected systemic barriers that explain why heritage engagement declines or remains uneven for youth aged roughly 10–16:

- Short-term, project-based formats with little continuity or follow-up.
- Tokenistic participation, where youth are consulted but not empowered to make decisions.
- Weak identity connection and low perceived relevance.
- Over-reliance on school visits and one-off events.
- Structural barriers (cost, transport, accessibility, scheduling).
- Institutional control and limited sharing of authority.
- Weak long-term evaluation, with success measured mainly through attendance rather than belonging, agency or sustained engagement.

A systemic response is needed: isolated projects cannot overcome these entrenched patterns without structural change in how heritage institutions understand and operationalise participation.

4.5 WHAT WORKS: EVIDENCE-BASED APPROACHES

Across all sources reviewed, the following approaches consistently show positive evidence for improving youth heritage engagement:

- Co-creation and participatory design: enabling young people to contribute to, shape, and own heritage products (Simon, 2010; European Heritage Hub, 2024).
- Identity-based and community-linked interpretation: connecting heritage to participants' own values, stories, and social contexts (Smith, 2006; Falk & Dierking, 2013).
- Youth authorship in content creation: moving from contribution to co-production and visible ownership of outputs (Russo et al., 2008).
- Continuity of engagement pathways: designing multi-session or multi-phase programmes with follow-up rather than isolated one-off events (Kids in Museums).
- Institutional adaptation: museums and heritage organisations sharing curatorial authority, embedding youth contributions in programmes, and adjusting practices accordingly (Dawson, 2014).
- Structured process facilitation: giving young people a clear, accessible methodology for participation (e.g. the d.school Design Thinking Bootleg) rather than expecting engagement from open-ended invitations alone.

Across these approaches, the strongest single pattern in the literature is not the provision of more information, but the creation of more ownership. The question that unlocks engagement is not "What do you know about this heritage?" but "What does this heritage mean to you, and what would you do with it?"

4.6 YOUTH–HERITAGE CO-CREATION CASE STUDIES

Our Shared Cultural Heritage (OSCH), British Council with Manchester Museum and Glasgow Life, UK

- Context: A UK-wide heritage initiative focused on the shared cultural heritage of the UK and South Asia, engaging young people aged 11–21 through partnerships with the museum and youth organisations.
- Co-creation design: The project combined workshops, training, research, shadowing, apprenticeships, social action projects, and evaluation traineeships developed with young participants.
- Youth role: Young people explored identity and belonging, influenced museum programmes, and helped shape methods for how museums engage the next generation.
- Outcomes: The project was funded through the Heritage Lottery Fund's Kick the Dust programme, which explicitly aimed to transform how heritage organisations engage young people.
- Lessons: Youth participation becomes more meaningful when it extends beyond attendance into programme influence, skills-building, and evaluation.

V&A East Museum, London, UK

- Context: A new museum in East London that presents creativity, making, and contemporary cultural narratives through a locally grounded lens.
- Co-creation design: The museum was developed with input from young people, creatives, and East London residents, and has been publicly described as co-created with these groups.
- Youth role: Young people contributed to shaping the museum's concept and what it should deliver for future users, particularly those interested in creative futures.

- Outcomes: The museum's identity, opening narrative, and public positioning were all framed around this co-created foundation.
- Lessons: Co-creation can shape not only a programme but the foundational identity of a museum when youth input is built into development from the start.

Untold Stories Hackathon, Museumpark Orientalis, Netherlands

- Context: A hackathon initiative engaging young people aged 14–16 with historical figures and museum objects through digital and AI-based interpretation. The initiative aligns with exploring the "untold" or overlooked narratives within the diverse cultural and religious history showcased at the museum, aiming for new ways to share those stories
- Co-creation design: Participants created AI-generated artefacts inspired by heritage materials, using contemporary tools to reinterpret cultural narratives.
- Youth role: Young people acted as story-makers and interpreters, generating new cultural outputs rather than only consuming historical content.
- Outcomes: The initiative promoted AI literacy, historical empathy, multi-perspectivity, and critical engagement with heritage narratives.
- Lessons: Hackathon-style formats can help make heritage relevant by combining youth creativity, emerging technologies, and narrative experimentation.

UNESCO World Heritage Youth Fora

- Context: UNESCO-supported forums that create spaces for young people to engage with World Heritage sites and heritage governance internationally.
- Co-creation design: Youth participants come together to discuss heritage challenges, exchange perspectives, and generate recommendations for heritage protection and engagement.
- Youth role: Young people act as contributors to dialogue, advocacy, and future-oriented thinking around cultural and natural heritage.
- Outcomes: The fora provide an international platform for youth participation in World Heritage processes and help build youth leadership around heritage issues.
- Lessons: Even when framed as policy or dialogue spaces, youth forums can expand the role of young people from visitors to heritage stakeholders.

Youth Vision for Heritage, European heritage youth process

- Context: A participatory process inviting young people to help shape a shared youth vision for heritage across European contexts.
- Co-creation design: Young participants are invited to co-create a collective vision and propose new ways of engaging young people with heritage.
- Youth role: Young people act as agenda-setters, articulating priorities and helping define what future-oriented heritage engagement should look like.
- Outcomes: The process helps generate youth-authored priorities that can inform wider heritage strategies and engagement models.
- Lessons: Co-creation is not only about activities on site; it can also involve young people in shaping strategic direction and institutional imagination.

Heritage Fieldwork with Minecraft, Estação, Brazil

- Context: A higher-education and heritage fieldwork case involving a vacant heritage building in Estação, Brazil, explored through participatory design tools.
- Co-creation design: The project used Minecraft and other participatory methods to support values-based design and help participants imagine future uses for a heritage site.
- Youth role: Young participants contributed ideas and design scenarios for how the building might be reused and reinterpreted.
- Outcomes: The process demonstrated how digital sandbox tools can support accessible heritage design conversations and future-oriented reuse thinking.
- Lessons: Game-based co-design can lower barriers to participation in heritage planning by giving young people intuitive ways to visualise and test ideas.

National Gallery Singapore – #SmallBigDreamersAtHome

- Context: A digital festival and microsite designed for children and families, developed when museums were rethinking online engagement.
- Co-creation design: A children's panel guided the choice of artworks and shaped aspects of site navigation and content engagement.
- Youth role: Children acted as design informants, influencing what content appeared and how child users would move through and interact with the site.=
- Outcomes: The resulting microsite offered multiple entry points for children, including zooming into artworks, videos, craft guides, and audio content.
- Lessons: Even digital heritage content becomes more child-centred when children shape both the content selection and the interface logic.

TWAM Children's Panel, Tyne & Wear Archives & Museums, UK

- Context: A museum youth participation model developed through a children's panel recruited to contribute across museum functions.
- Co-creation design: The panel worked on exhibitions, holiday activities, online content, and marketing, rather than being limited to one educational strand.
- Youth role: Children advised on multiple aspects of museum work, contributing perspectives on public-facing content and experiences.
- Outcomes: The model embedded children's perspectives into different areas of museum planning and interpretation.
- Lessons: Panels can be effective when they are used across institutional functions and not treated as isolated consultation exercises.

Norwich Castle Curators / Young People Co-design, Norfolk Museum Service, UK

- Context: A youth co-design initiative responding to the challenge that young people felt museums did not offer anything for them.
- Co-creation design: Through fortnightly sessions, young people explored museums and heritage creatively and practically, with co-design used as the organising method.
- Youth role: Participants helped shape public programming, contributed to a museum exhibition, and engaged in a social media takeover.
- Outcomes: The project generated a temporary exhibition, digital outputs, and ongoing opportunities for the group to influence future planning related to young people and museum engagement.

- Lessons: Co-design can rebuild relationships with young audiences when institutions start from the premise that existing offers may not feel relevant to them.

Young Curators / Children's Panel model, museum learning context

- Context: A museum learning model in which a children's panel, including younger pupils and continuing young curators, advises the learning department.
- Co-creation design: The panel meets regularly to advise on exhibitions and learning activity, creating an ongoing mechanism for youth input.
- Youth role: Children and young people act as advisory contributors helping shape how exhibitions and educational programmes are developed.
- Outcomes: The panel creates continuity between youth engagement and institutional learning practice.
- Lessons: Regular advisory structures can help turn child participation into an ongoing institutional habit rather than a one-off intervention.

ROCK Case Studies – Citizen and youth co-design in heritage-led urban development

- Context: European city case studies collected through the ROCK project, examining how cultural heritage can support citizen engagement and social inclusion.
- Co-creation design: Cities tested collaborative practices, living labs, community co-design, and citizen decision-making in heritage-led urban development processes.
- Youth role: While not exclusively youth-focused, the case studies include examples of end-users and local communities being involved directly in shaping heritage-rich spaces.
- Outcomes: The documented projects opened up more opportunities for citizens to influence heritage-led regeneration and public-space transformation.
- Lessons: Heritage participation frameworks from urban co-design can inform museum-based work by showing how cultural authority can be shared with communities.

5. HUP'S APPROACH: VBHI AND DESIGN THINKING

5.1 CONCEPTUAL FOUNDATION

The HUP approach combines two complementary frameworks:

- Value-Based Heritage Interpretation (VBHI), grounded in Laurajane Smith's *Uses of Heritage* (2006) and *Emotional Heritage* (2021), critical heritage studies (Harrison, 2013; Waterton & Watson, 2015) and community-driven models such as de Varine's work on ecomuseums (2017) and Abreu & Chagas' work on memory and heritage (2009).
- Design Thinking (DT), as articulated by the Stanford d.school and applied in museum and educational contexts (e.g. SFMOMA Youth Design Labs) and related participatory culture frameworks (Jenkins, Ito & boyd, 2016).

VBHI is grounded in a significant reconceptualisation of heritage. Laurajane Smith's *Uses of Heritage* (2006) challenges the traditional view of heritage as a fixed collection of objects, monuments or expert-defined narratives. Instead, she conceptualises heritage as a cultural process through which meaning is actively constructed in the present, closely linked to identity, memory and social experience rather than limited to the transmission of historical information. Her concept of the Authorized Heritage Discourse (AHD) highlights how institutional practices privilege certain narratives and voices, those of professional archaeologists, art historians and curators, often marginalising alternative perspectives and lived experiences; this helps explain why many

young people, particularly from non-dominant cultural backgrounds, do not see themselves reflected in heritage institutions.

Falk & Dierking's Contextual Model of Learning (2013) reinforces this by demonstrating that meaning-making in museums is shaped by visitors' personal context (identity, prior knowledge, motivation), sociocultural context (companions, cultural background) and physical context (the environment itself). The

UNESCO 2015 Recommendation on Museums and the Faro Convention (2005) operationalise these insights at policy level by affirming that heritage value lies in the meanings and uses communities attach to objects, and that heritage communities, including young people should have decision-making power over how heritage is sustained and transmitted.

Design Thinking offers a human-centred, iterative methodology: (Empathise–Define–Ideate–Prototype–Test) that starts from users' needs and experiences and leads to tangible solutions or prototypes. In heritage contexts, DT structures co-creation, moves participants from reception to production and embeds reflection and iteration. Together, VBHI and DT provide a coherent lens: VBHI explains why engagement matters (meaning, identity, values), while DT provides how engagement can be facilitated through structured, participatory processes.

5.2 VBHI: VALUES, EMOTIONS AND AUTHORSHIP

VBHI addresses the youth engagement gap through two key mechanisms:

- Relevance mechanism. By starting from participants' values, stories and social contexts, VBHI makes heritage meaningful in relation to young people's lives. This directly addresses the lack of perceived relevance and the "heritage as distant and abstract" problem documented in
- Eurobarometer 466, national surveys and work on intangible heritage. It is particularly important in contexts where intangible or everyday heritage risks being dismissed as irrelevant by younger generations.
- Participation mechanism. VBHI positions young people as interpreters and authors, not just recipients. It invites them to generate and share their own interpretations, aligning with evidence that engagement deepens when participants move up the participation spectrum (Simon, 2010; Russo et al., 2008; Lynch, 2011; International Audience Engagement Network, 2023).
- VBHI also aligns with policy frameworks such as the Faro Convention and the UNESCO 2015 Recommendation on Museums and Collections, which affirm that heritage value lies in meanings and uses defined by communities, and that heritage communities, including youth, should have decision-making power.

In combination, these mechanisms shift heritage from a subject to be learned into a space for personal and collective meaning-making for young people.

VBHI principles for HUP design

Drawing on Freeman Tilden's foundational interpretation principles (adapted for youth and contemporary contexts) and Smith's framework, six VBHI principles apply directly to HUP Hackathon design:

Principle	Core idea	HUP application
Provocation, not instruction	Good interpretation provokes, not merely informs	Frame hackathon challenges as open questions, not as knowledge transmission
Personal connection	Interpretation must connect to lived experience	Start with participants' own values and stories before introducing collection objects

The whole, not the part	Address the whole person and whole experience	Design for emotional and social engagement, not only cognitive outcomes
Story over fact	Human stories carry meaning; catalogues do not	Use narrative and personal testimony as interpretive starting points
Multiple voices	No single interpretation is complete	Legitimise and celebrate divergent perspectives and interpretations
Authorship	The most powerful interpretation is self-authored	Make participant-created interpretation the visible output of every hackathon

These principles translate VBHI theory into concrete design choices and connect directly to the Learning Outcomes Framework (identity, authorship, critical engagement) and to facilitation guidance in the Manual.

5.3 DESIGN THINKING: STRUCTURED CO-CREATION

Design Thinking responds to specific barriers identified in the evidence by providing a structured pathway for participation. Policy frameworks and institutional strategies increasingly call for co-creation but often lack a clear methodology; DT fills this gap.

Design Thinking stages in the HUP context

Design Thinking, as formalised by the Stanford d.school, follows five iterative stages:

Stage	Core activity	Heritage context	HUP Hackathon application
Empathise	Understand users, contexts and lived experiences	Interview museum visitors and community members; observe how young people move through collections	Participant research into their own heritage questions and local contexts
Define	Synthesise insights into a clear problem statement	Identify specific disconnects between collections and communities	Co-formulate a shared heritage challenge statement
Ideate	Generate diverse ideas without immediate judgement	Brainstorm new interpretation formats, objects and narratives	Structured ideation sessions using VBHI-based prompts
Prototype	Build low-fidelity representations of ideas	Mock-up exhibits, digital interpretations, events, workshop designs	Create tangible heritage prototypes
Test	Gather feedback and iterate	Present to other visitors; evaluate with community or peers	Peer and public presentation, feedback and reflection

The d.school Design Thinking Bootleg toolkit is freely available and has been adapted for educational contexts across Europe, making it directly transferable across the five HUP countries.

Design Thinking and the youth participation gap

DT directly addresses four systemic barriers highlighted in the evidence:

1. Short-term, one-off formats → DT's iterative cycle creates natural continuity (empathise → define → ideate → prototype → test → iterate), which can be mirrored in pre- and post-hackathon phases.
2. Tokenistic participation → the Empathise stage ensures young people's perspectives are the starting point, not an afterthought, and the Define stage is co-produced.
3. Passive engagement → DT shifts the mode from reception to production; participants build something rather than only observe or comment.
4. Weak identity connection → DT's human-centred orientation keeps personal and community context at the centre throughout the process.

Simon (2010) argues that "the most successful participatory projects start from visitors' needs, not institutional goals"; this is the epistemological foundation of DT's Empathise stage. By framing challenges in relation to real-world issues, local contexts and future-oriented questions, DT also enables participants to see heritage not only as something to be preserved, but as something that can inform action and decision - making in the present. This aligns with evidence (ESACH, 2023) that Generation Alpha is most likely to engage when heritage is linked to issues they care about: identity, community, climate and social justice.

Design Thinking in museum practice

Documented precedents show how DT-like processes can work in heritage and museum contexts:

Programme	Institution	Country	Model	Relevance to HUP
Blikopeners	Stedelijk Museum Amsterdam	Netherlands	Youth co-curators using participatory design	Direct precedent: institutional co-creation at scale
Brikl'Young	Musea Brugge	Belgium	Youth hackathon-style co-design of museum experiences	Closest structural precedent to the HUP format
Youth Design Labs	SFMOMA / d.school	USA	d.school methodology applied to museum collection challenges	Methodology precedent
Learning Landscapes	Interpret Europe (NL, GR, SI)	NL / GR / SI	Values-based interpretation with school groups	Active pilot in three HUP countries
Rijksstudio	Rijksmuseum	Netherlands	Open collection enabling digital co-creation	Digital co-authorship model, relevant to HUP's digital outputs

These examples demonstrate that design-based approaches can support youth agency, creativity and collaborative problem-solving around collections and sites, and that they are adaptable across national and institutional contexts.

5.4 AN INTEGRATED MODEL FOR HUP

When considered together, VBHI and Design Thinking offer a **coherent and mutually reinforcing approach** that directly addresses the gap identified in the evidence base:

Dimension	VBHI Contribution	Design Thinking Contribution	Integrated Outcome
Purpose	*Why engagement matters* - meaning, identity, values	*How engagement is facilitated* - structured process	Purposeful co-creation
Entry point	Heritage objects as value triggers	User experience and lived context	Identity-anchored participation
Mode	Interpretive authorship	Problem-solving and prototyping	Youth as makers and authors
Output	Interpreted meaning	Tangible prototype or solution	Visible, shareable heritage artefact
Transfer	Across cultural contexts via shared human values	Across institutional contexts via common methodology	Cross-national transferability

The research synthesis confirms that the strongest driver of engagement is not increased access or information, but **increased ownership**. By enabling young people to interpret, create, and contribute through the combined VBHI + DT approach, HUP Hackathon provides a practical, evidence-based pathway toward this ownership, across all five national contexts.

5.5 LIMITATIONS AND CRITICAL CAVEATS

The literature also highlights important limitations that must be built into HUP's design:

- **Limited longitudinal evidence:** While participatory and design-based approaches show strong potential for engagement, belonging, and skill development, there is limited evidence demonstrating *sustained changes in participation behaviour over time*. HUP should build in follow-up phases and longitudinal evaluation.
- **Institutional dependency:** The effectiveness of these approaches depends significantly on institutional context. Without broader changes in organisational practices — including willingness to share authority and integrate youth contributions into decision-making — participatory initiatives risk remaining isolated or short-term. Museum partner selection and preparedness criteria are critical.
- **Scaling vs. deepening tension:** Approaches that work for small, committed groups may not scale without modification. The HUP cross-national transfer model must account for this.

6. IMPLICATIONS FOR IMPLEMENTATION: HACKATHONS, LOF AND MANUAL

6.1 DESIGN REQUIREMENTS FOR HUP HACKATHONS

The evidence implies several design requirements for HUP hackathons:

- Beyond one-off events. Each hackathon should be framed within a broader engagement pathway, with pre-hackathon preparation (values elicitation, introductory activities) and post-hackathon follow-up (display, dissemination, further iterations).
- Real youth agency. Challenges must allow genuine decision-making by participants over content, format and narratives. Partners should commit to using or showcasing youth outputs.
- Identity-anchored challenges. Every hackathon should begin with exercises that connect heritage to participants' own values and lived experiences, not with content-heavy lectures.
- Hybrid physical–digital outputs. Hackathon outputs should combine in-person experiences with some digital elements (e.g. social media storytelling, digital guides, AR prototypes) to align with youth digital practices and DigComp 2.2 content-creation competences.
- Structural inclusion. Pilots must address cost, access and time (free participation, accessible venues, transport where needed, inclusive scheduling and recruitment).
- Institutional embedding. Partner heritage institutions should be selected and oriented on the need to share authority, integrate youth contributions into ongoing practice and align with policy frameworks (e.g. Faro Convention, national youth strategies).
- Evaluation beyond attendance. Monitoring and evaluation should focus on belonging, agency, identity connection and digital authorship, not only the number of participants.

These principles will be operationalised in the HUP Hackathon Manual (D2.3).

Pilot design parameters: cross-national transferability

To make these principles operational and comparable across the five countries, HUP pilots should adhere to the following baseline parameters:

Parameter	Recommended approach	Rationale
Age group	10–16 (Generation Alpha focus)	Pre-formation of heritage identity; critical window for intervention
Group size	8–15 participants per session	Ensures co-creation depth and manageable peer dynamics
Session structure	Minimum 3 sessions (Empathise/Define; Ideate/Prototype; Test/Present)	Addresses short-termism; establishes minimum viable continuity
Museum partner role	Collection access, facilitation co-design and output display commitment	Ensures institutional integration beyond one-off events

Facilitator profile	Trained in both VBHI and DT; cultural competency in national context	Cross-national transfer requires adapted facilitation, not uniform delivery
Language of challenge	Developed with participants in local language and cultural idiom	Prevents dominance of external heritage narrative frameworks
Evaluation	Pre/post VBHI identity-connection items; co-creation competence rubric; 3-month follow-up	Addresses longitudinal evidence gap; generates comparable cross-national data

6.2 LEARNING OUTCOMES FRAMEWORK (D2.2)

Based on the evidence and the VBHI + DT model, the LOF for HUP should include at least the following domains (to be elaborated in D2.2). These domains translate the research into concrete learning targets for hackathon design, facilitation and evaluation:

- Heritage understanding. Youth can articulate heritage as a process of meaning-making, recognise its constructed nature and identify whose perspectives are present or absent.
- Identity and values. Youth can connect specific heritage objects/sites to their own values, identities and communities, including intangible and everyday heritage.
- Co-creation competence. Youth can collaboratively design, prototype and test a heritage interpretation product or service.
- Critical engagement and decolonial awareness. Youth can reflect on power, representation, coloniality and exclusion in heritage narratives.
- Digital authorship. Youth can use at least one digital tool to create and share heritage interpretations, moving from consumption to production.
- Civic participation and rights. Youth understand their right to engage with and shape heritage, and see heritage as connected to contemporary social and environmental issues.
- Peer facilitation and collaboration. Youth can support peers in meaning-making processes, including basic facilitation and feedback skills.

LOF domains and evidence basis

The table below links each domain to a draft learning outcome and the main evidence sources it draws on:

Domain	Learning outcome (draft)	Evidence basis
Heritage understanding	Can articulate that heritage is a process of meaning-making, not a fixed collection	Smith, 2006
Identity & values	Can connect at least one heritage object/site to their own values and lived experience	Falk & Dierking, 2013; Eurobarometer 466
Co-creation competence	Has designed, prototyped and tested a heritage interpretation product with peers	Simon, 2010; d.school DT Bootleg

Critical engagement	Can identify whose voices are and are not present in a heritage narrative	Smith, 2006; Dawson, 2014
Digital authorship	Can use at least one digital tool to create and share heritage interpretation	DigComp 2.2; EU Kids Online, 2020
Civic participation	Can articulate their right and responsibility to engage with heritage	Faro Convention, 2005; ESACH, 2023
Peer facilitation	Can support a peer in engaging with heritage using VBHI techniques	Russo et al., 2008

6.3 HACKATHON MANUAL (D2.3)

The Hackathon Manual (Edition 1) will translate the VBHI + DT model and the LOF into practical guidance for partners. It should:

- Translate VBHI and DT principles into concrete tools. Provide session plans, facilitation scripts, tools and templates (e.g. VBHI prompts, DT canvases, reflection exercises, values-elicitation activities).
- Define facilitator profiles and support. Offer guidance on recruiting and supporting facilitators who combine heritage interpretation skills with design-based co-creation competences and cultural competency in their national context.
- Include case examples and mini-case studies. Document examples from the five partner countries and beyond, such as Blikopeners, Brikl'Young, Learning Landscapes, Acropolis Museum and Benaki Museum programmes, Naoussa Industrial Heritage Centre, Slovenian Ethnographic Museum, illustrating different adaptations of the model.
- Provide step-by-step implementation guidance. Outline the full process from partner selection and challenge definition to hackathon delivery, display and integration of results into institutional practice, including how to embed pre- and post-hackathon phases.
- Integrate evaluation tools. Include sample instruments and rubrics aligned with the LOF domains (identity connection, co-creation competence, digital authorship, civic participation, peer facilitation) and guidance on 3-month follow-up to begin addressing the longitudinal evidence gap.

Together, the design requirements, LOF domains and Manual guidance ensure that the HUP Hackathon model is evidence-based, transferable across the five countries and directly oriented toward D2.2 and D2.3.

7. COUNTRY PROFILES: FIVE HUP NATIONAL CONTEXTS

7.1 NETHERLANDS

Heritage landscape: The Netherlands has a rich institutional infrastructure with approximately 750 museums. CBS Statistics Netherlands data shows that museum visits remain below pre-pandemic levels among 12–18 year olds. The Landelijk Kennisinstituut Cultuureducatie en Amateurkunst (LKCA) provides national research on cultural education and participation.

Barriers: Eurobarometer 466 data shows the Netherlands at 78% cultural heritage involvement - among the highest in the EU but this masks sharp socio-economic inequalities, particularly for young people from migrant backgrounds. Eurostat (2022) confirms the income participation gap applies in the Netherlands as strongly as elsewhere.

Relevant precedents: Stedelijk Museum Amsterdam – Blikopeners programme: Youth ambassadors aged 16–26 co-curate content and engage peers is a strong precedent for youth co-creation at institutional scale.

Rijksmuseum Rijksstudio: Open access to 900,000+ collection items, enabling digital co-creation and remixing by young people.

Design Thinking in education: Dutch secondary schools have been active adopters of design-based learning, providing a transfer-ready pedagogical context.

HUP relevance: The Netherlands offers the strongest pre-existing infrastructure for scaling participatory models. The challenge is deepening inclusivity for under-represented youth rather than expanding reach among already-engaged audiences.

7.2 PORTUGAL

Heritage landscape: Portugal has an extensive heritage network, including 140+ national museums. Eurobarometer 466 shows 94% of Portuguese respondents consider cultural heritage important to their region, which is the highest in the EU; yet participation rates among youth remain below the EU average.

Barriers: OECD data on Portugal and national YouthWiki data consistently identify "lack of interest" as the primary reported barrier in Portugal, reaching 51% in some national surveys, the highest among the five HUP countries. This points to a profound relevance and identity alignment problem, not merely a structural access problem.

Relevant precedents: Museu Nacional do Azulejo – participatory education programmes: Community-linked interpretation connecting heritage tile-making to contemporary identity.
Serralves Foundation, Porto: Strong model of youth engagement through contemporary art-heritage integration, including school partnerships and design challenges.

Fundação Calouste Gulbenkian: National funder of youth cultural participation with documented impact evaluations.

HUP relevance: Portugal's challenge is primarily a *relevance gap* - VBHI's capacity to anchor heritage in identity and lived values addresses this directly. The Hackathon format's emphasis on peer-to-peer creation has particular potential in the Portuguese context.

7.3 BELGIUM

Heritage landscape: Belgium's federated structure creates a complex museum landscape across Flemish, Walloon, and Brussels institutions. Eurobarometer 466 shows approximately 60% of Belgians consider cultural heritage important personally. Flanders has developed strong heritage education policies through Faro – Flemish Interface Centre for Cultural Heritage, which explicitly supports participatory and community-based heritage approaches.

Barriers: Institutional fragmentation across linguistic communities creates inconsistent access. Urban–rural disparities are significant. Cost and transport are primary structural barriers for young people in under-served areas. Eurostat (2022) shows that Belgium's participation inequality by income is near the EU median.

Relevant precedents: Musea Brugge – Brikl'Young participatory programme: Direct precedent - young people aged 16+ have co-developed museum experiences, providing a documented model of youth co-creation in a Flemish museum context.
Faro network of participatory heritage organisations: A national infrastructure that explicitly supports the Faro Convention's heritage community principles.

Design Flanders / Flanders Design Week: Strong design culture providing a transfer context for Design Thinking facilitation.

HUP relevance: Belgium's Flemish institutional infrastructure (Faro, Musea Brugge) provides the most direct precedent for HUP's model. The Walloon and Brussels contexts offer opportunities for cross-community adaptation testing.

7.4 GREECE

Heritage landscape: Greece has one of the highest densities of archaeological sites and museums in Europe, with over 240 museums and thousands of registered heritage sites. Eurobarometer 466 shows 95% of Greeks consider cultural heritage important — joint highest in the EU. ELSTAT's Survey on Museums and Archaeological Sites Attendance reports 20.6 million visits in 2024 (up from 19.2 million in 2023), largely driven by international tourism. The Hellenic Ministry of Culture coordinates public-engagement initiatives across museums and sites, and the new "Hellenic Heritage" digital culture platform integrates 350+ venues into a unified digital gateway emphasizing access and inclusion.

Barriers: YouthWiki Greece confirms that Greece ranks 26th of 33 countries for youth cultural participation and explicitly notes that "there is no national strategy focusing on creativity and culture for young people," leading to fragmented provision.

YouthWiki Greece Museum education research by Nikonanou, Bounia et al. (2015) documents that school-based museum visits are largely curriculum-driven, transmission-oriented and observation-based, with limited co-creation. The DESI Greece 2024 Country Report and Greek Safer Internet Centre show that Greek youth are highly active online but that advanced digital content-creation skills lag behind basic consumption, echoing the EU Kids Online 2020 pattern of high social media use but low civic/cultural production.Relevant precedents: The Acropolis Museum – Educational Programmes and school activities offer large-scale, structured education for all school levels, with some interactive elements. The

Benaki Museum has a long-standing education offer, including multisensory programmes and "museum kits." The Museum Education & Research Laboratory (MuseumEduLab), University of Thessaly serves as a research hub for museum pedagogy, and Greece participates in Interpret Europe's "Learning Landscapes" pilot on values-based interpretation.

HUP relevance: In Greece, HUP Hackathons can act as gap-fillers rather than add-ons: moving young people from passive, school-mediated visits to active, youth-authored interpretation that bridges everyday digital practices and heritage content. VBHI directly addresses the relevance and identity gap produced by the dominance of classical, object-centred narratives, while Design Thinking offers a structured pathway to build the DigComp 2.2 content-creation competences that DESI identifies as weak.

7.5 SLOVENIA

Heritage landscape: Slovenia has a well-developed museum and heritage network relative to its size, including the National Museum of Slovenia and a network of regional museums. Statistical Office of Slovenia (SURS) data (2024) shows that children and youth account for 25.8% of all museum visits, one of the highest youth shares among the five HUP countries.

Barriers: Evidence from Eurydice's National Policies Platform and YouthWiki Slovenia indicates that youth engagement with heritage is heavily mediated through formal school visits, where heritage is treated as curriculum content rather than a space for participation. Visits are typically one-directional and observation-based, reinforcing Smith's (2006) "Authorised Heritage Discourse" pattern of passive audiences. The

DESI Slovenia profile shows above-EU-average connectivity and basic digital skills, but a gap between digital consumption (social media, streaming, gaming) and digital content creation for cultural or civic purposes, consistent with EU Kids Online 2020.

Relevant precedents: The Slovenian Ethnographic Museum has developed community co-creation projects with schools and local groups, while the City Museum of Ljubljana runs urban-heritage programmes with growing youth components. Slovenia is a partner in Interpret Europe's "Learning Landscapes" pilot (with the Netherlands and Greece), which applies values-based interpretation in school settings, and an Interreg case story on "Cultural and natural heritage in digital Slovenia" showcases strong digitisation projects that nonetheless remain focused on access rather than youth co-creation.

HUP relevance: Slovenia is well-positioned for HUP to focus on quality deepening: moving from relatively high youth visit rates to genuine ownership and interpretation. VBHI offers a way to connect rich local and intangible heritage (crafts, folk traditions, landscape practices) to contemporary youth values across both urban and rural contexts, while Design Thinking leverages Slovenia's strong digital infrastructure to develop content-creation skills and turn museums and heritage sites into co-creative, youth-led spaces.

8. CONCLUSION FOR NEXT STEPS

This desk research establishes the evidence base and conceptual model that will be consolidated in D2.1 - Joint Research Report. It provides the shared problem definition (youth engagement gap), the systemic barriers, and the rationale for adopting an integrated VBHI + Design Thinking approach, which D2.1 will formalise into a coherent narrative for the consortium and external stakeholders.

For D2.2 - Learning Outcomes Framework (LOF), the report already identifies seven core outcome domains (heritage understanding, identity and values, co-creation competence, critical engagement, digital authorship, civic participation, peer facilitation) and links each domain to specific evidence sources. These domains and draft learning statements will be translated in D2.2 into age-appropriate indicators, rubrics and evaluation tools that can be applied consistently across the five HUP countries.

For D2.3 - HUP Hackathon Manual (Edition 1), the design requirements, pilot parameters and VBHI + DT principles outlined here form the blueprint for session architecture, facilitation scripts and institutional partnership criteria. The Manual will operationalise these findings into concrete guidance, tools and case examples, ensuring that each hackathon embodies the project's evidence-based approach while remaining adaptable to national contexts. Together, D2.1, D2.2 and D2.3 will carry this desk research forward from analysis to implementation, supporting pilots that can both test and further refine the HUP model.

9. SOURCE RATIONALE AND CONCEPTUAL ORIENTATION

The bibliography for this report was selected to provide an interdisciplinary approach to the HUP project by combining critical heritage theory, participatory practice and contemporary audience-engagement approaches.

Laurajane Smith's work on emotional heritage establishes the central role of affect, meaning-making and personal connection in visitor engagement, directly informing the project's Value-Based Heritage Interpretation (VBHI) approach, which inspired the overall project concept. The *New Principles for Audience Engagement in Museums* (International Audience Engagement Network, 2023) complement this vision by framing engagement as a relational, inclusive and community-oriented process, reinforcing the need to move beyond passive consumption. Decolonial and Global South perspectives (Mignolo & Walsh; García Canclini; Abreu & Chagas; Chagas) challenge dominant heritage narratives and highlight plurality, identity and community voice, while Hugues de Varine's work on ecomuseums grounds these ideas in socially engaged, community-driven heritage practice. Foundational texts in critical heritage studies (Harrison; Waterton & Watson) provide the theoretical grounding to understand heritage as dynamic, contested and socially constructed. Participatory and digital culture frameworks (Jenkins; Lynch) inform the project's co-creation and youth-agency dimensions, emphasising the shift from audiences as consumers to active contributors. Finally, policy-oriented insights from OECD and related bodies reinforce the role of culture in fostering social cohesion, innovation and local development. In combination, these strands support the HUP project's conceptual framework by linking emotional engagement, participatory practice and inclusive heritage interpretation to the development of meaningful, youth-driven cultural experiences.

10. BIBLIOGRAPHY

Books and Monographs

- Smith, L. (2006). *Uses of Heritage* (1st ed.). ResearchGate
- Smith, L. (2021). *Emotional Heritage: Visitor Engagement at Museums and Heritage Sites*. ResearchGate
- Falk, J. H., & Dierking, L. D. (2013). *The Museum Experience Revisited*
- Harrison, R. (2013). *Heritage: Critical Approaches*.
- Waterton, E., & Watson, S. (Eds.). (2015). *The Palgrave Handbook of Contemporary Heritage Research.* Palgrave Macmillan.
- Mignolo, W. D., & Walsh, C. E. (2018). *On Decoloniality: Concepts, Analytics, Praxis*.
- García Canclini, N. (2001). *Consumers and Citizens: Globalization and Multicultural Conflicts.*
- Abreu, R., & Chagas, M. (2009). *Memória e patrimônio: Ensaios contemporâneos.*
- Chagas, M. (2010). *Museus, memórias e movimentos sociais*. Museu da República.
- de Varine, H. (2017). *The Ecomuseum in the 21st Century: A Social Museum.*
- Jenkins, H., Ito, M., & boyd, d. (2016). *Participatory Culture in a Networked Era: A Conversation on Youth, Learning, Commerce, and Politics.*
- Simon, N. (2010). *The Participatory Museum.* Museum

Journal Articles

- Dawson, E. (2014). "Not Designed for Us": How Science Museums and Science Centers Socially Exclude Low-Income, Minority Ethnic Groups. *Science Education*, 98(6), 981–1008. → <https://doi.org/10.1002/sce.21133> → Wiley Online Library PubMed
- Russo, A., Watkins, J., Kelly, L., & Chan, S. (2008). Participatory Communication with Social Media. *Curator: The Museum Journal*, 51(1), 21–31. → <https://doi.org/10.1111/j.2151-6952.2008.tb00292.x> → ResearchGate
- Kidd, J. (2011). Performing the Knowing Archive: Heritage Performance and Authenticity. *International Journal of Heritage Studies*, 17(1), 22–35. → Cardiff University Open Access

Policy Documents and Reports

- European Commission. (2018). *European Framework for Action on Cultural Heritage* (Staff Working Document SWD/2018/491). Publications Office of the European Union → Overview
- European Commission. (2017). *Special Eurobarometer 466: Cultural Heritage*. Directorate-General for Education, Youth, Sport and Culture. → Full PDFSurvey portal
- Eurostat. (2022/2024). *Culture Statistics – Cultural Participation*. European Commission. → Statistics Explained
- UNESCO. (2015). *Recommendation Concerning the Protection and Promotion of Museums and Collections, their Diversity and their Role in Society*. 38th General Conference, 17 November 2015. → UNESCO
- UNESCO. (2019). *Report on the Implementation of the UNESCO 2015* Full PDF
- *Recommendation on Museums & Collections* (CLT-2019/RP/1 Rev.). UNESCO. → UNESDOC
- Council of Europe. (2005). *Framework Convention on the Value of Cultural Heritage for Society* (Faro Convention, CETS No. 199). → Official text
- Kids in Museums. (2018). *Hurdles to the Participation of Children, Families and Young People in Museums: A Literature Review*. Kids in Museums / Arts Council England. Full PDF | Resource page European Heritage Hub. (2024).
- *Youth Participation in Cultural Heritage Management: A Conceptual Framework*. European Heritage Hub.→ Full document
- Group for Education in Museums (GEM) / Arts Council England. (2025). *Children and Young People Engaging with Museums*. ACE. → Full PDF
- EU Kids Online / Smahel, D., Machackova, H., et al. (2020). *EU Kids Online 2020: Survey Results from 19 Countries*. EU Kids Online Network / LSE.→ Full report PDF
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The Digital Competence Framework for Citizens* (EUR 31006 EN). Publications Office of the European Union. → <https://doi.org/10.2760/115376> |JRC Repository Full PDF
- ESACH (European Students' Association for Cultural Heritage). (2023). *Youth for the Future of Cultural Heritage in Europe: Position Paper*. ESACH / Europa Nostra. → Heritage Research Hub ESACH
- International Audience Engagement Network. (2023). *New Principles for Audience Engagement in Museums*. International Audience Engagement Network → Publication page
- OECD. (2021). *The Culture Fix: Creative People, Places and Industries*. OECD Publishing. → OECD Publications

Design Thinking Sources

- Hasso Plattner Institute of Design at Stanford (d.school). (2018). *Design Thinking Bootleg* (Toolkit). Stanford University. → https://toolkit.ucsf.edu/design-thinking-tools
- Interaction Design Foundation. (2024). What Is Design Thinking and Why Is It So Popular? → IDF article

National and Country-Level Sources

- CBS Statistics Netherlands. StatLine: Museum Visits.→ CBS StatLine
- Landelijk Kennisinstituut Cultuureducatie en Amateurkunst (LKCA). Research and Data on Cultural Education and Participation in the Netherlands. → LKCA
- ELSTAT (Hellenic Statistical Authority). Survey on Museums and Archaeological Sites Attendance [monthly press release series, ongoing].→ ELSTAT statistics portal

- ELSTAT (Hellenic Statistical Authority). Cultural Activities Survey [EU-SILC framework].→ ELSTAT
- SURS (Statistical Office of Slovenia). (2024). *Activity of Museums and Galleries, 2024* → SURS
- EACEA / European Commission. *National Policies Platform: YouthWiki – Creative and Cultural Participation* (per country: NL, PT, BE, GR, SI).→ YouthWiki portal
- YouthWiki Greece — Section 8: Creativity and Culture (updated March 2026). EACEA / European Commission.→ Chapter 8 overview
- Council of Europe / ERICarts. *Compendium of Cultural Policies and Trends in Europe* (country profiles). → Cultural Policies Compendium
- OECD. Portugal Country Profile — Culture and Education references. → OECD Portugal
- EGMUS (European Group on Museum Statistics). Museum Statistics by Country. → EGMUS
- Nikonanou, N., Bounia, A., Filippoupoliti, A., Chourmouziadi, A., & Yiannoutsou, N. (2015). *Museum Learning and Experience in the 21st Century* [in Greek]. Kallipos Open Academic Editions → Full textbook
- European Commission. (2024). *Greece 2024 Digital Decade Country Report* (formerly DESI). DG CONNECT. → Country report DESI Greece archive
- European Commission. *DESI Slovenia / Digital Decade indicators – Slovenia*. → DESI Slovenia overview
- Greek Ministry of Digital Governance. (2023). *Greek National Digital Decade Strategic Roadmap*. Digital Strategy Department. → Full PDF
- Greek Safer Internet Centre / FORTH. (2025). *Children's Online Habits in Greece: 2025 Nationwide Survey*. Foundation for Research and Technology-Hellas.→ Survey summary
- Interreg. (2023). *Cultural and Natural Heritage in Digital Slovenia*. → Interreg case story
- Hellenic Ministry of Culture. Public Engagement, Museums and Archaeological Sites.→ Ministry portal
- Museums list Greek Government. Ministry of Culture – organisational overview. → Gov.gr culture page

Museum and Programme Sources

- Stedelijk Museum Amsterdam. Blikopeners programme. → Stedelijk Blikopeners
- Rijksmuseum. Rijksstudio.→ Rijksstudio
- Musea Brugge. Brikl'Young and youth participation programmes.→ Musea Brugge
- Faro – Flemish Interface Centre for Cultural Heritage. Community heritage and participation resources. → Faro
- Interpret Europe. Learning Landscapes (Netherlands, Greece, Slovenia) and related projects. → Interpret Europe
- Museu Nacional do Azulejo (Portugal). Education and community programmes. → Museu do Azulejo
- Fundação de Serralves, Porto. Youth and education programmes. → Serralves
- Fundação Calouste Gulbenkian. Cultural participation and education programmes. → Gulbenkian
- Acropolis Museum. Educational programmes and school activities. → Educational programmes School activities
- Benaki Museum. Education and participation programmes. → Benaki education
- Museum Education & Research Laboratory (MuseumEduLab), University of Thessaly.→ MuseumEduLab
- National Museum of Slovenia. → NMS
- City Museum of Ljubljana.→ Mestni muzej Ljubljana
- Slovenian Ethnographic Museum.→ Slovenian Ethnographic Museum

INSIGHTS FROM FOCUS GROUP DISCUSSIONS WITH MUSEUM PARTNERS

Purpose: To examine educational and outreach museum staff's needs, challenges and expectations in engaging Gen α.

Participants:

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- Joos Van Cauwenberghe - Change of Course
- Vithika Yadav - Designathon Works

1. INTRODUCTION

This report presents an integrated synthesis of insights generated through focus group discussions and a joint workshop conducted as part of the HUP Hackathon – Heritage Understanding & Participation project. It consolidates learning from museum partners and project collaborators, including two additional sessions with Nieuwe Instituut and MAAT (Museum of Art, Architecture and Technology, Lisbon), and situates these inputs within the broader workshop dialogue on how museums can meaningfully engage children and young people with cultural heritage.

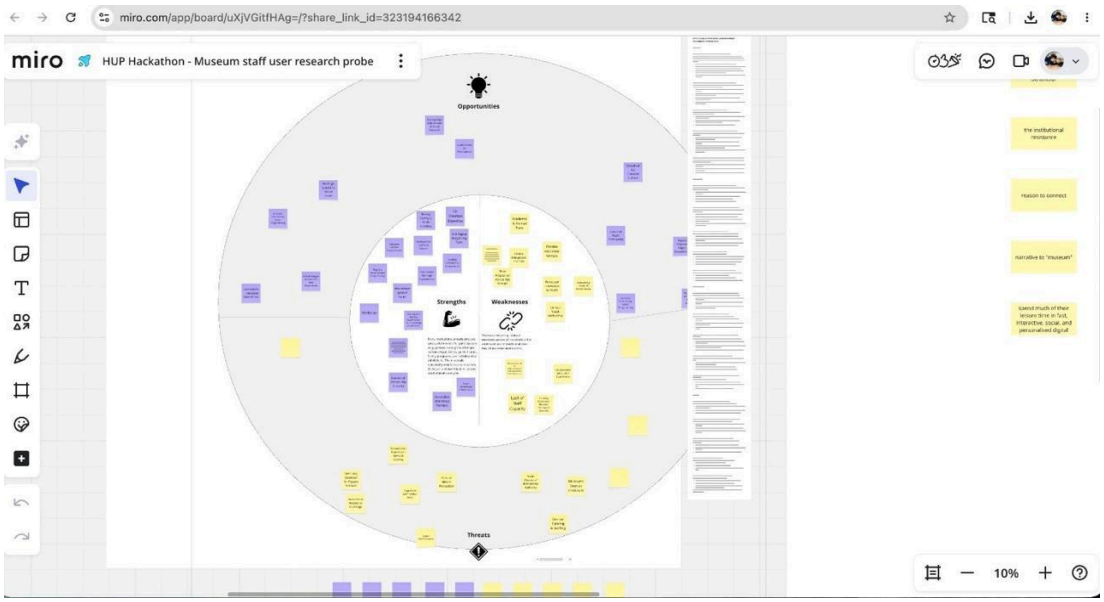
The report is intentionally structured as an insights document because the purpose is to identify recurring themes, shared tensions, and strategic opportunities emerging across institutions, while also incorporating distinct examples and reflections that deepen the collective understanding of youth participation in museums.

The insights reveal that challenges around youth engagement are not only matters of programming, outreach, or communication. They are closely tied to institutional culture, inherited perceptions of museums, organisational flexibility, participatory practice, and the extent to which children and young people are genuinely treated as contributors to cultural meaning-making.

2. BACKGROUND AND PROCESS

The insights in this report draw from a co-creation workshop on youth engagement with cultural heritage in museums and from related FGD discussions with museum and project partners. The workshop brought together participants from all museum partners, including representatives from the HUP Project partner organizations. The session was designed to support collaborative reflection on how museums can strengthen youth participation through more critical, participatory, and innovative approaches.

The workshop used a participatory methodology grounded in SWOT analysis, collaborative voting, breakout discussions, and problem reframing. Participants were invited to identify both internal institutional weaknesses and broader external threats affecting youth engagement, and then work in interdisciplinary groups to turn broad concerns into clearer, more actionable problem statements. The process was explicitly intended to generate insights that could inform future co-creation sessions with museum professionals, facilitators, and young people themselves.



An important framing example introduced early in the workshop was the Untold Stories initiative, a hackathon hosted at Museumpark Orientalis. This project engaged young people aged 14–16 in creating AI-generated artefacts inspired by historical figures and museum objects. It was used to foreground possibilities around AI literacy, historical empathy, multi-perspectivity, and critical engagement with cultural narratives, and to encourage participants to think beyond traditional museum education models.

3. CORE INSIGHTS

1. Youth disengagement is rooted in institutional culture as much as programming

A major insight running through both the workshop and FGD discussions is that youth disengagement from museums cannot be understood simply as a communication or outreach problem. Participants repeatedly pointed

to institutional structures, inherited narratives, and adult-centred ways of working as deeper causes of disengagement.

The co-creation workshop voting exercise identified intimidating museum environments as one of the strongest internal weaknesses affecting youth participation. Museum spaces were described as formal, rigid, inaccessible, and at times culturally exclusive. This was closely connected to broader concerns about institutional resistance to change, insufficient youth-centred programming, rigid educational formats, and limited mechanisms through which young people can actively shape museum experiences.

Participants pointed out that if museums want children to feel involved in shaping the world, then the physical environment should also communicate invitation, playfulness, and possibility. This insight reinforces a broader point from the workshop: emotional and experiential accessibility are as important as physical accessibility. If heritage engagement is to feel meaningful for young people, the environment must support curiosity and exploration rather than only observation, including spaces that adolescents can appropriate and use informally, such as flexible "community rooms", in contrast to over-programmed settings that leave little room for youth-led presence.

These concerns strongly show that institutions may have good intentions and isolated examples of youth programming, yet still feel formal, distant, or difficult for children and families to relate to in everyday practice. The implication is that youth engagement must be approached as an institutional challenge rather than only a programmatic one. This has led to more explicit reflection on how spaces can be opened up for informal occupation and youth-led presence, not only structured activities.

2. Museums still carry narratives of authority, passivity, and exclusion

Another recurring insight is that museums are shaped not only by what they do, but by what they symbolise. In the workshop breakout discussions, participants reflected on how museums are often associated with silence, rules, passivity, and historical authority. These associations create emotional and psychological barriers for young audiences, particularly for those who do not easily see themselves reflected in museum narratives or who are unfamiliar with museum-going culture.

This broader narrative construct appeared across all museum partners through concerns about intimidating atmospheres, high-brow institutional identities, and a lack of warmth or invitation in museum environments. In some cases, the architecture, communication style, and visitor journey were seen as reinforcing a sense that museums are places to observe quietly rather than spaces in which children and young people can question, interpret, and contribute.

This insight is particularly significant because it expands the discussion beyond access in a narrow sense. It suggests that emotional accessibility, representational accessibility, and the right to participate in meaning-making are just as important as physical access.

3. Participation is more meaningful when it is embedded rather than event-based

A strong cross-cutting theme in the discussions is the difference between embedded participation and occasional engagement. Across partners, there were examples of recurring and deeply rooted programmes that involve children and young people meaningfully in museum experiences, including long-term laboratories, residencies and co-authorship projects in which adolescents maintain an ongoing relationship with the museum rather than only making one-off visits and participation being concentrated in special events, seasonal formats, or time-bound activities. This mixed ecology matters because it affects how young people experience the institution.

This mixed ecology matters because it affects how young people experience the institution. If participation is available only during dedicated programmes or guided moments, then inclusion remains conditional and intermittent. By contrast, when it is embedded in recurring formats, visible structures, or long-term methods, it signals that children and families are part of the institution's ongoing public life.

The workshop reflections reinforce this point by showing that the challenge is not only to create youth-specific activities, but to move away from one-way models of education towards more participatory and co-creative forms of engagement.

4. Co-creation is widely valued, but not yet fully supported by institutional systems

The discussions show strong alignment around the importance of co-creation. Participants across the workshop and FGDs emphasised the need to move from "educating youth" towards working with young people as interpreters, contributors, and co-designers of cultural experiences. There was broad agreement that young people should not be treated only as audiences for museum content, but as people capable of contributing meaningfully to interpretation, programming, and the shaping of institutional futures.

At the same time, the material also shows that co-creation remains difficult to sustain within existing museum systems. Institutional pace, hierarchical structures, generic communication approaches, and limited time for experimentation all create friction. In other words, museums may endorse co-creation conceptually while still operating through organisational conditions that make it difficult in practice.

This tension emerged clearly in the FGDs through reflections on the slow-moving nature of institutions, the challenge of improvising when working with children, and the mismatch between participatory ambitions and formal systems. It also surfaced in discussions about institutional resistance to experimentation and fear of losing authority or academic credibility when adopting more youth-centred approaches.

5. Museums need to trust young people as capable cultural actors

One of the most important insights to emerge from the workshop is that assumptions held by museum professionals can themselves become barriers to participation. In breakout groups, participants reflected on how institutions sometimes underestimate young people's curiosity, critical thinking abilities, and creative capacity to contribute to cultural interpretation.

This insight is echoed in the FGD material, where some of the strongest examples of engagement were those that approached children not merely as learners to be guided, but as people capable of shaping meaning, asking questions, and participating in world-making. Programmes that involve children in panels, collaborative design, artistic interpretation, or co-learning demonstrate a much more expansive understanding of what young people can do in museums. Staff across all museums also highlighted that adolescents want real influence but still need clear frames and support, and that "total openness" can sometimes feel overwhelming rather than empowering.

For the HUP project, this is a foundational point. Participation depends not only on creating opportunities for young people, but also on adults and institutions being willing to revise their assumptions about who can hold knowledge, express interpretation, and influence cultural space.

6. Making, doing, and perspective-sharing help bridge abstract content

The discussions also suggest that one of the most effective ways to engage children and young people with cultural heritage is through methods that make themes more tangible, relevant, and open to interpretation. Participants described the value of participatory making, artistic facilitation, perspective-sharing, and open-ended

inquiry as ways to help young people connect with content that might otherwise seem abstract, distant, or overly academic.

This is especially important in museums and institutes where collections or themes are not immediately object-based or tactile. In such environments, engagement cannot depend only on display. It often requires carefully designed methods that allow children and young people to bring their own experiences, creativity, and questions into dialogue with the content.

The Untold Stories example introduced at the beginning of the FGD workshop is relevant here. By inviting young people to create AI-generated artefacts inspired by historical figures and museum objects, it demonstrated how contemporary tools and participatory methods can create new routes into heritage, empathy, and critical reflection. At the same time, several partners noted that while museums are increasingly open to digital tools and AI, many young people actively seek manual, embodied and social experiences within museum settings, suggesting that technology should support, rather than replace hands-on, relational, and reflective forms of engagement.

7. Communication shapes belonging before participation even begins

The FGD insights underline that communication is a central participation issue. External threats identified in the workshop included perceptions of museums as irrelevant, elitist, or disconnected from young people's everyday lives. These broader perceptions are closely tied to the ways institutions present themselves publicly and communicate their relevance.

FGD discussions further highlighted that many institutions rely on one communication strategy across all target groups, which can fail to speak effectively to children, young people, and families. This means that even before a young person enters the building, the museum may already appear distant or not intended for them.

This insight suggests that communication should be understood not simply as dissemination, but as invitation. Language, tone, visual identity, outreach strategies, and framing all affect whether young people recognise museums as spaces where they are expected, addressed, and able to participate.

8. Welcome, atmosphere, and first impressions are part of participation

Another strong pattern across the material is that participation begins long before a child joins a workshop or engages with an exhibit. It begins at the entrance, in the reception encounter, and in the atmosphere conveyed by the building itself.

Participants reflected on how museums may create warm and engaging experiences during dedicated family events, yet fail to offer the same sense of welcome in everyday conditions. Questions of atmosphere, friendliness, consistency, and navigability were therefore not minor operational concerns, but central to whether children and families experience museums as places of belonging.

The workshop insight that museums are often perceived as formal, rule-bound spaces adds weight to this issue. Where the everyday visitor experience confirms those expectations, participation remains fragile. Where first impressions communicate openness, curiosity, and care, deeper engagement becomes more possible.

9. Physical and sensory design matter more than institutions often assume

The discussions also reveal that participation is spatial and sensory, not only discursive. Children and young people respond to what they can touch, notice, experiment with, and move through. Yet many museum environments still provide few opportunities for tactile, playful, or self-directed engagement.

This was especially evident in reflections on the absence of immediate, interactive entry points in some institutions, even those devoted to design or future-facing themes. Participants pointed out that if museums want children to feel involved in shaping the world, then the physical environment should also communicate invitation, playfulness, and possibility. Some museums like MAAT are translating this into concrete ideas such as quieter "refuge" areas, community rooms or more "brain-friendly" spaces that are sensitive to overstimulation and different sensory needs.

This insight reinforces a broader point from the workshop: emotional and experiential accessibility are as important as physical accessibility. If heritage engagement is to feel meaningful for young people, the environment must support curiosity and exploration rather than only observation.

10. Diversity in audience context does not remove the need to design for inclusion

The FGD workshop brought together institutions working in very different social and geographic contexts, yet a consistent theme was that diversity cannot be assumed to resolve participation challenges on its own. Some institutions benefit from being located in highly diverse cities or from having diverse staff and facilitators, and this clearly strengthens programming and interpretation.

However, the discussions also suggest that diversity of context does not automatically lead to belonging. Museums may still be perceived as elitist, inaccessible, or culturally distant. This means that representation, while important, is not enough. Inclusion must be intentionally designed through atmosphere, methods, communication, and genuine participatory mechanisms. Partners therefore emphasised that inclusion needs to be understood structurally as well as narratively, with attention to who works in museums, whose histories are centred, and how safe and welcoming different groups feel. Emerging ideas around more "brain-friendly" environments, where sensory needs, overstimulation and the availability of quieter or restorative spaces are taken seriously, illustrate how accessibility can be treated as a core design principle rather than an add-on.

For HUP, this distinction is important because it helps avoid a simplistic equation between diversity and accessibility. The more meaningful question is whether young people from varied backgrounds can see themselves as legitimate contributors to cultural heritage spaces.

11. Problem reframing is helping shift the conversation from symptoms to systems

One of the most useful elements of the FGD workshop was the structured problem reframing process. Rather than simply listing obstacles, participants worked to define who experiences the problem, what the challenge is, why it matters, and what successful change would look like. This moved the conversation away from vague concern and toward clearer design and research questions.

This systems-oriented approach is also reflected in the FGD material, where some of the strongest questions are not about how to run a single better activity, but about how to ensure museums feel welcoming, relevant, and participatory even outside facilitated moments. Such questions are more valuable because they focus on the institution as a whole rather than on isolated fixes.

The FGD outputs are therefore significant not only for documentation, but as a basis for upcoming co-design activities, including LEGO Serious Play sessions and future engagements with young participants themselves.

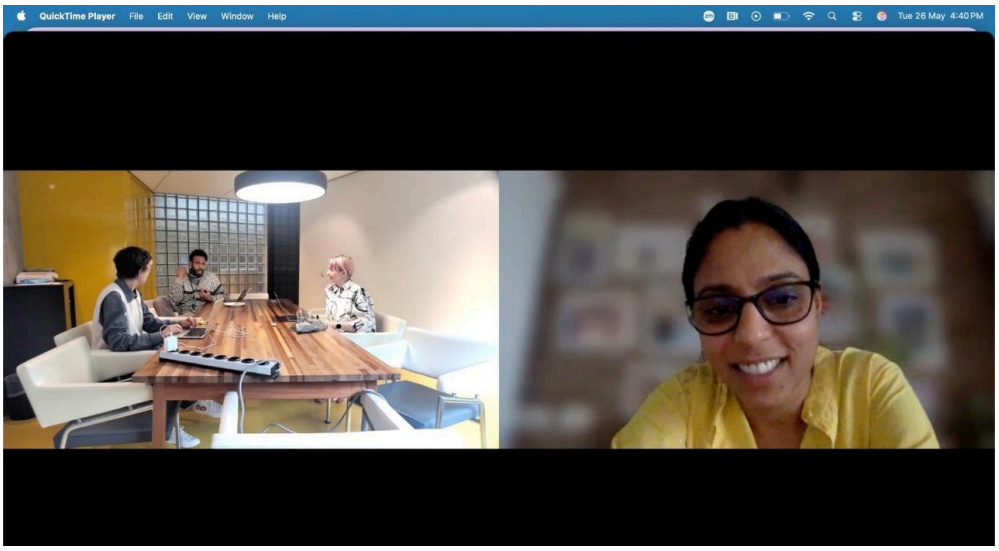
12. Meaningful participation requires time, flexibility, and institutional commitment

The final major insight cutting across the discussions is that meaningful participation is resource-intensive. It requires time to build trust, test methods, reflect, adapt, and remain open to changing course. Participants

acknowledged that this is difficult in institutions facing financial constraints, slow decision-making structures, or limited flexibility.

This matters because the language of participation can easily outpace the conditions needed to support it. Where museums do not have the time or freedom to truly co-create, there is a risk that participation becomes symbolic. By contrast, when institutions recognise co-creation as an ongoing commitment requiring investment and invest in continuity, such as multi-session laboratories or residencies where young people share personal work publicly, emotional engagement deepens and participants begin to experience the museum as a space of belonging and identity affirmation, sometimes simply captured in the realisation "I am not alone".

For the HUP project, this is an important strategic consideration. Reporting should make visible not only inspiring examples and aspirations, but also the labour, time, and institutional readiness that meaningful youth participation requires.



4. IMPLICATIONS FOR THE HUP PROJECT

The integrated findings from the FGD point to several implications for the next phase of HUP work.

- First, the project should continue to frame youth engagement as a whole-institution issue rather than only a programming challenge. The strongest barriers identified by partners relate to culture, atmosphere, communication, assumptions, and organisational systems, as well as the availability of spaces that young people can appropriate and feel they belong to.
- Second, future co-creation methodologies should build on the strong alignment among partners around the need to treat young people as contributors and interpreters of heritage. This means designing future sessions not only to gather youth feedback, but to invite young people into framing questions, generating ideas, and shaping outcomes. Partners also underlined that adolescents need both agency and structure: co-creation works best when there is clear facilitation and support, rather than unlimited openness.
- Third, HUP can use the problem reframing approach as a bridge between reflection and action. The process of identifying who is affected, what the challenge is, why it matters, and what change would look like is already generating more actionable pathways for subsequent workshops and hackathon activities.
- Fourth, the project's Joint Research Report, Learning Outcomes Framework, HUP Hackathon Manual, and future educational innovation activities can all benefit from the clear evidence emerging here: emotional

accessibility, co-creation, and institutional openness are central to meaningful youth engagement with cultural heritage. This also includes emerging ideas around "brain-friendly" museum environments that offer rest, reduced overstimulation and different modes of participation.

- Fifth, future hackathon and co-creation activities should therefore combine digital and AI-based tools with strong embodied, tactile and social components, and create space for critical reflection on technology rather than focusing solely on its novelty.

AREAS FOR CONTINUED REFLECTION

The following areas stand out for continued exploration across project partners:

- How to move from one-way educational models to sustained co-creative practice with young people.
- How to redesign intimidating or formal museum environments into more welcoming, exploratory spaces.
- How to challenge staff assumptions that limit young people's interpretive and creative roles.
- How to align communication, atmosphere, and visitor experience with participatory ambitions.
- How to create tactile, sensory, and emotionally accessible entry points into heritage.
- How to resource co-creation so that it remains substantive rather than symbolic.
- How to refine institutional problem statements into practical design questions for future workshops and youth sessions.

5. CONCLUSION

The insights from the FGD workshop and discussion provides a strong foundation for understanding current barriers and opportunities in youth engagement with cultural heritage across museum contexts in Europe. The discussions reveal broad partner alignment around the importance of participatory, youth-centred, and experimental approaches, while also making visible the institutional and cultural factors that continue to inhibit deeper participation.

A central conclusion of this report is that youth disengagement from museums is rarely just a matter of interest. It is often produced by inherited narratives, formal environments, limited trust in young people's capacities, and institutional systems that have not yet adapted to co-creative ways of working. At the same time, the examples and reflections gathered through HUP show that there is strong potential for change when museums treat children and young people as contributors, interpreters, and co-designers of heritage experience.

The value of this report lies in making those patterns visible across contexts. It shows that participation is not only something that happens in a workshop, a hackathon, or a guided tour. It is also something communicated through atmosphere, design, invitation, process, and power. This understanding will continue to inform future HUP co-creation sessions, research outputs, and educational innovation activities.

INSIGHTS FROM THE YOUTH FOCUS GROUP DISCUSSION

1. OVERVIEW

This section of the report brings together youth insights from the Netherlands, Slovenia, Greece, and Belgium to inform the Heritage Understanding & Participation (HUP) Hackathon. Across all four cohorts, young people do not reject heritage itself; they reject heritage experiences that feel passive, over-explained, adult-centered, or disconnected from their own lives.

The material shows a strong cross-country pattern: youth are far more engaged when heritage is interactive, emotionally resonant, socially relevant, and open to co-creation. At the same time, the reports reveal important contextual differences in how young people emotionally relate to heritage, what kinds of stories they want, and how ready they are to work with digital and AI-enabled formats. The Belgian insights further confirms that museums are generally viewed positively as places of learning and discovery, but shows that young people increasingly expect museums to function less like repositories and more like platforms for interactive, social, and participatory experiences.

Research base

The joint findings synthesize four main evidence streams:

- a focus group discussion with eight children aged 10–12 in the Netherlands,
- a focus group with fourteen teenagers mainly aged 13–16 in Slovenia,
- a focus group with eight teenagers aged 13–16 in Greece, and
- a focus group with six teenagers and a survey with seventeen young people, all aged approximately 10–16 in Belgium.
- a survey for young people aged 10–16 in Portugal.

Although the methods and age ranges differ somewhat across countries, the evidence is sufficiently aligned to identify shared design principles for youth-centered heritage participation. The most useful analytical frame emerging from the material is the relationship between barriers, emotional engagement, and co-creation potential.

2. CROSS-COUNTRY FINDINGS

1. Museums are still perceived as adult spaces

In both the Netherlands and Greece, youth explicitly framed museums as spaces designed more for adults than for young people. Dutch participants said museums were mainly for the "elderly," while Greek youth participants described museum language and tone as suited to older, academic audiences.

In Slovenia, this adult-centered perception appears more indirectly through school-led visitation, uneven enthusiasm, and recurring comments that museums often do not include things that interest them. Belgian respondents, while generally positive about museums as places to learn and discover, also tended to describe them primarily as educational institutions rather than as social or recreational environments, which again points to a gap around youth-centered social space and relevance. The issue across all four settings is therefore not only access, but age relevance and interpretive fit.

2. The main problem is delivery, not content

Across the four countries, the most repeated barriers are too much text, too little interaction, boring presentation, and limited relevance to everyday life. Dutch children described museums as boring, dark, quiet, and passive; Slovenian respondents frequently selected too much reading, low relevance, and preference for other activities; Greek youth highlighted complex words, information overload, unrelated exhibits, and rigid guided tours. Belgian participants echoed these patterns by pointing to excessive reading, passive observation, and feeling disconnected from exhibition content, even when they valued museums as places of learning.

This pattern suggests that youth disengagement should not be read as indifference to history or heritage. Instead, it is a critique of how institutions currently package and deliver heritage experiences.

3. Interactivity is the strongest shared demand

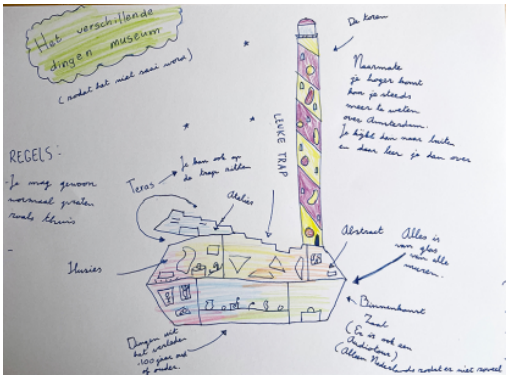
The clearest cross-country design priority is active participation. Dutch children wanted museums where they could do, make, build, and interact; Slovenian respondents favored touch-based exhibits, games, VR/AR, workshops, and creating content; Greek participants asked for direct contact, interactivity, and more participatory formats. Belgian youth similarly imagined future museums as interactive, creative, social, immersive, flexible, and multi-sensory environments in which learning happens through action, play, and discovery rather than through static display.

This means co-creation should be understood as both a process and an outcome. Youth want to help shape museum experiences, but they also want the experience itself to feel collaborative, exploratory, and hands-on.

4. Young people want human-centered and emotionally meaningful stories

Across the datasets, youth consistently preferred stories that feel close, surprising, hidden, or emotionally charged. Dutch participants preferred hidden or lesser-known stories and especially stories about people their own age; Slovenian youth strongly favored hidden histories, difficult emotional stories, and stories linked to present-day issues; Greek youth responded strongly to stories involving identity, loss, pride, injustice, and lived human stakes.

Belgian respondents likewise described emotional engagement emerging when heritage felt personal, unexpected, relatable to current life, or immersive, and they highlighted stories about people their age, hidden histories, and narratives that continue to influence the present as especially compelling. This suggests that relevance depends less on whether a topic is "historical" and more on whether it is framed as human experience. Heritage becomes meaningful when young people can imagine themselves into it, question it, or connect it to contemporary concerns.



The Various Things Museum - This is a historical museum and everything has to be more than 100 years old. All the walls are made of glass, things from the past are presented with optical illusions. There is a Creative Atelier on the top floor, for workshops. As you climb the tower, you learn more and more about Amsterdam and can see outside. Rules - you can speak as loud as you like.

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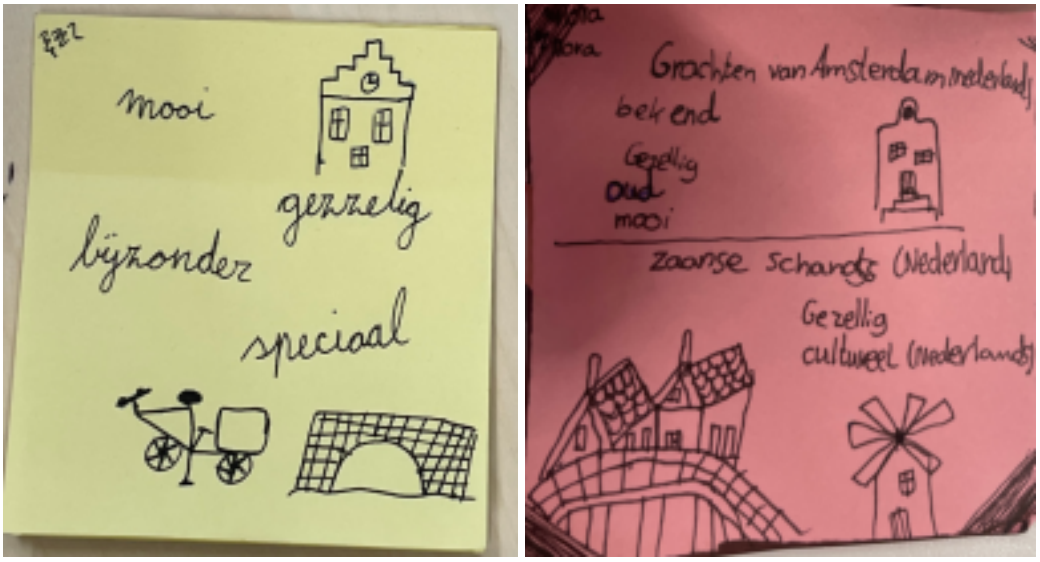


Notes the children made during the discussions about their ideas on Dutch material and immaterial heritage.

3. COUNTRY PERSPECTIVES

NETHERLANDS

The updated Dutch focus group report confirms that this cohort has the weakest baseline attachment to heritage among the three countries. Most participants said museums are mainly for older people, associated them with art and "old things," and saw them as worth visiting only when there were things to do or experience.

However, the updated report adds important nuance. Dutch children showed clear curiosity when heritage connected to multicultural identity, making, hidden stories, and embodied or immersive experiences; the Batik textile connected to colonial histories and migrant heritage sparked more interest than iconic Dutch symbols such as clogs, windmills, or canal houses, which many saw as tourist-oriented or overfamiliar.

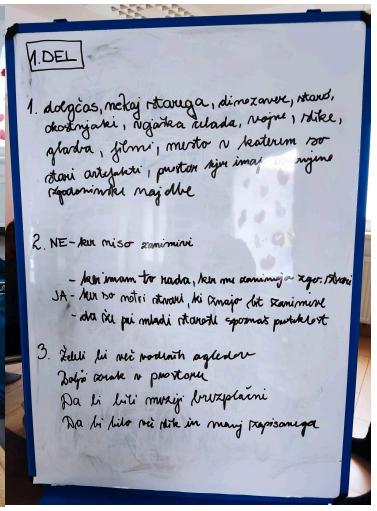
The added personas sharpen this picture. "The Creative Pre-teen" is motivated by modern art, making, and embodied experiences; "The Anime Skater" prefers social, playful, interest-led concepts over conventional museum content; and "The Mathematician" disengages from heritage unless it is linked to puzzles, innovation, or problem-solving.

These profiles suggest that Dutch hackathon concepts should not assume one uniform youth audience. The strongest concepts will likely combine creativity, culturally layered storytelling, friendship or teamwork, and optional routes for both low-tech making and selective digital immersion.

[1] Image on this page: drawing of a Museum Shaped Like a One Piece Character. The museum is designed as a building in the shape of a One Piece character. Visitors can enter through the character's mouth. (FGD, Netherlands)

SLOVENIA

The Slovenian insights suggest a mixed but promising engagement profile. Many respondents already find museums at least somewhat interesting, most have visited museums recently, and many believe museums should connect the past to the present; yet the same dataset shows recurring barriers around long texts, school-driven attendance, lack of relevance, and competition from other activities.



Slovenian youth consistently favored touch-based exhibits, games, workshops, VR/AR, and creative production. They were also open to co-design participation and frequently selected hidden histories, emotional events, and stories related to current issues, which indicates strong potential for participatory and relevance-driven heritage design.

GREECE

The Greek cohort shows the deepest emotional engagement with heritage and the most explicit articulation of interpretive barriers. Young people described pride, nostalgia, awe, curiosity, anger, anxiety, and shame when responding to ancient Greek heritage, especially when issues of historical greatness, loss, injustice, and national identity were activated.

At the same time, Greek youth sharply criticized the dominant museum experience: complicated language, heavy text, unrelated exhibits, crowding, lack of autonomy, and guided tours that create anxiety and information overload. Their responses make clear that heritage matters deeply to them, but only becomes accessible when translated into youth-centered, emotionally legible, and participatory forms.

[2] Images on this page: FGD, Slovenia; FGD Greece

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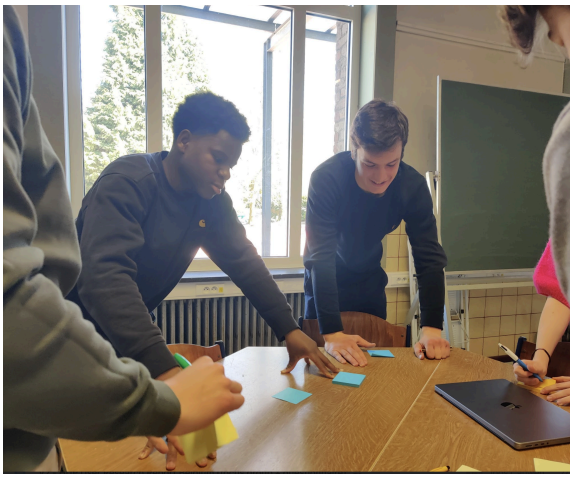
BELGIUM

The Belgian cohort presents a broadly positive but expectation-rich view of museums. Most participants had visited museums before, mainly through school and family contexts, and commonly described museums as places to learn, discover stories and objects, preserve history, and support cultural understanding.



At the same time, Belgian youth were clear that "museums need to be experienced": they want future museum environments to be interactive, creative, social, immersive, flexible, and multi-sensory, with learning happening through action, play, experimentation, and exploration rather than passive observation and long reading. Emotional engagement arose when heritage felt personal, unexpected, relatable to current life, or immersive, and many respondents expressed interest in stories about people their age, hidden histories, and narratives that still influence the present.

Belgian participants also identified barriers that mirror those in other countries: cognitive load (too much text), low perceived relevance ("nothing interests me"), competition with more interactive activities, and limited visibility of what museums offer. Practical issues such as cost and distance appeared but were not dominant, reinforcing the finding that barriers are mostly experiential rather than logistical.

PORTUGAL

The Portuguese focus group with children aged 10–16 suggests a low-to-moderate baseline interest in museums, with engagement strongly dependent on the format of the experience. Participants associated museums mainly with art and conventional cultural spaces, and identified boredom, preference for other activities, and lack of interaction as key barriers.

The strongest opportunity is to make heritage experiences more playful, interactive, and creative. Participants were attracted by games, challenges, music, and opportunities to create things such as videos, drawings, or objects. This suggests that Portuguese hackathon concepts should prioritise hands-on participation, youth agency, sensory engagement, and formats where young people can choose, play, make, and contribute.

4. DIGITAL AND AI IMPLICATIONS

Digital tools are a strong opportunity across all four contexts, but only when they deepen experience rather than adding more passive content. Dutch children were curious about AI, AR/VR, and interactive games but not interested in standard museum apps; Slovenian youth repeatedly selected AR/VR, interactive games, and creative digital making; Greek youth showed especially high readiness for immersive technology and practical uses of AI.

Belgian respondents similarly expressed the highest interest in AR/VR, interactive games, creative tools, and digital storytelling when these technologies enabled immersion, exploration, creativity, and participation, and were less interested in information-heavy apps or passive digital interfaces.

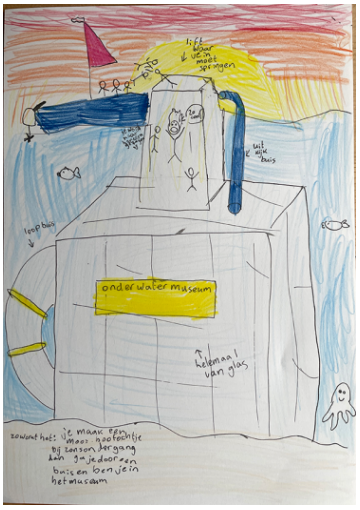
The insights from the Netherlands also show that digital enthusiasm is uneven even within one cohort. Some Dutch children are eager to use AI or immersive media, while others are more motivated by building, prototyping, or sensory making, which reinforces the need for hackathon concepts that offer multiple modes of participation.

The insights from Greece add a critical design caution: some participants advocated strongly for AI-enhanced interpretation, while others argued that only humans can convey emotional meaning and passion. The strongest HUP concepts will therefore likely use technology to support discovery, personalization, and immersion, while keeping room for human storytelling and facilitation.

5. DESIGN PRINCIPLES FOR THE HACKATHON

The evidence points to seven practical design principles for the HUP Hackathon:

1. Make heritage active, not observational
   Prioritize doing, making, touching, building, and decision-making over passive reading, responding to youth expectations across all four contexts that museums should be places to experience and experiment, not only to look and listen.
2. Reduce cognitive overload
   Simplify language, shorten labels, and structure information into memorable, youth-friendly layers, recognising that long texts and difficult words were identified as barriers in all four countries.
3. Build around emotionally meaningful stories
   Emphasize hidden narratives, youth perspectives, difficult histories, and open interpretive questions, in line with young people's preference for stories about people their age, overlooked histories, and narratives that connect past events to contemporary life.
4. Design for autonomy
   Allow self-paced exploration, different entry points, and personalized routes instead of one fixed journey for all, to counter feelings of crowding, anxiety, and loss of control in guided, text-heavy tours.
5. Use digital tools for immersion and creation
   Use AR, VR, AI-supported ideation, interactive games, and multimedia storytelling when they increase agency and support discovery, creativity, or influence over experiences, rather than replicating information-heavy apps or passive digital interfaces.
6. Create for multiple youth personas
   Recognise that some participants are motivated by art and making, others by social fun, identity, fandom, competition, or structured problem-solving; design hackathon challenges that allow different hooks and roles within the same concept.
7. Treat youth as co-designers, not just visitors
   All four contexts include evidence that young people want to help shape museum experiences and present their ideas, and the Belgian insights specifically shows interest in workshops where youth collaborate with peers, build models, use digital tools, solve real challenges, and contribute to real museum decisions.



6. HACKATHON OPPORTUNITY AREAS

The findings suggest several promising challenge areas for teams:

Opportunity area	Why it matters
Hidden stories and overlooked perspectives	Youth in all four contexts showed strong interest in lesser-known, emotionally engaging narratives rather than only canonical facts.
Interactive heritage journeys	Young people repeatedly asked for exhibits they can touch, test, play with, or shape themselves, and Belgian survey responses prioritised interactive, creative formats.
Youth-language interpretation	Greek and Slovenian insights especially show that formal language and long texts reduce participation, while Dutch and Belgian youth also resisted reading-heavy formats.
AR/VR and immersive storytelling	All four contexts indicate interest in immersive formats, but not in generic museum apps; technology is attractive when it enables exploration and presence.
Co-created social and creative spaces	Youth want museums to become more inviting, workshop-based, collaborative, and in some cases more socially enjoyable with peers, as reflected strongly in the Belgian expectation of social participation.

[3] Images in this page: the Solar System Musuem. A museum experience about the Solar System, in which a visitor climbs up the ladder to see a dome of stars. As you take the slide down you see the stars and learn about them on your way. (FGD, Netherlands); The Under Water Museum. A museum in the sea, you take a boat to get there and then jump through the lift, to descend. making it really fun. Once inside the walls are glass so you can see the sea life outside. (FGD, Netherlands)

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Persona-based experience design	The Dutch insights show that different youth profiles require different hooks, from creative making to fandom-based design to logic and innovation challenges.
Context-rich heritage experiences	Especially in Greece, the Netherlands, and Belgium, youth responded when heritage was grounded in cultural, emotional, or contemporary context rather than presented as isolated facts.

IMPLICATIONS FOR HUP

For the HUP Hackathon, the central insight is that participation is not only about inviting youth into existing museum structures. It requires redesigning heritage interpretation so that young people can recognize themselves in it, enter it emotionally, and shape it through action, dialogue, and imagination.

The insights strengthen this conclusion by showing that even within a relatively low-interest cohort, co-creation becomes attractive when it includes teamwork, making, prototyping, pitching, or building around specific interests. Young people already recognise museums as valuable places of learning but expect them to evolve from showing knowledge toward creating meaningful, interactive experiences. This means the hackathon can serve not only as an ideation method, but also as a direct participation model that mirrors the kind of heritage experience youth are asking for.

7. CONCLUSION

Across the Netherlands, Slovenia, Greece, and Belgium, youth are asking for cultural heritage experiences that are more interactive, more emotionally intelligent, more relevant to contemporary life, and more open to co-creation. The differences across the four cohorts remain important, but the updated evidence makes the shared message even clearer: when heritage becomes active, meaningful, flexible, and participatory, youth engagement rises sharply.

For HUP, this creates a strong basis for hackathon challenges centered on agency, interpretation, creativity, and collaborative design. The most promising concepts will be those that help young people not only learn about heritage, but also use it as material for identity-building, storytelling, experimentation, and collective participation.

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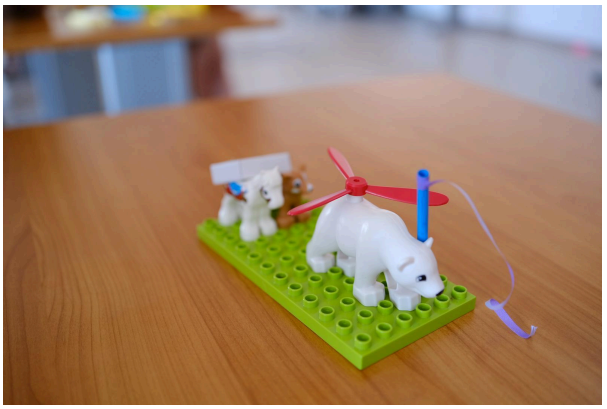
INSIGHTS FROM THE LEGO WORKSHOP

A session was conducted in Slovenia on 29th of MAY with 12 people - 6 kids (12-15) + 6 adults. The goal was to better understand what would make museums, heritage sites, and exhibitions more relevant for young people. Participants worked in three groups, each focused on one perspective: one girl, one boy, and one adult.

The session followed a hands-on model-building format. First, each group built a model showing what would make their persona go to a museum, heritage site, or exhibition. Second, they built a model showing what would hold them back. Third, they explored what would make the experience feel attractive or worth attending. After sharing ideas, each group selected key priorities and returned to their first model to improve it. The final task was to build and pitch a model showing what is needed to make a heritage story, object, or museum experience truly relevant for them and their friends.

The main learning was that participants are attracted by experiences that are interactive, playful, visual, and surprising. Technology, illusion, immersive rooms, playful entrances, and opportunities to touch, play, and interact with objects were seen as strong motivators. Participants also valued being able to choose their own pathway and contribute something to the experience, such as creating souvenirs, making pieces, or leaving a personal output.



The main barriers identified were boredom, silence, passive observation, and experiences that feel too rigid or disconnected from young people's interests. Participants were less motivated by traditional museum formats where they only look, read, and listen.

Overall, the session showed that relevance for young people depends on agency, interaction, and emotional engagement. For the HUP Hackathon, this means that future activities should support youth ownership, co-creation, hands-on experimentation, and playful ways of connecting heritage stories to young people's lives.

OVERALL CONCLUSIONS, RECOMMENDATIONS AND KEY LEARNINGS

The desk research, museum partner discussions, and youth research point to one clear conclusion: young people are not inherently uninterested in cultural heritage. Rather, heritage is often presented through formats, narratives, and institutional approaches that do not reflect how young people make meaning, build identity, and participate in the world today. Across the evidence, youth engagement becomes stronger when heritage is not treated as fixed knowledge to be received, but as something young people can question, interpret, connect with, and actively shape.

A key learning is that youth disengagement is structural, not superficial. Young people repeatedly reject experiences that feel passive, text-heavy, over-explained, adult-centred, or disconnected from their own lives. This means that Heritage institutions need to rethink how participation, interpretation, and power are organised, and how young people are invited into cultural spaces as contributors rather than only as visitors.

The findings also show that relevance is created through meaning-making, not simplification. Young people engage more deeply when heritage connects to identity, lived experience, emotional resonance, hidden or contested histories, and questions that matter today. For HUP, this strongly supports the use of VBHI alongside Design Thinking. VBHI helps young people explore why heritage matters, whose voices are included or excluded, and what meanings can be created, while Design Thinking offers a practical structure for co-creation, experimentation, and prototyping.

Another important conclusion is that co-creation must be treated as an institutional commitment, not only as a workshop method. Meaningful youth participation requires time, trust, facilitation, continuity, and visible pathways through which young people's ideas influence real outcomes. The most powerful examples are those where young people act as interpreters, advisors, makers, authors, and co-designers. Therefore, the success of the HUP Hackathon will depend on the willingness of partner institutions to embed youth voice into their ongoing practice.

The research also highlights that the conditions of participation matter. Emotional accessibility, hospitality, autonomy, social safety, language, atmosphere, and flexible entry points all shape whether young people feel that museums are spaces where they belong. Digital and AI-based tools can support engagement when they increase immersion, creativity, agency, and expression, but they should not replace tactile, social, reflective, and human forms of participation.

For the next phase, HUP should treat youth participation as a whole-institution issue; design for ownership rather than attendance; create multi-phase engagement pathways before and after hackathons; prioritise emotional and relational accessibility; use technology critically and creatively; and support museum partners to build the institutional readiness needed for meaningful youth participation.

Overall, the HUP Hackathon should be understood as more than a creative event format. It is a practical test of whether cultural heritage institutions can move from transmission to dialogue, from access to authorship, and from one-off engagement to sustained cultural relationship-building. If implemented with continuity, institutional commitment, and openness to shared authority, HUP has the potential not only to create more engaging heritage experiences for young people, but also to help museums rethink what participation means in contemporary cultural life.