

Project Inspire: Digital Engagement and Innovation

Examples of excellent and innovative digital engagement

SCIENCE CENTRES DEC 10, 2020 05:48PM

Citizen sensing

What is Citizen Sensing?

Citizen Sensing is about empowering people and places to understand and use smart tech and data from sensors to tackle the issues they care about, connect with other people who can help, and take positive, practical action.

Sensors that collect data are increasingly embedded into our lives – in our mobile phones, streets and buildings, cars and powerlines, even in our kettles and clothes. Too often in this swelling flow of connectivity and information people and places are treated as passive sources of data. What information is being collected? By whom and for what purpose?

Example of a Citizen Sensing Project:

Air Quality Data: The Bristol Approach

Adverse health effects caused by air pollution are increasingly being recognised and debated at national and international level. Knowle West Media Centre is currently working with communities in East Bristol to gather air quality data using sensor technology to see what can be done to tackle the problem of poor air quality at a local level.

THE BRISTOL APPROACH



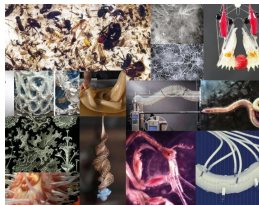
Science and Art

Public interventions to raise awareness of issues and challenges using art and mixed media...

Other Animals | Pervasive Media Studio

Other Animals is a series of public interventions which uses soft robotic sculptures to raise awareness of local ecological issues and the wider climate crisis. This project was started in January 2020 as part of the Watershed/MAYK Winter Residency program and is currently at the research and development stage.

WATERSHED



Gaming

Nesta: How to use games to involve the public in decisions about research and innovation policy.

How to use games to involve the public in decisions about research and innovation policy

In Cambridge, they managed it by using Minecraft and virtual reality. Participants were able to walk around a virtual model of a planned neighbourhood regeneration project, then roll up their sleeves and build their own ideas. The workshop generated 'a hugely diverse and creative range of proposals' said James Delaney, from the University of Cambridge.

NESTA



Guide to podcasts

YOUR MUSEUM NEEDS A PODCAST: A STEP-BY-STEP GUIDE TO PODCASTING ON A BUDGET FOR MUSEUMS, HISTORY ORGANIZATIONS, AND CULTURAL NONPROFITS

Books - Better Lemon Creative Audio

Want to start a podcast for your organization, but unsure of where to begin? Looking for new ways to meaningfully engage your audience?

Need to convince leadership that a podcast is the right move for your museum, history organization, library, religious institution, or cultural nonprofit?

BETTER LEMON CREATIVE AUDIO



How to...

Simple how to... videos for communities and audiences to try at home, or outside. Themed according to weather/season/topics.

How to draw a dinosaur

Follow our simple instructions to draw a cartoon T. rex and read on to find out how professional artists bring dinosaurs to life with their pictures. Tyrannosaurus rex is probably the most famous dinosaur that ever lived, capturing our imagination with its fearsome face, terrifying teeth and comically small arms. The video above shows how to draw a cartoon T.

NHM



Kid's pages

Add a kids page to your website with all the content created to share on social media. Use it for community groups, families, home schoolers with clear categories for ages/activities. Good for SEO too! Great example from the Tate:

Partner with Community Radio

Hook up with local radio stations, offer content and ideas for a **regular science-themed slot** with competitions to win tickets and accompanying online content. Tell stories, go behind the scenes, Q&A, bringing the centre to life and making it fun and engaging to attract new audiences.

Community Radio Programme

Talking Science the science radio show developed by the University of Aberdeen Public Engagement with Research Unit and Shmu FM. Talking Science brings a mix of news, interviews and regular features including science you can try at home and a weekly sound of science competition.

ABDN



UGC

Lots of User-Generated Content

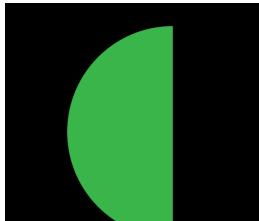
Engage visitors, social media fans and listeners to send in their photos, videos, stories, questions, experiments and ideas to share and use as content. A great way to look at trends, what's on people's minds and keeping people connected. Also good for **growing communities online organically using hashtags** and collaborations with existing groups.

On a bigger scale, We The Curious used visitor's ideas and questions to create **Project What If...**

Project What If

We've also been continuing to work with our community partners across Bristol through our MakeSpace project. Each partner is designing an exhibit, together with an artist, in response to one of our constellation questions. The exhibit will be made, and you'll be able to experience it when you visit Project What If.

WE THE CURIOUS



Collaborations with existing STEM community projects/organisations

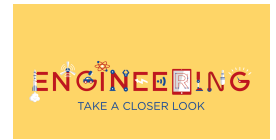
Collaborations with companies who already engage communities with STEM.

Example: **Kids Invent Stuff** duo Ruth and Shaun who run monthly competitions and actually make the winning idea! The design, build and demo of the inventions are filmed and shared on YouTube.

About - Kids Invent Stuff

Kids Invent Stuff is the YouTube channel (as seen on The One Show, BBC News Online and Tomorrows World Live) where 4-11 year olds have the chance to get their invention ideas built by real engineers. We do this to give more primary school kids the chance to engage with real engineering projects.

KIDS INVENT STUFF



Night in the Science Centre...

Science sleepovers with stories, makes and inventions - for real in class/family bubbles or remotely with live link ups.

Centres could collaborate with science kit creators **Curiosity Box** for kits to send out in advance of the sleep over.

The Curiosity Box

Just like Dr Merritt Moore Jamie's other love is ballet, she's is a talented dancer who also loves science just like Merritt. When we got Dr Merritt Moore's Curiosity Box she was thrilled.

THE CURIOSITY BOX



Museums n'that - the Leeds Museums & Galleries podcast

This is Museums n'that, a podcast by Leeds Museums & Galleries. Museums attract passionate people like moths to a flame and this podcast gets to the very heart of the things that make them tick, by asking the questions you actually want to know.

LEEDS MUSEUMS & GALLERIES



Online resource bank that provides people with the tools and knowledge they need to build their digital skills

Resources to help museum people understand and use digital tools and channels, hand-picked by Culture24

Digital Pathways

Resources to help museum people understand and use digital tools and channels, hand-picked by Culture24

DIGITAL PATHWAYS



Lessons in Herstory

Lessons in Herstory is an **app that uses AR** to bring to life the forgotten heroes in U.S. history textbooks—women. By putting a new lens on history, this app has the power to inspire the next generation through the stories of powerful women.

Could this app be used to tell the herstory of female scientists too as visitors scan exhibits or images in your centre?

Daughters of the Evolution

Lessons in Herstory is an app that uses AR to bring to life the forgotten heroes in U.S. history textbooks-women. By putting a new lens on history, this app has the power to inspire the next generation through the stories of powerful women.

DAUGHTERS OF THE EVOLUTION

Science hacks

Inspired by life hacks and blind hacks, can you use science to make life easier and fun at the same time? Can you make something easier to understand with a science hack? Or merge science and magic in a hack to wow?

Blind Hacks | The Best Everyday Tips From People With Sight Loss

Share your videos with friends, family, and the world

YOUTUBE



English Heritage nailing it on TikTok!

English Heritage aims to take an entertaining and informative approach on the historic sites it manages, starting with a mini-guided tour of Stonehenge on Friday.

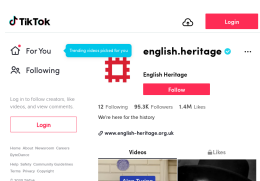
It will also be hosting a live stream of the summer solstice sunrise at the prehistoric monument on Saturday morning.

Martin Jefferies, social media manager at English Heritage said he hopes access to TikTok's younger audience will provide the charity with an opportunity to explore different types of content.

"We think that TikTok is a safe space to explore stories that matter most to young people, so things like black history, LGBTQ stories from some of our sites, women's history as well - it feels like a very safe, welcoming environment," he told the BBC.

TikTok

TIKTOK



Eureka's Digital Sensory Guide

A comprehensive digital guide for anyone visiting Eureka with children with autism, disabilities and those who need extra support. Designed to help with planning a visit in advance, for

example the sights, sounds and smells in each area of the centre. The guide also links to photos of the staff who have been specifically trained as 'enablers' to support children during their visit.

Home - Eureka! Sensory Guide

At Eureka! there are lots of things to touch, see, smell and hear. We've created a sensory code to help you find out the sounds, smells, sights and things to touch in each different area of the museum. As you explore this website, you'll see the sensory code symbols against each different area so you'll know what to expect when you visit.



EUREKA! SENSORY GUIDE

Louvre Abu Dhabi launches the world's first roadside gallery

The billboard gallery spans 100 km of the Dubai-Abu Dhabi highway, and you can tune in to the radio to hear a curator's take on each work as you drive past.

Could this idea be used to engage audiences in science projects/sharing content in the areas where they live/work/play? QR codes or links to social, creates a quick and easy way to share too.

Louvre Abu Dhabi launches the world's first roadside gallery

The drive along Sheikh Zayed Road between Dubai and Abu Dhabi is an experience that is better lived than described. Bright lights flashing at you from a Nissan Patrol 2 metres from your bumper, the strange midway interlude of a green forest.



THE NATIONAL

Making websites 100% accessible

Fonts, colours, text size, subtitles - how accessible is your website? Do you know about the accessibility widget?

International Day of People with Disabilities 2020

International Day of People with Disabilities 2020 On December 3 this year, during the annual celebration of people with disabilities, the 2020 theme 'Not all Disabilities are Visible' also focuses on spreading awareness and understanding of disabilities that are not immediately apparent, such as mental illness, chronic pain or fatigue, sight or hearing impairments, diabetes, brain injuries, neurological disorders, learning differences and cognitive dysfunctions, among others.



INTERNATIONAL DAY OF PEOPLE WITH DISABILITIES

Haptic technology

Using vibrations to feel objects, sensations or textures using a phone or specific hardware.

Touchscreens and haptic feedback: new forms of interaction
Haptic technology offers users a truly immersive experience when using touchscreens interfaces: direct information transfer between display and the fingertip.

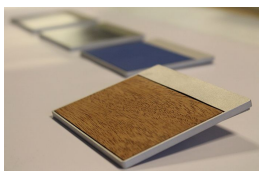
Surface haptics may be defined as providing programmable haptic effects on physical surfaces, making interfaces come to life.

Tactile Haptic feedback recreates the sense of touch, detecting forces and tactile stimuli in the form of vibrations, texture rendering, simulated clicks, pulses, and buzzes...

Surface Haptics: feedback technology for tactile screens - Hap2U

Haptics, the science of sensing through touch, is at the root of how we communicate and execute everyday actions. Drinking a glass of water, typing on a keyboard or even walking relies on haptics, through force feedback stimulation of mechanoreceptors.

HAP2U



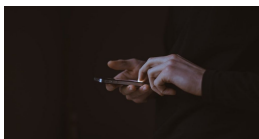
Audio tour app

New app in development at Technquest science centre to enable non-English or Welsh speaking communities to visit

Connect, اتصل, mettre en contact, جوڑنا... with us for our new App! * Technquest

Technquest is committed to providing an inclusive and supportive environment for all visitors. As a result, we are developing an App with our community, for our community. They have requested that we create the App in the most popular languages they speak which include, Arabic, Polish, Bengali, Somali, Urdu, Chinese and French.

TECHNIQUEST



Podcasts

Create family friendly podcasts run by science centres for families, teenagers, adults and anyone who wants to engage with science via audio.

Some ideas on everyday topics:

- Food provenance 'What's for tea?' The science behind the food on your plate.

- How does the heating work? Snuggle up next to the radiator and listen in - could be linked to reducing heating bills and CO2 emissions.

- How many t-shirts/tops are there in your drawer? Discuss cotton/materials, where they come from, production, clothing waste and the effects on the environment.

- Fun science quizzes with score boards online/social.

What On Earth: The Sustainable Podcast

What On Earth: The Sustainable Podcast sees Sarah discuss the issues affecting our planet with a different topic each week. It's a lighthearted, chatty and informative look at climate change, backed up by the experts at environmental charity, Hubbub. Created by Hubbub Presented by Sarah Divall Produced by Ross Buchanan

ANCHOR FM INC.



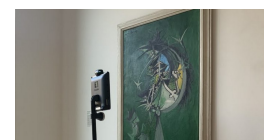
Explore science centres by robot

Drive yourself around the science centre, and with the help of a member of the team have a go at some of the hands-on activities

Robot Tours - Hastings Contemporary

We have been delighted at the incredible response to our Robot Tours, as featured in the BBC News, New York Times, The Guardian, The Art Newspaper, and the Daily Mail. To help us manage the demand effectively, we ask that...

HASTINGS CONTEMPORARY



Virtual events/shows/talks

...with real live audience!

Painting with light - Virtual Event Studio

Fully-fledged high-tech Virtual Event Studio & Expo for dynamic and interactive event experiences. Combined with the live Virtual Event Studio in Genk and Londerzeel, the new Virtual Event Expo is ideally suited for corporate meetings, brand activation, round tables, product launches, conferences, seminars, and even concerts.

PAINTINGWITHLIGHT



Science trail/challenge

Mix up the traditional treasure trail with a digital version...

Collaborate with shops, cafes, businesses locally and create a trail in your local area with **QR codes**, clues, problems to solve, challenges, activities and incentives to **get families out and about being curious**.

Example here of downloadable Treasure Trails in towns and cities around the UK: [Things to do in Bristol - The Bristol Harbourside Treasure Trail](#) (treasuretrails.co.uk)

Bristol Harbourside

Explore Bristol's Harbourside with this self-guided Treasure Hunt themed walking Treasure Trail. Great fun for the whole family at any time of the year.

TREASURE TRAILS



Keeeep Dancing on TikTok, with BBC Children in Need & Strictly

Whatever you're taking up this second lockdown, there's one thing that will put a smile on your face. Yes, it's that time again. Everyone's favourite bear, Pudsey, is here to brighten up your lockdown. And this year BBC Children in Need and the iconic yellow bear are gearing up to celebrate the charity's 40th year!



NEWSROOM | TIKTOK

Another great example from The Army's National Charity:
Operation Bletchley
<https://events.soldierscharity.org/event/operation-bletchley/home> – SCIENCE CENTRES

Give the gift of science wonder

#ShopMuseums campaign launched to promote online museum shops, a nationwide initiative to encourage people to shop directly from museum's websites.

Could be an idea for next year with gift vouchers, memberships and gifts for centres that have online shops.

#ShopMuseums campaign launched to promote online museum shops

With many museums, galleries and cultural institutions under lockdown once more, 15 museums have launched a campaign to inspire shoppers to use their purchasing power to support their favourite cultural attractions. The #ShopMuseums campaign aims to encourage people to buy their gifts, books, Christmas decorations, homeware, artwork, jewellery and clothing from online museum shops in the run-up to Christmas.

MUSEUMS ASSOCIATION



Go Walkeez!

A physical and digital heritage engagement project. It helps get kids out to explore cultural places and spaces in a fun and interactive way.

Here's how Go Walkeez works

Children walk a specially designed sausage dog toy through physical cultural spaces. The dog is linked to a Go Walkeez! app that prompts children with open-ended questions to go search and sniff out material heritage that they find interesting. The children then take photographs of the dog with their spotted findings and share the images online on the Walkies' website.

Inclusive access and diverse audience participation is one of the key 'ethos' of Go Walkeez! It is designed to strengthen a number of different learning skills so that children who struggle with traditional book learning. Access shouldn't be a problem. The dogs are cuddly friends to help everyone including those who have difficulties engaging in new spaces to feel more confident and safe.

TikTok dancing

BBC Children in Need use TikTok to engage families during lockdown

Go Walkeez!

Go for fun walkies and explore cultural and natural heritage spaces. Let the Walkeez blogging sausage dogs be your guide!

GO WALKEEZ!