

# BRIDGING THE VIRTUAL & PHYSICAL

*Designing for Digital Engagement in Galleries*

Alex Flowers



@axflowers

# CREATIVE

# CONFIDENCE

What is important to you as an organisation and as an individual?

IT'S MAGICAL, NOT MAGIC

CREATIVITY IS SORT OF A CATCH-ALL IDEA THAT ENCOMPASSES SO MANY THINGS. IT'S HARD TO NAIL DOWN, BUT YOU KNOW IT WHEN YOU SEE IT. ONE THING IT ISN'T IS A SUPERPOWER YOU'RE JUST BORN WITH. IT'S NOT EXCLUSIVE. ANYONE CAN TAP INTO THEIR CREATIVE ENERGY TO MAKE SOMETHING SPECIAL WITH HARD WORK & A LITTLE BIT OF LUCK.

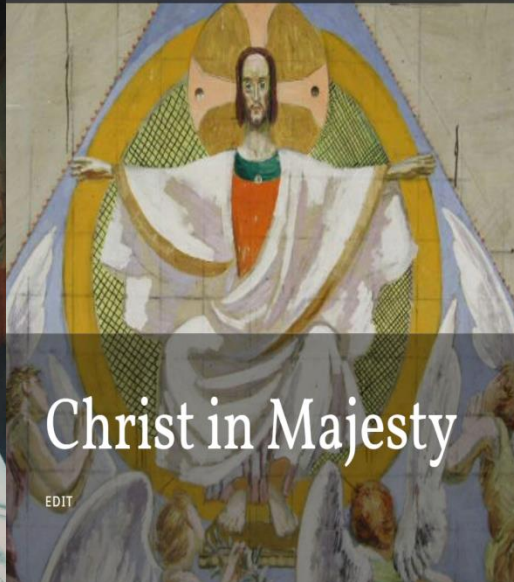


V&A



MUSEUM OF LONDON



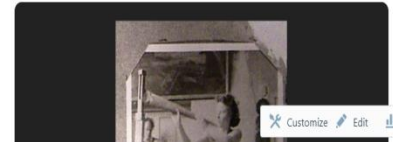


## Christ in Majesty

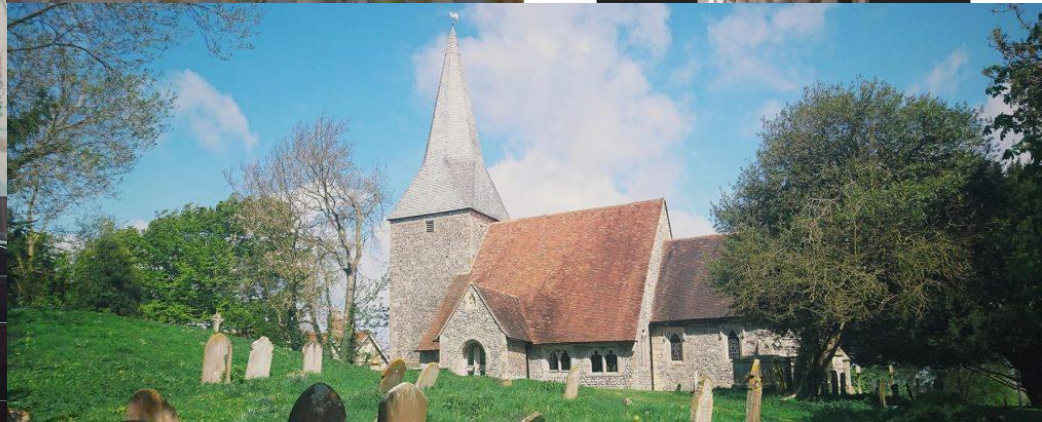
EDIT



Perhaps Duncan gave Vanessa the subjects of 'The Annunciation' and 'The Nativity' because they were smaller and more manageable, but it certainly seems fortuitous that she should have painted the scenes relating to motherhood and family life. In 'Christ in Glory' Duncan tackles the largest and grandest of the paintings in the church and also the one which portrays the more traditionally masculine themes of authority and governance through the depiction of Christ's enthronement, the Church and war.



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## Current driving factors in the UK:

- Emphasis on **STEM** or **STEAM**
- New **Computing Curriculum**
- The **challenge of educating for a fast changing future**

## Key reports:

- *“Designing the Digital Economy: Embedding Growth through Design, Innovation and Technology”*, All Party Design and Innovation Group
- *“Next Gen”*, Nesta
- *“The UK STEAM Education Landscape”*, The Royal Academy of Engineering
- *“After the reboot: computing education in UK schools”*, Royal Society, 2017

1. Cultural
2. Cognitive
3. Constructive
4. Communicative
5. Confident
6. Creative
7. Critical
8. Civic

Doug Belshaw (2011)  
*The Essential Elements of Digital Literacies.*

MENU SEARCH

# FINANCIAL TIMES

HOME WORLD UK COMPANIES MARKETS OPINION WORK & CAREERS LIFE & ARTS

Special Report: **The Connected Business**

## How to robot-proof your children's careers

Experts say a rethink of education is needed to keep humans employed



A worker walks alongside a conveyor belt as items are sorted into crates to be sent to retail stores from the Argos Distribution Centre in Burton-upon-Trent, central England, on November 27, 2015. © Getty

61 Save

APRIL 6, 2016 by Sarah O'Connor, Employment Correspondent

Pity school careers advisers. If economists are to be believed, vast numbers of jobs will

# REPAIR MANIFESTO

WE HOLD THESE TRUTHS TO BE SELF-EVIDENT

IF YOU CAN'T FIX IT, YOU DON'T OWN IT.

## REPAIR IS BETTER THAN RECYCLING

Making our things last longer is both more efficient and more cost-effective than mining them for raw materials.

## REPAIR SAVES YOU MONEY

Fixing things is often free, and usually cheaper than replacing them. Doing the repair yourself saves you money.

## REPAIR TEACHES ENGINEERING

The best way to find out how something works is to take it apart.

## REPAIR SAVES THE PLANET

Earth has limited resources. Eventually we will run out. The best way to be efficient is to reuse what we already have.



REPAIR **CONNECTS**  
PEOPLE AND THINGS

REPAIR IS WAR ON  
**ENTROPY**

REPAIR IS  
**SUSTAINABLE**

**WE HAVE THE RIGHT:**  
TO DEVICES THAT CAN BE OPENED  
TO REPAIR DOCUMENTATION FOR  
**EVERYTHING**

TO CHOOSE  
OUR OWN REPAIR TECHNICIAN

TO NON-PROPRIETARY  
**FASTENERS**

TO REMOVE 'DO NOT REMOVE' STICKERS

TO REPLACE  
**ANY & ALL**  
CONSUMABLES OURSELVES

TO TROUBLESHOOTING  
INSTRUCTIONS &  
FLOWCHARTS

TO REPAIR THINGS  
IN THE PRIVACY OF OUR OWN HOMES

TO ERROR CODES &  
WIRING DIAGRAMS

TO AVAILABLE, REASONABLY-PRICED SERVICE PARTS

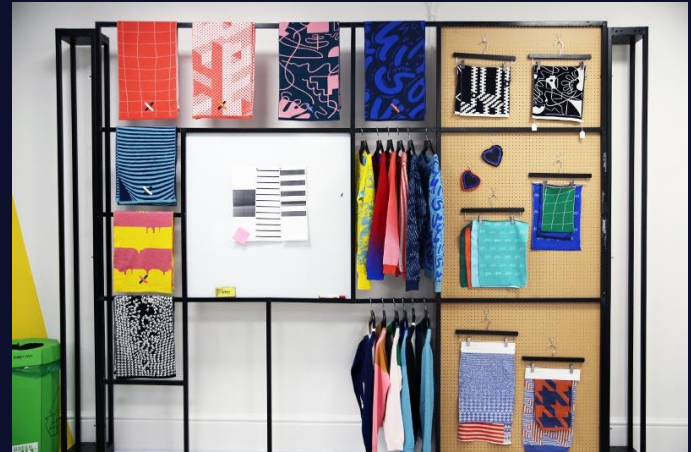
BECAUSE **REPAIR**  
IS INDEPENDENCE  
SAVES MONEY & RESOURCES

REQUIRES  
CREATIVITY

MAKES CONSUMERS INTO  
**CONTRIBUTORS**

INSPIRES  
PRIDE IN OWNERSHIP

PEOPLE <sup>♡</sup> LOVE <sup>♡</sup>  
MAKING



# HOW CAN YOU BRING MAKING INTO GALLERIES?







How Do You  
CREATE THAT  
"Wow!"  
MOMENT?





# WHY LEARN BY MAKING?



- The biggest brands in the world for young people at the moment are all about **making** and **collaboration**
- Making and hacking is about **sharing knowledge**
- Digital tools and platforms are a space for **self expression**
- Expectation from young audience to be able to **participate, shape and create media**
- Easier than ever to **connect the physical and the digital**





Constructionism (*Harel & Papert, 1991*)

*“Learning by constructing knowledge through the art of making something shareable”*

Martinez & Stager, 2013

# 5 STRATEGIES FOR PROBLEM-BASED LEARNING

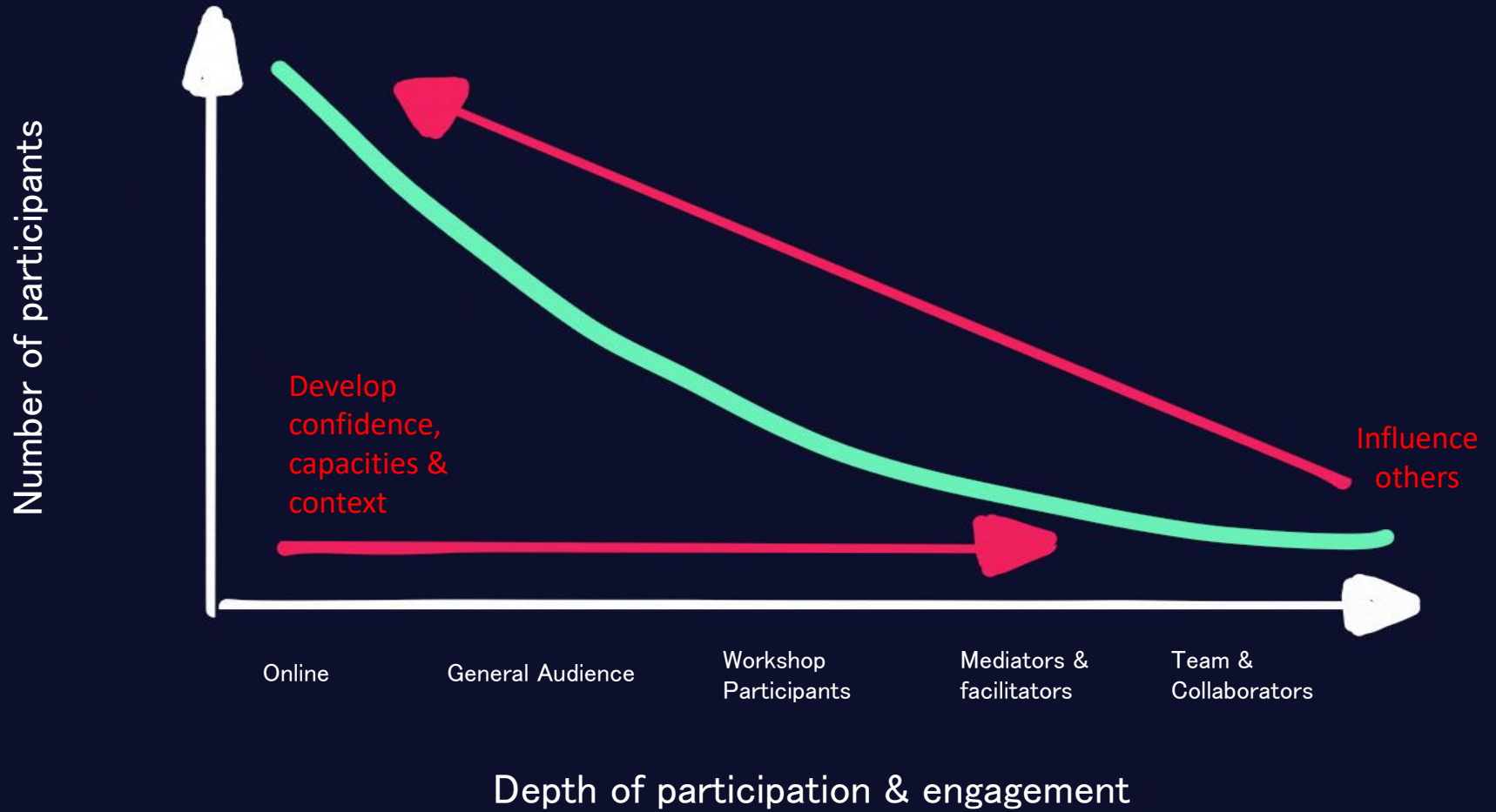
1 – The learning should be related to a larger task

2 – Students should be able to take ownership of the problem

3 – The task should be authentic

4 – Reflection is central to the learning process

5 – Allow and encourage learners to test ideas against different views in different contexts





ENGAGEMENT  
DOES NOT  
ALWAYS  
HAVE TO BE  
DEEP

# V&A SAMSUNG DIGITAL CLASSROOM



The Samsung Digital Classroom is a programme for 16 – 24 year olds which offers hands on, practical workshops with designers exploring the latest in digital art and design and paths into study and industry.





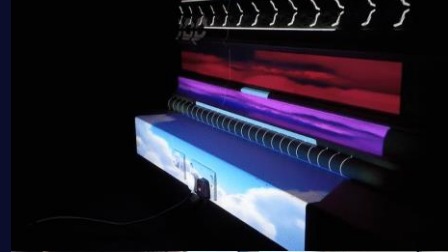
*‘This is so different to school – art is more just learning about history and artists – this encourages you to develop your own style and ideas’*

*‘I liked how it prepares you for what you are going to need later on. A learnt a lot about what universities expect’*

*‘I want to do a creative career and I already am considering game design so this has just made me more keen’*

# V&A SAMSUNG DIGITAL CLASSROOM

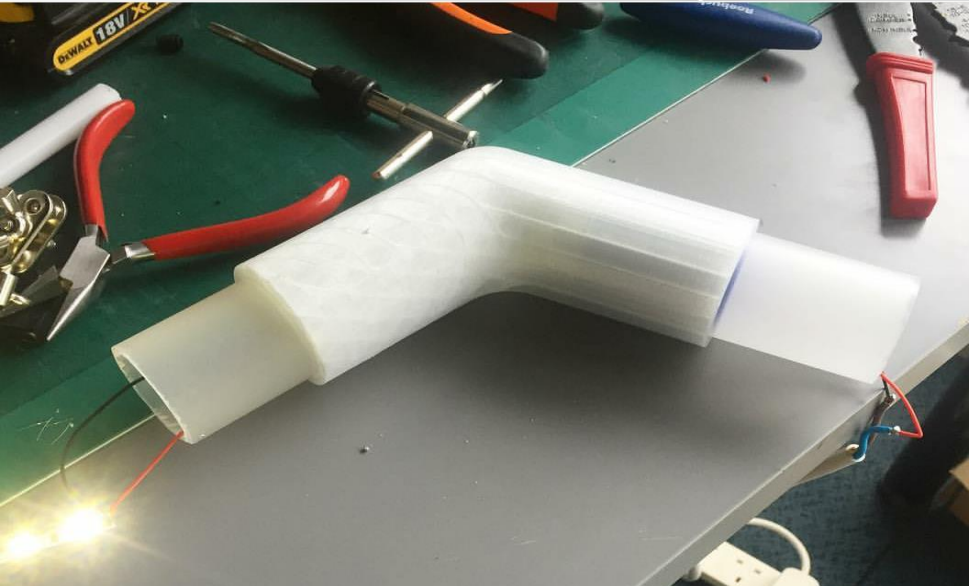
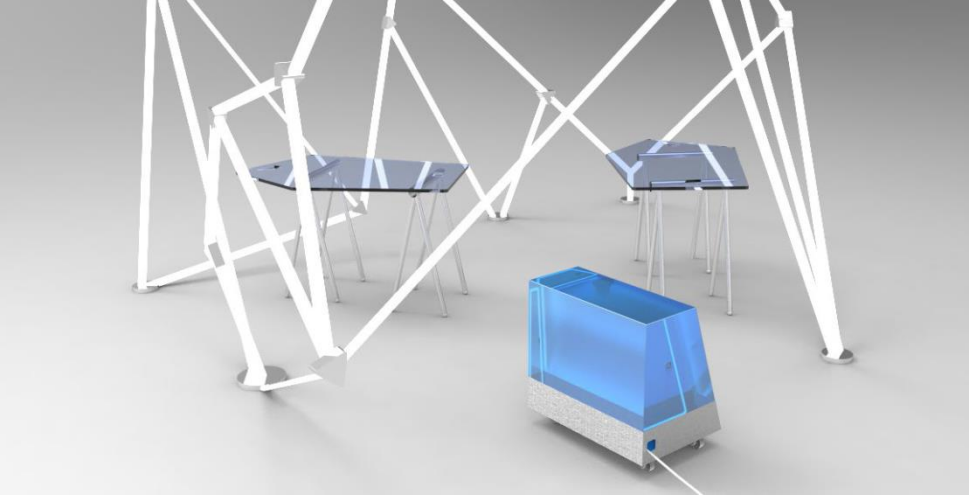
Digital Print for Fashion/  
Virtual Reality /  
Wearable Technology /  
Engineering /  
Projection Mapping /  
Portrait Photography /  
Crowd Funding /  
Creating Digital  
Portfolios /  
Video Game Design /  
3D Printed Jewellery /  
Digital Animation /  
Sustainable Design/





BREAK  
OUT  
OF THE  
CLASSROOM

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... INTO  
THE  
GALLERY





'SYNCHRONICITY'

F.E.N. C.E / MICHELE PANEGRASSI







# GREAT ORMOND ST. HOSPITAL



# SCAN THE WORLD

MyMiniFactory

CATEGORIES

DESIGN CHALLENGES

HOW IT WORKS

CREATE



UPLOAD

(EN)

REGISTER

LOGIN

## scan the world

Supported by SHINING 3D®

5232 3D printable scanned sculptures

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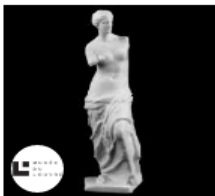
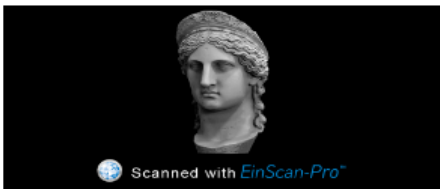
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### info

project start date - 28th June 2014

printing hours - 21,000

Scan the world is an ambitious initiative whose mission is to archive the world's sculptures and objects of cultural significance in a form suitable for 3D printing.

This serves to bring art to the masses in a way more tangible than ever before, all in the wider context of meaningful contribution to education, preservation, restoration and accessibility.

3D 3D

Effigy of a Knight at the V&A, London

Free Download

Victoria and Albert Museum  
▲ 10 Followers  
Login to follow  
Login To Tip

Other objects from this designer

Date published: 21/10/2014  
Location: London  
Time to do: 308 - 458 minutes  
Material Quantity: 48g  
Dimensions: 120.00 x 40.71 x 34.53  
Complexity: Very Easy  
Category: London, V & A Museum, All, Europe

Community Prints

Be the first to share a picture of this printed object

Upload Prints

1709 Views 3 Likes Add to a Collection

Title: Effigy of a Knight  
Medium: Italian Stone

Item Details

This tomb effigy was discovered in an underfloor vault during excavations in a chapel space at Lesnes Abbey, Kent. The chapel was probably the site of the Abbey's Lady Chapel, which was built in the 1370s. This effigy is somewhat older than that, and this would explain its unusual placement in an underfloor vault: it was either in an earlier chapel on this site, or was moved here from elsewhere in the abbey.

This object is part of "Scan the World": Scan the World is a non-profit initiative introduced by MyMiniFactory, through which we are creating a digital archive of fully 3D printable sculptures, artworks and landmarks from across the globe for the public to access for free. Scan the World is an open source, community effort, if you have interesting items around you and would like to contribute, email [saw@myminifactory.com](mailto:saw@myminifactory.com) to find out how you can help.

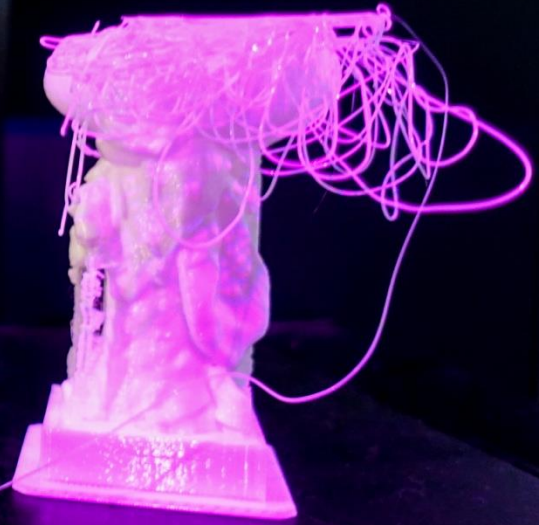
Dimension: The V&A  
Accession: The V&A  
Credit: The V&A  
Place: The V&A (Visit)

“...there is a different class of amateur creators that digital technologies have enabled and a different kind of creativity has emerged as a consequence.”

“This is a free gift to many who could pay for it, no doubt. But it is an extraordinarily valuable gift to many who could not, but who still want to create.”

Lawrence Lessig, “*Freesouls*”, 2007





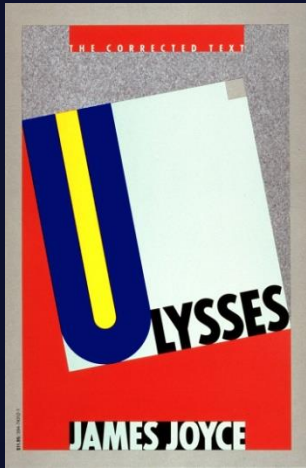


“It was amazing to have this 3D printer on the ward and to see the young people so focussed on what they wanted to make. It was such a good project for young people in isolation as everything was done on a tablet.

Plus, I never thought that I’d ever see them so interested in C17th sculpture!”

Amy Crowley, Play worker





I thrive on collaboration and learned early on as an aspiring painter in art school that I couldn't picture myself poor and alone in a cold garrett smoking unfiltered Camels.

I need heat, hot water, nice linens, and the sound of two hands clapping.

Carin Goldberg

