Era's muse

STEAM JOURNEY TOOLS

2019-1-SE01-KA201-060604

Erasmus+

STEAM ROUTES:

THE JOURNEY TO INTRODUCE STEAM TO YOUR MUSEUMl Museu de

When we talk about STEAM we mean an educational model that originated in the United States. The acronym in English refers to Science, Technology, Engineering, Arts and Mathematics. This model, born with the aim of creating a tool that helps to generate new solutions in the face of an increasingly competitive world, moved quickly from the business sector to education in order to stimulate a type of skills necessary for the future of students, more and more technological.

In this sense, it is key that all educational spaces beyond the regulated schools understand and adapt the new school curricula in this context. In this context, cultural agents and museums in particular play a very important role, as they have a high capacity to offer knowledge, educational activities, learning methods, etc. They have everything they need to introduce art and science from a useful and prosperous approach to the development of young people and children. But in order for students to be able to adopt competent knowledge for the future that awaits them, these centers must be able to incorporate tools and new methodologies that make the most of these competencies. STEAMs have become a key tool for doing just that.

The Museu de l'Hospitalet wanted to put its grain of sand. Through Eras Muse, he has produced and is hosting the exhibition "STEAM Journey", which links museums and heritage with STEAM's secondary education. This exhibition, which is on display at the museum until June 5, also has a series of extended contents that will take us deeper into some of the topics. He also shares some tools designed to help us introduce STEAM to the museum.

HOW DO WE USE THE TOOLS?

The "STEAM Journey" exhibition aims to give you the keys so you can start a project that links STEAM with your museum. To do this, in addition to providing you with basic information, we present some TOOLS that will help you to develop an idea and to transform it into a future purpose.

These TOOLS are a tool that you can use to build the foundations of a project. These are forms that must be completed in the following order:

1. TEAM

2. EMPATHY

3. IDEATION

4. CANVAS

1. TEAM

Every project requires a multidisciplinary team to carry out different tasks. The first step will be to identify the people on this team and share roles and give common direction.

The file consists of three sections: “PRETEXT”, “STEAM”, and “METHODOLOGY”. In each of them you will find some boxes that need to be ticked. The idea is to find excuses to help us give direction and reasons for the project. For example, if I come from the field of technology and I would like to work on the skills I develop in a technology project, but I would also like to link it to artistic skills, I could tick the boxes "Technology" and "Art" in from the “STEAM” section.

You can check as many boxes as you want. These will not be final, as the idea of the project may vary as we fill out the forms. This first is for guidance only.

2. EMPATHY

The Empathy tab does not focus on what or how, but on who. At this point, it's about imagining a focus character who will act as a link between the museum or cultural center and the STEAM project to be developed. This character will be the target audience of the project. As a group, you need to think about their tastes and concerns and understand how the action should be focused.

3. IDEATION

It's time to dump her and move on. This sheet has four different rounds.

In the first round, under the name "Creativity Round # 1", you will have to think 8 project ideas individually. That is, if your group has 4 members, you will have a total of 32 ideas at the end. Don't cut yourself and imagine without limits!

In the second round of creativity you will share the ideas, choosing one or two ideas per person and reserving the others (there is no "bad" idea). At this point you can adjust these project sketches to new comments and ideas.

In the "Top 3" section, you need to select only 3 of the ideas. Finally, you have to choose the winning idea and write it in the final box.

4. CANVAS

Now is the time to connect the activity with the environment. In this tab you will have to finish defining the winning project by filling in the blanks. You will have to choose one or more methodologies on which your action will be based, which you

will have learned from the contents of the exhibition (or you will be able to contribute others).

In addition, at this point we will begin to think about how to make the project a reality: we will have to define the resources that will be needed to carry it out, the knowledge that the target audience must have, the spaces and the people that will be needed. for it to work and finally the financial resources you will need.

Finally, you will have the basics to start shaping your activity or challenge. Make commitments: What are the first steps you need to take? Who will do that? How many days do we have to take each action? Cheers!

TEAM

MEMBERS

Name:

Museum:

Especialism:

Choose one or more options in each column to develop your project.

PRETEXT

- ☐ ODS
- ☐ International Days
- ☐ Others: _____

STEAM

- ☐ Science
- ☐ Technology
- ☐ Engineering
- ☐ Arts
- ☐ Maths

METHODOLOGY

- ☐ Project-based learning (PBL)
- ☐ Citizen science
- ☐ Design Thinking
- ☐ Flipped Classroom
- ☐ Challenge-based learning
- ☐ Gamification
- ☐ Thinkering
- ☐ Service Learning
- ☐ Thinking Based Learning

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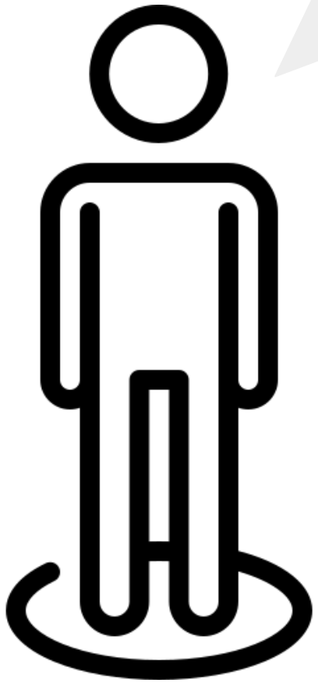
EMPATHY

My name is

I'm from

I have years old

and right now I'm



What is worrying me?

What do I like?

What do I see and listen?

What do I hate?

What do I do? And what do I do with?

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IDEATION

CREATIVITY ROUND #1

Individually, make a "crazy eight", choose one from the 8 ideas and write it down.

CREATIVITY ROUND #2

Share the ideas and go one step further: Improve them by thinking of a character ... how would he / she solve the challenge?

TOP 3

Individually, vote and choose the 3 finalist ideas.

WINNER IDEA

As a group, choose the winner idea and, if it's needed, reformulate it.

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CC BY SA

CANVAS

VALUE PROPOSAL

THE PROJECT

Following the excuse_____

we'll work the STEAM/s_____ with the

methodology_____and we will do an activity that is

_____

and it is aimed at_____

	RESOURCES	LIMITATIONS
TOOLS		
KNOWLEDGE/ CAPACITY		
SPACES		
PEOPLE		
FINANCING		

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STEAM i els museus

Un binomi guanyador

Museus i STEAM? Els nous processos de transformació educativa han fet que l'educació i els aprenentatges traspassin les parets de les aules per treballar amb una perspectiva global que cerca connexions entre diferents camps del coneixement i diversos actors educatius. És un context nou que reclama aliats perquè els museus esdevinguin espais clau i es creï un cercle virtuós entre la comunitat educativa i els museus. Per aconseguir-ho les STEAM són una eina fonamental.

El "Trajecte STEAM" ofereix un entramat d'experiències inspiradores i casos d'èxit com si recorreguessis les línies de metro d'una ciutat. Els qui visiten l'exposició poden fer un trajecte per referents ideals i coneixements clau que apliquen les STEAM als museus.

Fomentem, doncs, aquest cercle virtuós! Benvinguts a "Trajectes STEAM".

STEAM and museums.
A winning binomial

Museums and STEAM? The new educational transformation processes have taken learning beyond the walls of the classroom, to work with an all-encompassing approach that seeks out connections among different fields of knowledge and diverse educational stakeholders. This is a new context that requires allies for museums to become essential spaces, and creation of a virtuous circle between the educational community and museums. STEAM are key tools to achieve these goals.

The "STEAM Journey" proposes a network of inspiring experiences and success stories, arranged like stations of an underground rail network. Visitors to the exhibit will travel through the main ideals and knowledge applied by STEAM to museums.

Let's make the virtuous circle a reality! Welcome to "STEAM Journeys"!

Teniu accés a més informació als QRs que trobareu a cada un dels panells de l'exposició. Us convidem a fer-vos una guia STEAM pròpia.

You can get more information from the QR available on each of the exhibit panels.Make your own STEAM guide.

QR

Mapa

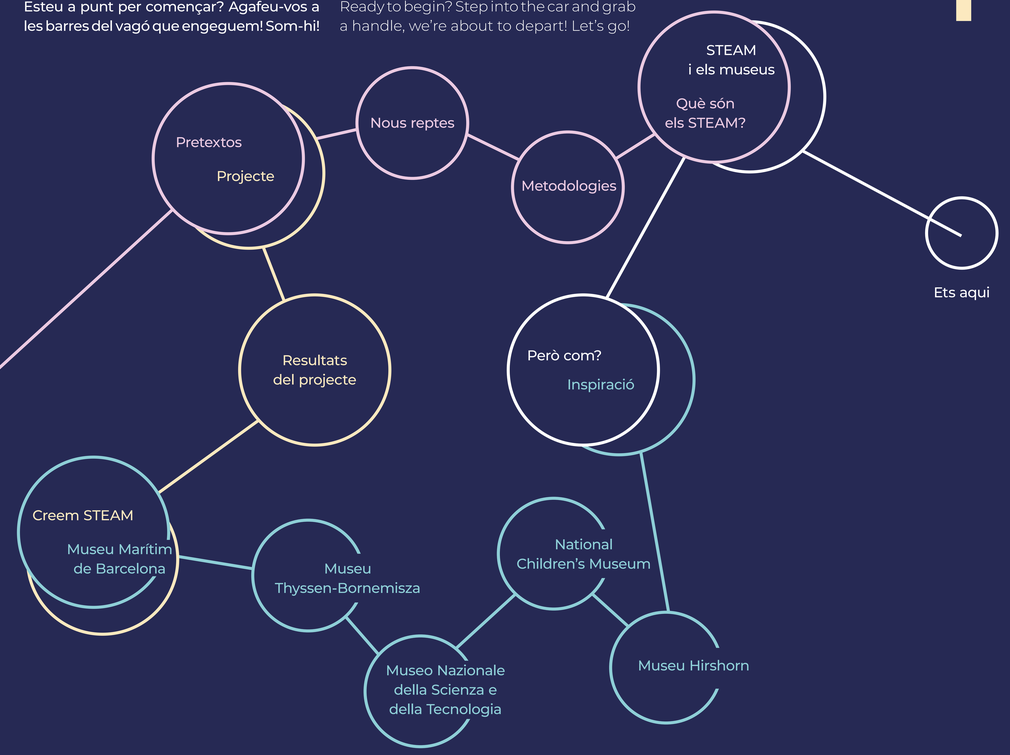
Map

Sou al punt de partida d'un trajecte que us convida a aprendre, a inspirar-vos i a assumir compromisos per incorporar les STEAM en el context dels museus i en l'educació. Quin recorregut heu de seguir?

Esteu a punt per començar? Agafeu-vos a les barres del vagó que engeguem! Som-hi!

You are about to embark on a journey. As you travel, you will be invited to learn, be inspired and commit to making STEAM a part of museums and education. What route should you take?

Ready to begin? Step into the car and grab a handle, we're about to depart! Let's go!



Trajecte STEAM

BENVINGUTS A
"TRAJECTES STEAM"!

Direcció i organització:
Museu de L'Hospitalet

Conceptualització i redacció de textos:
Adhoc Cultura i Museu de L'Hospitalet

Edició textos català:
Addenda S.L

Traducció a l'anglès:
PhbInterpret, S.L.

Conceptualització museogràfica:
Adhoc Cultura i Misterio Studio

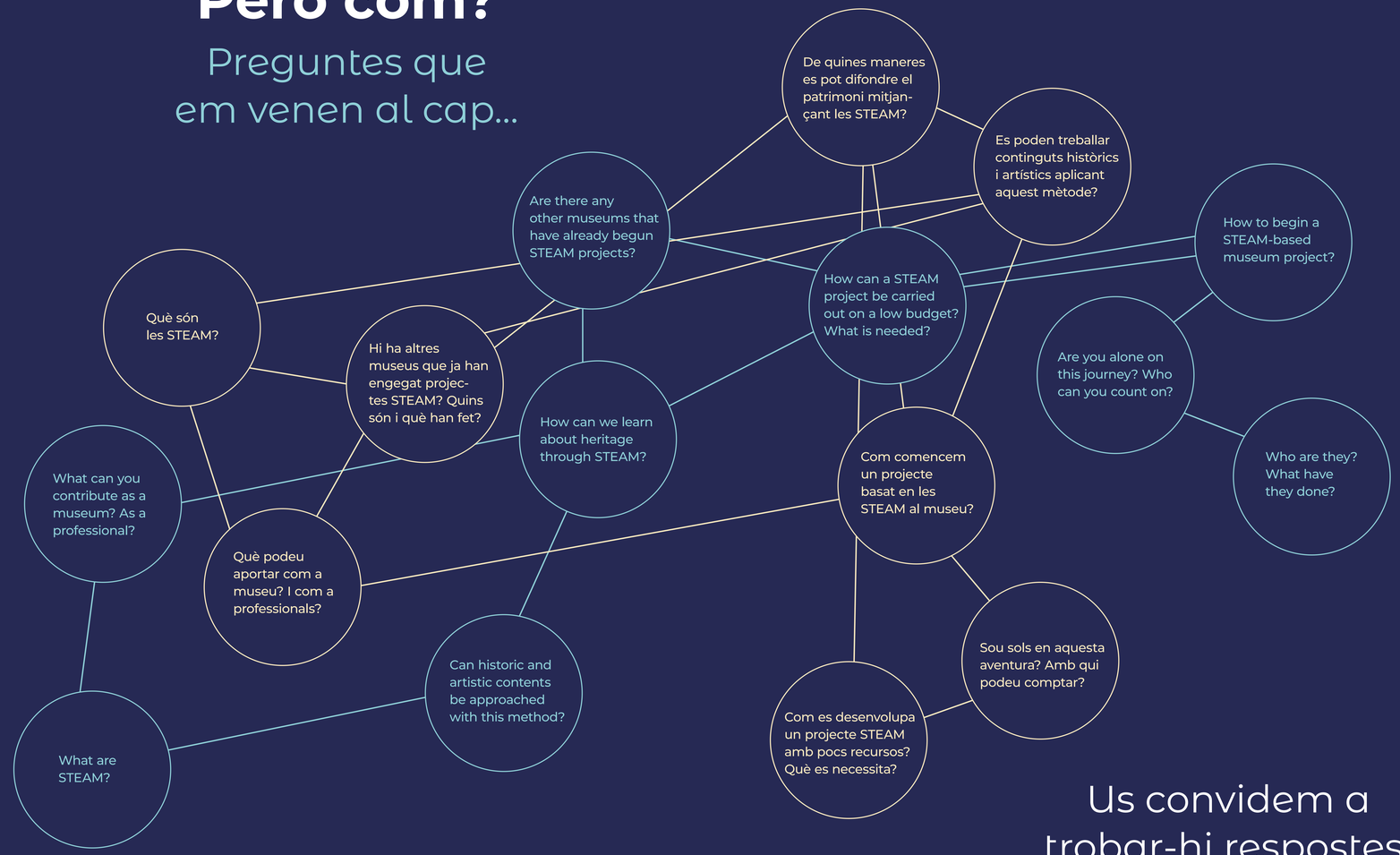
Disseny gràfic i museografia:
Mireia Domènech per
Misterio Studio

Impressió i Muntatge:
MAD Rotulación

Agraïments:
Östra Gymnasiet (applicant organisation)
Lycée Louis Jouvet de Taverny
Associazione Palermoscienza
Liceo Cannizzaro
Lietuvos nuotolinio ir e. mokymosi (LieDM) asociacija
Elpis Association
Manisa Sosyal Bilimler Lisesi

Però com?

Preguntes que em venen al cap...



But... how?
Questions that come to my mind...

Us convidem a trobar-hi respostes!

We encourage you to find some answers!

Què són les STEAM?

Cap a un model interdisciplinari

Atureu-vos! Parada obligatòria. Ja sabeu què són les STEAM?

El sistema educatiu STEAM fa referència a les sigles en anglès SCIENCE (ciència), TECHNOLOGY (tecnologia), ENGINEERING (enginyeria), MATHS (matemàtiques) i ARTS (arts).

Cada vegada es treballen les STEAM més sovint i a més centres educatius. Darrerament la sigla A ha agafat més protagonisme, atès que s'entén la creativitat com un element essencial per estimular el pensament.

Més enllà del significat de les sigles o dels coneixements o matèries concretes que s'haurien d'ensenyar o de bandejar a les aules, aquest sistema, basat en la cultura maker, vol estimular en els alumnes habilitats que els despertin el pensament crític, i també introduir un mètode que afavoreixi l'experimentació i el raonament. Aquests aspectes són fonamentals pel mètode científic. No es tracta de prioritzar la ciència i la tecnologia, sinó el pensament humà.

Us animeu a descobrir més coses sobre un mètode que revoluciona els centres educatius i els equipaments culturals?

What are STEAM?
Progressing toward an interdisciplinary model

Halt! Mandatory stop. Do you know what STEAM are by now?

The STEAM educational system refers to the initials of SCIENCE, TECHNOLOGY, ENGINEERING, ARTS and MATHS. STEAM are being explored more frequently and in more educational institutions. Lately the "A" has taken on a more prominent role, as creativity comes to be understood as an essential element to stimulate thinking.

Beyond the meaning of the letters, knowledge or subjects that must be taught in or banished from the classroom, this system, based on the maker culture, seeks to stimulate in students skills that arouse critical thinking, and introduce a method that promotes experimentation and reasoning. These are fundamental aspects for the scientific method. Priority is not given to science or technology, but human thinking.

Want to learn more about the method that is revolutionizing educational institutions and cultural facilities?

Més informació:

More information:

QR

S	T	E	A	M
SCIENCE	TECHNOLOGY	ENGINEERING	ARTS	MATHS
CIÈNCIA	TECNOLOGIA	ENGINYERIA	ARTS	MATEMÀTIQUES

Metodologies

Assolim i apliquem el coneixement

Aquesta parada us convida a esbrinar què són les STEAM!

L'univers STEAM obre les portes a nous mètodes d'aprenentatge que malden perquè els alumnes siguin protagonistes actius en el procés d'aprenentatge. L'ús d'aquests mètodes els capacita per dur a terme exercicis i assolir coneixements a partir d'una feina centrada en els valors, l'autonomia, la quotidianitat, l'autogestió, la recerca, la creativitat i el pensament reflexiu i crític.

Us presentem a continuació alguns d'aquests mètodes:

Methodologies.
Reaching and applying knowledge

At this stop you will have the opportunity to find out what STEAM are!

The STEAM universe opens doors to new learning methods designed for students to play an active role in their learning process. Using these methods prepares them to carry out exercises and reach knowledge through work focused on values, autonomy, daily life, self-management, research, creativity and reflective, critical thinking.

A few of these methods are:

Més informació:

More information:

QR

- APRENENTATGE BASAT EN PROJECTES: FER RECERCA, APRENDRE I RESOLDRE
  Project-based learning: researching, learning and resolving
- DESIGN THINKING: LES PERSONES AL CENTRE
  Design Thinking: people at the centre
- ABR / APRENENTATGE BASAT EN REPTES: DESAFIAMENTS AMB RESPOSTA
  CBL / Challenge-based learning: challenges with answers
- THINKING BASED LEARNING: REPTES DIARIS I APRENENTATGES CONSTANTS
  Thinking-based Learning: daily challenges and constant learning
- APRENENTATGE DE SERVEI VINCULAT A LA COMUNITAT
  Service learning linked to the community
- LUDIFICACIÓ: APRENENTATGES AMB RECOMPENSA
  Gamification: learning with rewards
- FLIPPED CLASSROOM: CAPGIREM LES AULES
  Flipped classroom: turning classrooms around
- CIÈNCIA CIUTADANA: RECERCA COMPARTIDA
  Citizen science: shared research
- TINKERING: PENSAR AMB LES MANS
  "Tinkering": thinking with your hands

- APRENENTATGE SIGNIFICATIU
  Significant learning
- DESENVOLUPAMENT DE LES HARD SKILLS O COMPETÈNCIES DURES I DE LES SOFT SKILLS O HABILITATS SOCIALS
  Development of hard skills and soft skills
- NEURODIDÀCTICA
  Neuroeducation
- L'EDUCADOR PASSA DE SER PROFESSOR A FACILITADOR
  The educator goes from teacher to facilitator
- L'ALUMNE SE SITUA AL CENTRE DEL PROCÉS EDUCATIU
  The student is positioned in the centre of the educational process
- EDUCACIÓ INCLUSIVA
  Inclusive education
- EL PROCÉS I LA METODOLOGIA FORMEN PART DE L'APRENENTATGE
  Process and methodology form part of learning
- TREBALLAR EN XARXA
  Working in a network

Nous reptes

On cal situar els museus?

Com a museus i centres culturals quines respostes podem oferir a una societat que es transforma constantment?

What responses can museums and cultural centres offer a society in constant transformation?

Com col·laborem a repensar les àrees del coneixement i de l'educació?

How can we help rethink the areas of knowledge and education?

Com donem eines STEAM per despertar la curiositat i la creativitat?

How can we give STEAM tools to arouse curiosity and creativity?

Volem cercar les maneres de fer funcional aquest model educatiu en l'àmbit patrimonial i cultural.

Però... per on hauríem de començar?

Podem treballar amb projectes coliderats? Unir esforços i compartir interessos ens hi pot ajudar?

New challenges.
Where should museums be situated?

We are seeking the ways to make this educational model function in the heritage and cultural realm.

But, where should we begin?

Can we work with co-led projects? Can joining forces and sharing interests help us do this?

En voleu saber més?
Feu clic aquí per accedir al full A4.

Want to find out more?
Click here to access the A4 sheet.

QR

Pretextos

Els guies de les STEAM, històries per explicar

En tot trajecte necessitem guies que ens orientin i ens reforcin el viatge, que ens expliquin històries... Nosaltres us en presentem un parell. Se us n'acudeixen més? Aneu-hi pensant...

Pretexts. STEAM guides, stories to tell.

Travellers can always use a good guide, to show the way, make the trip more interesting... and tell a story or two. Let us introduce you to a couple. Do any more come to mind? Think about it!

Els disset Objectius de Desenvolupament Sostenible (ODS) marcats per les Nacions Unides permeten de tractar temes d'interès global. Sabíeu que els museus tenen un paper clau en l'assoliment d'aquests objectius? Exacte! Com que són agents aglutinadors de cultura, societat i benestar hi tenen molt a aportar i molt a dir. Ja n'heu parlat amb el museu?

The 17 Sustainable Development Goals (SDG's) defined by the United Nations are the ideal pretext to discuss issues of global interest. But did you know that museums play an important role in meeting these goals? Exactly! As agents for the cohesion of culture, society and well-being, museums have a lot to say, and contribute. Have you spoken with a museum lately?

Els dies internacionals són un bon pretext per incloure les STEAM en els nostres projectes culturals, atès que ens donen l'oportunitat de parlar, de manera puntual, de qüestions d'interès.

Nosaltres us en proposem uns quants... En podríeu esmentar més?

"International" or "world" days are a good pretext to work STEAM into your cultural projects, as they are special occasions to bring up relevant issues.

Here are a few proposals. Can you think of any others?

MAY	MAIG	
Europe Day	Dia d'Europa	09
Fibromyalgia and Chronic Fatigue Syndrome Awareness Day	Dia Mundial de la Fibromiàlgia i la Fatiga Crònica	12
International Day of Light	Dia Internacional de la Llum	16
International Day Against Homophobia, Transphobia and Biphobia	Dia Mundial contra l'Homofòbia, la Transfòbia i la Bifòbia	17
International Museum Day	Dia Internacional dels Museus	18

JUNY		JUNE
05	Dia Mundial del Medi Ambient	World Envoroment Day
08	Dia Mundial dels Oceans	World Oceans Day
18	Dia de la Gastronomia Sostenible	Sustainable Gastronomy Day
30	Dia Internacional dels Asteroides	International Asteroid Day

Inspiració
Inspiration

(T) National Children's Museum

Estructurem el coneixement

Recorrem uns quants quilòmetres amb metro i, sense sortir de Washington DC, arribem al National Children's Museum (Museu Nacional dels Infants)! És un museu vertebrat per les STEAM, on es viuen experiències que canvien la manera de veure, de gaudir i de sentir un museu.

(T) National Children's Museum. We structure knowledge

Let's take the subway a couple more kilometres, but without leaving Washington D.C., to the National Children's Museum. It is a museum built around STEAM, where visitors have experiences that change the way they see, enjoy and feel such an institution.

***QUÈ?** Un museu amb un ADN format per les STEAM. Tot allò que fa i que ofereix es basa en aquest mètode, i en mostra la versatilitat i aplicabilitat en multitud de contextos diferents.
***PER A QUI?** Públic familiar, especialment infants.
***COM?** Ús del mètode tinkering i de la ludificació.

***WHAT IS IT?** This is a museum whose DNA is informed by STEAM. Everything that happens and is offered within this method shows its versatility and applicability in a whole range of different contexts.
***FOR WHOM?** Visiting families, and especially children.
***HOW?** Through the "tinkering" method and gamification.

Més informació:

More information:

QR

(A) Museu Thyssen-Bornemisza

Els videojocs són art...

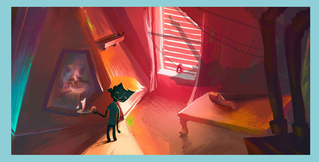
...però l'art pot ser un joc? Propera parada: Madrid. Quin viatge! Us heu aturat davant les portes del Museu Thyssen-Bornemisza, un centre pioner en les activitats educatives innovadores. En aquest cas us presentem Nubla, un dels projecte amb més ressò i el primer videojoc inspirat en el museu d'art i en les seves obres. Aquí l'art i el videojoc es fusionen per oferir-vos una experiència STEAM única.

(A) Thyssen-Bornemisza Museum. Video games are art...

...but can art be a game? Next stop: Madrid. What a trip! You've stopped in front of the Thyssen-Bornemisza Museum, a forerunning museum when it comes to innovative educational activities. We'd like to introduce you to Nubla, the project everyone's talking about. It's the first video game based on an art museum and its works. With Nubla, art and video games come together to offer players a unique STEAM experience.

***QUÈ?** Nubla és el resultat d'un projecte fet per un equip multidisciplinari en què professionals i joves uneixen esforços per crear un binomi que comprèn la narrativa pròpia dels videojocs i la història de l'art.
***PER QUI?** Fet amb i per a joves.
***COM?**

***WHAT IS IT?** Nubla is the result of a project created by a multidisciplinary team in which professionals and young visitors have created a new binomial: a classic video game narrative and art history come together.
***FOR WHOM?** Made with and for young people.
***HOW?** Usage of gamification and citizen science.



Més informació:

More information:

QR

(S) Museu Hirshhorn, institut Smithsonian

No hi ha ciència sense art

I tampoc hi ha art sense ciència.

Aquest transbord ens ha portat als Estats Units. Benvinguts! Sou a l'institut Smithsonian, que inclou altres equipaments com ara el museu i jardí d'escultures Hirshhorn. És un dels centres que representa més bé el binomi entre art i ciència, amb una oferta d'activitats ben àmplia. Entre les seves atractives propostes us convidem a descobrir "ARTLAB+".

(S) Hirshhorn Museum, Smithsonian Institute. There is no science without art

Nor is there art without science.

This transfer has taken us to the United States. Welcome! You're at the Smithsonian Institute, which encompasses several other facilities like the Hirshhorn Museum and Sculpture Garden. The Hirshhorn is one of the centres that best represents the binomial of art and science, with a broad offering of activities. Among its many enticing proposals, visitors are encouraged to discover "ARTLAB+".

***QUÈ?** Espai que convida els joves a fer ús de la tecnologia, dels materials artístics i de les eines de treball, i on reben assessorament en art i en ciència. Aquesta concepció crea un ecosistema innovador i promou una comunitat sòlida que aprèn a compartir.
***PER QUI?** Adolescents d'entre 13 i 19 anys.
***COM?** Adaptació del concepte d'espai maker.

***WHAT IS IT?** A space that invites young people to use technology, art materials and tools, and where they receive guidance in arts and sciences. This concept creates an innovative ecosystem, promoting a solid community that learns to share.
***WHO IS IT FOR?** Young people from 13 to 19.
***HOW DOES IT WORK?** It's an adaptation of the "maker" space.

Més informació:

More information:

QR

(E) Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci

L'art de pensar amb les mans

En un moment ens hem traslladat a Milà, a Itàlia. El Museu Nacional de la Ciència i de la Tecnologia Leonardo da Vinci és dins l'antic monestir de San Vittore al Corpo, però aquesta situació no representa cap entrebanc per bellugar-ne les parets i introduir en el programa (o tenir com a filosofia de treball) activitats pensades en clau STEAM, com és el cas de la iniciativa The Tinkering Studio.

(E) National Museum of Science and Technology Leonardo da Vinci. The art of hinking with your hands

It's only taken us a moment to reach Milan, Italy. The National Museum of Science and Technology Leonardo da Vinci is located inside the historic San Vittore al Corpo monastery. But that hasn't stopped its staff from moving walls around, working with a STEAM philosophy and including STEAM in their programme, as they've done with the Tinkering Studio project.

***QUÈ?** Espai experimental per crear projectes on tenen un paper cabdal la tecnologia, la ciència i les arts, i que es basen en el mètode de fer amb les mans.
***PER A QUI?** Per a gent de totes les edats, especialment per al públic infantil.
***COM?** Ús del mètode tinkering.

***WHAT IS IT?** An experimental space for visitors to create projects in which technology, science and the arts play a leading role, based on the hands-on method.
***FOR WHOM?** For museum visitors of all ages, especially children.
***HOW?** Use of the "tinkering" method.

Més informació:

More information:

QR

(M) Museu Marítim de Barcelona

Naveguem amb les STEAM

Aquest viatge tan mogut us duu de nou a les portes de Barcelona. Us deixem a la darrera parada de la línia verda, que es diu Inspira, davant el Museu Marítim. No oblideu d'explorar-ne les activitats STEAM en què els LEGO són el grans protagonistes! I és que el MMB ha donat vida a tres activitats ideades amb l'empresa Robotix, el soci oficial de LEGO Education a Espanya, per transformar el museu no únicament en un espai d'aprenentatge, sinó també en un lloc de socialització i de treball en equip.

(M) Maritime Museum of Barcelona. Sailing with STEAM

This fast-paced trip has brought you back to the gates of Barcelona. We'll drop you off at the last stop of the green line, called Inspira, in front of the Maritime Museum. Remember to explore STEAM activities where LEGO plays a starring role! The Maritime Museum of Barcelona and Robotix, official partner of LEGO Education in Spain, have created three activities that make the museum not just somewhere to learn, but also a place to make friends and practice teamwork.

***QUÈ?** Gràcies al sistema d'aprenentatge LEGO, basat en les STEAM, s'han desenvolupat tres activitats educatives intuïtives, inclusives, adaptables i divertides que permeten de conèixer el món dels vaixells i de la navegació de ben a prop. L'experimentació en primera persona i l'aprenentatge per assaig i error proposen tot de reptes als participants.
***PER QUI?** Alumnes d'educació infantil, primària i secundària.
***COM?** Ús del mètode ABR (aprenentatge basat en reptes) i el thinking based learning.

***WHAT IS IT?** Thanks to LEGO's STEAM-based learning system, three intuitive, inclusive, adaptable and entertaining educational activities have been developed through which users familiarize themselves first-hand with the world of ships and navigation. Participants will face an entire range of challenges through hands-on experimentation and trial-and-error learning.
***FOR WHOM?** Nursery, primary and secondary schools.
***HOW?** Through CBL (challenge-based learning) and thinking-based learning.

Més informació:

More information:

QR

El projecte

Qui, què i per què?

El Museu de l'Hospitalet passa per un procés de transformació; és un punt d'inflexió que ha de marcar la dècada que ve en la manera de treballar i de connectar amb la gent de l'Hospitalet i amb la comunitat europea en general. En aquest context es desenvolupa el projecte europeu Era's Muse, museus de nova era: Entorns d'ensenyament STEAM per a l'educació secundària), liderat per l'institut suec Östra gymnasiet i del qual el Museu de l'Hospitalet és soci.

El projecte consisteix a aplicar en el pla museístic un mètode educatiu basat en l'aprenentatge mitjançant les STEAM. Amb aquesta premissa es vol dotar els museus dels coneixements necessaris per elaborar un currículum o un mètode conjunt que incideixi en els adolescents perquè desenvolupin les seves habilitats.

En aquest marc s'engloben els Trajectes STEAM, concebuts com una acció clau per assolir els objectius marcats en aquest projecte europeu.

The project. Who, what and why?

The Museum of l'Hospitalet is in a transformation process, a turning point that will define how we work and connect with the people of l'Hospitalet and the European community in general over the coming decade. In this context, the European Project "Era's Muse, New Era's Museums: STEAM Teaching Environments for Secondary School Education" is being carried out, led by the Swedish high school Östra gymnasiet, partner of the Museum of l'Hospitalet.

The project consists of applying an educational method based on learning through STEAM in the museum's plans. Working under this premise, the idea is to equip museums with the knowledge necessary to draw up a curriculum or shared method that will help adolescents develop their skills.

STEAM Journeys, conceived as key actions through which to achieve the aims defined in this European project, fall within this framework.

Més informació:

More information:

QR

Cofinanciado por la Unión Europea

Museu de L'Hospitalet

Resultats del projecte

Museus de nova era: STEAM per a secundària

Era's Muse és un projecte subvencionat pel programa Erasmus+ de la Unió Europea, que ofereix la oportunitat de crear associacions estratègiques per a projectes de cooperació entre diferents països.

Aquest projecte té com a objectiu final elaborar un mètode educatiu basat en l'aprenentatge amb les STEAM als museus que es materialitzarà en els següents productes intel·lectuals:

Project outcomes.
New Era's Museums: STEAM Teaching Environments for Secondary School Education

Era's Muse is a project financed by the Erasmus+ Programme of the European Union. It offers an opportunity to create strategic partnerships for cooperation projects among different countries.

This project aims to develop an educational method based on learning with STEAM in museums, which will be materialized in the following intellectual products:

- **Una plataforma d'aprenentatge en línia: per proporcionar informació, eines i recursos als estudiants, als professors, als empleats del museu, als empresaris, a les mares, als pares i a tot el personal implicat en l'educació.**

  An on-line learning platform: to provide information, tools and resources to students, teachers, museum employees, business owners, mothers, fathers and anyone else involved in education.

- **Un manual educatiu i un paquet de recursos per als educadors amb instruccions per aprendre en un entorn STEAM, amb recursos i eines basats en un context museístic.**

  An educational manual and resource package for educators with instructions to learn in a STEAM environment, with materials and tools based on a museum context.

- **Cursos oberts en línia (mini MOOC en anglès): es desenvoluparan breus cursos en línia oberts per tothom basats en les STEAM per aprendre de manera activa que s'adrecen als estudiants.**

  Mini-MOOC's (Massive open online courses): on-line courses based on STEAM and targeting students will be open to everyone for active learning.

- **Aquests productes intel·lectuals ajudaran els adolescents a definir la personalitat i les habilitats entorn de diversos temes que es poden fer servir de contextos per dur a terme les activitats d'ensenyament i d'aprenentatge basades en les STEAM.**

  These intellectual products will help the young people define the personality and skills around a number of subjects that can be used as contexts to carry out STEAM-based teaching and learning activities.

Creem STEAM

Noves propostes

CASOS D'ÈXIT

SUCCESS STORIES

EINES

TOOLS

PROJECTES EN MENT

PROJECTS IN MIND

Creem STEAM

Fem xarxa

Deixa'ns les dades perquè et contactem

Leave us your details. We'll be in touch!

Esperem que hagueu gaudit del trajecte!

We hope you've enjoyed the journey!