full steam ahead ...

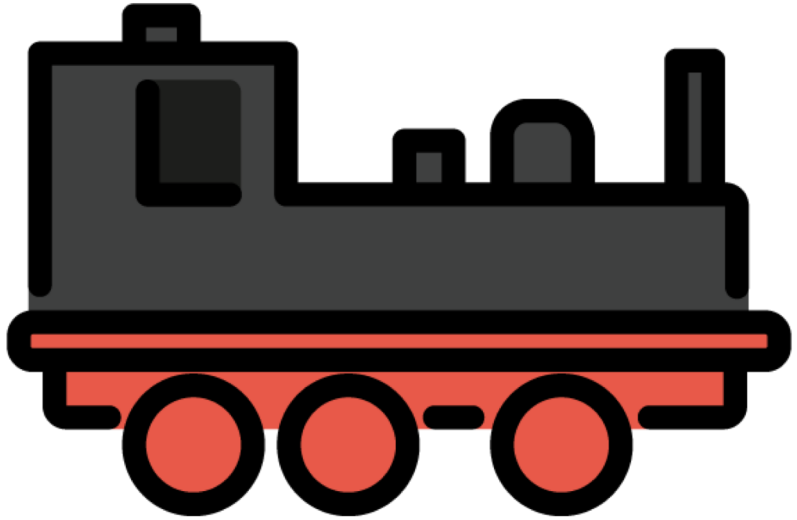
science

technology

engineering

arts

maths



FiD

fiona duggan

learning environments conference 16.05.2019

steam initiatives are …

inherently inter-disciplinary

departments … disciplines … institutions

increasingly multi-contextual

academic … government … industry

users working together across academic spectrum …

learn

teach

research

impact

relying on …

spaces

technologies

services

to deliver user experiences that are …

engaging

productive

rewarding

via resources that are …

flexible

integrated

scalable

the journey ...

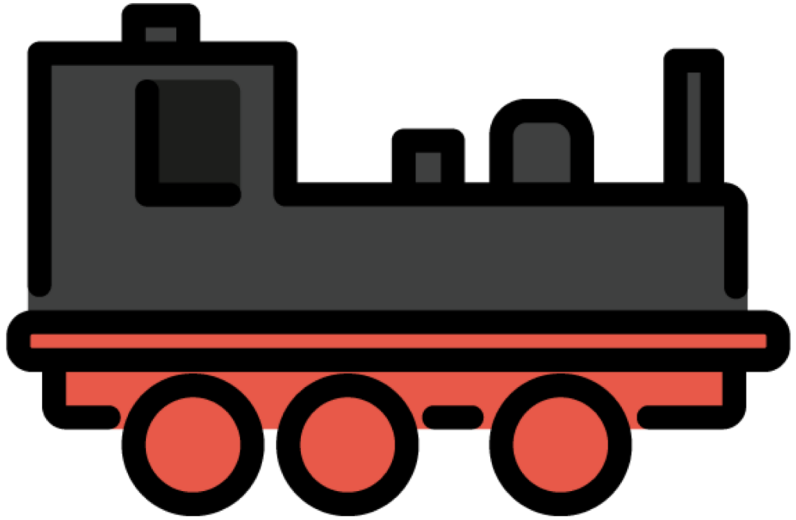
science

technology

engineering

arts

maths



overlapping conversations involving …

purpose

people

programmes

projects

processes

places

seeking new boundaries that enable …

individuals & teams

move across …

disciplinary & contextual boundaries

in search of …

colleagues with resources to share

influencing how resources are …

designed

equipped

operated

maintained

steam initiatives are all about …

convergence

the destination …

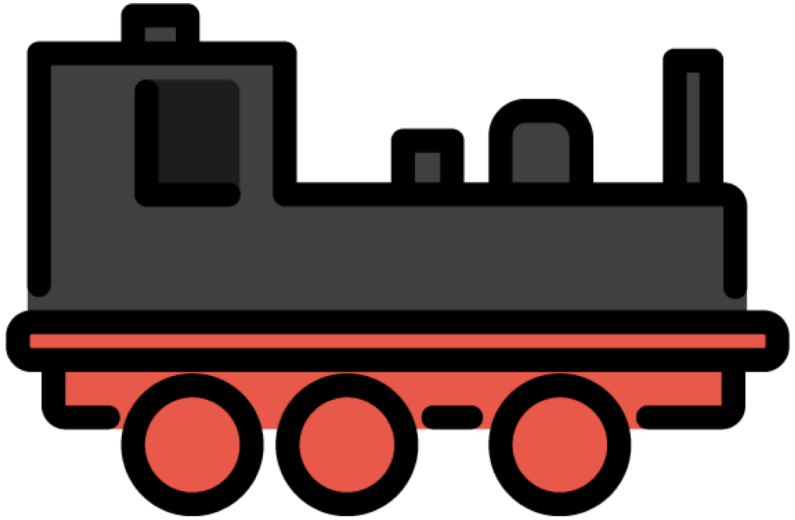
science

technology

engineering

arts

maths



user experiences that are …

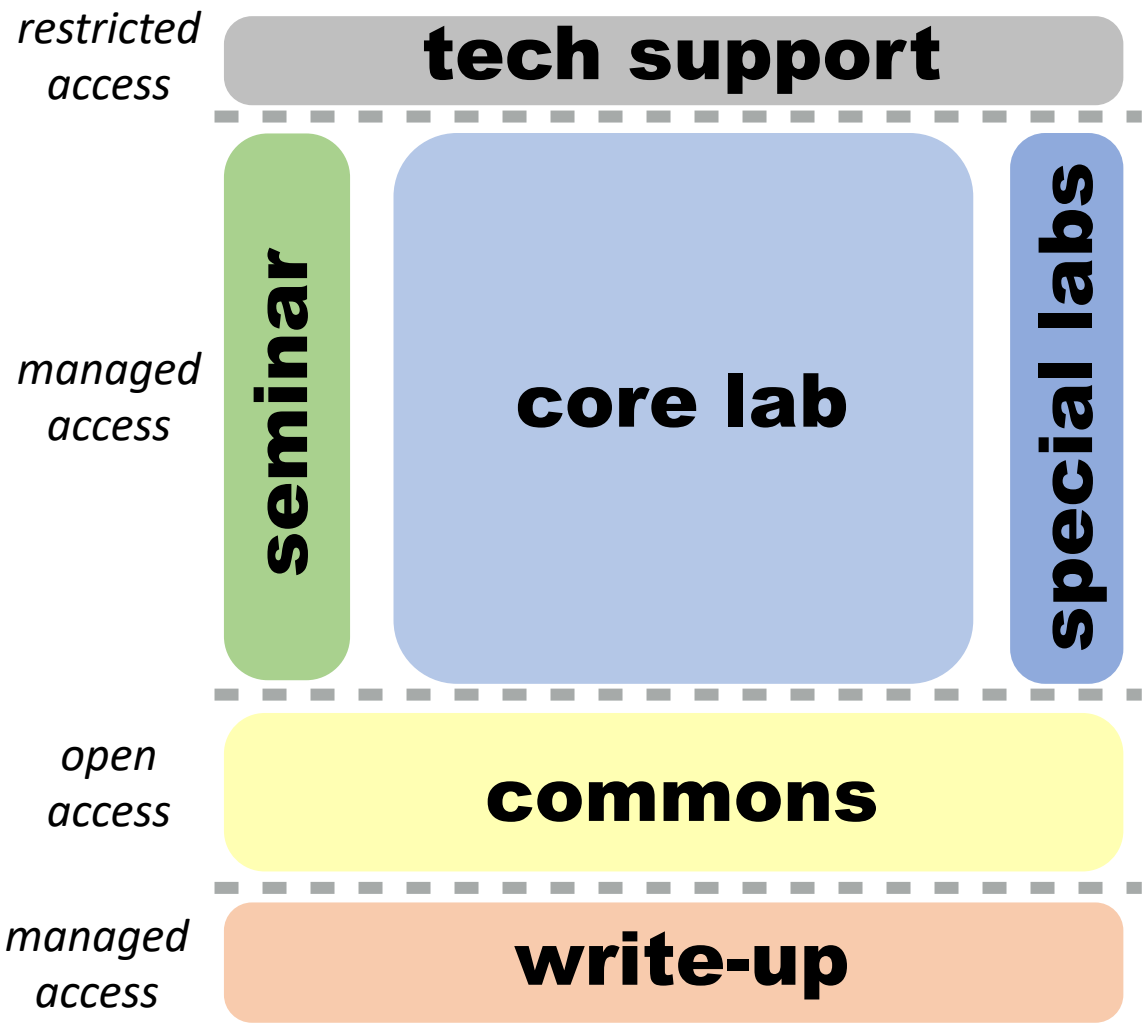
engaging productive rewarding

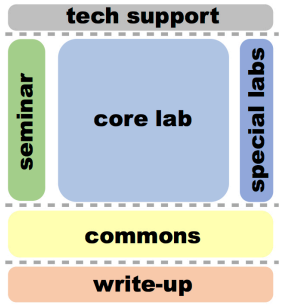
in resources that are …

flexible integrated scalable

new space model …

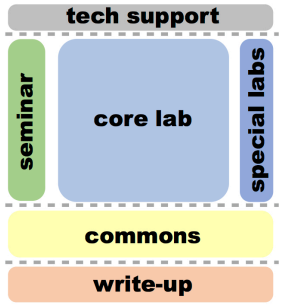
the steam hub





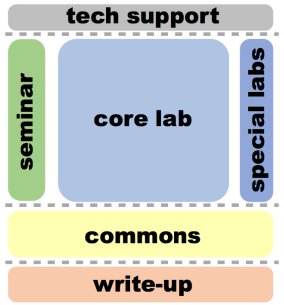
the steam hub

25%	core lab	*defines discipline range*
5%	special lab	*expands core activities*
5%	tech support	*seeks maximum benefit for all*
35%	**lab space**	



the steam hub

5%	seminar	*supports learners*
10%	write-up	*supports researchers*
20%	commons	*encourages interaction*
35%	**other space**	



the steam hub indicative size

35%	total lab	700	*based on core lab being 500 sqm*
35%	total other	700	
70%	**sub-total**	**1,400**	**sqm nia**
30%	core	600	
100%	**total hub**	**2,000**	**sqm gia**

managed by steam concierge team to …

optimise flow of …

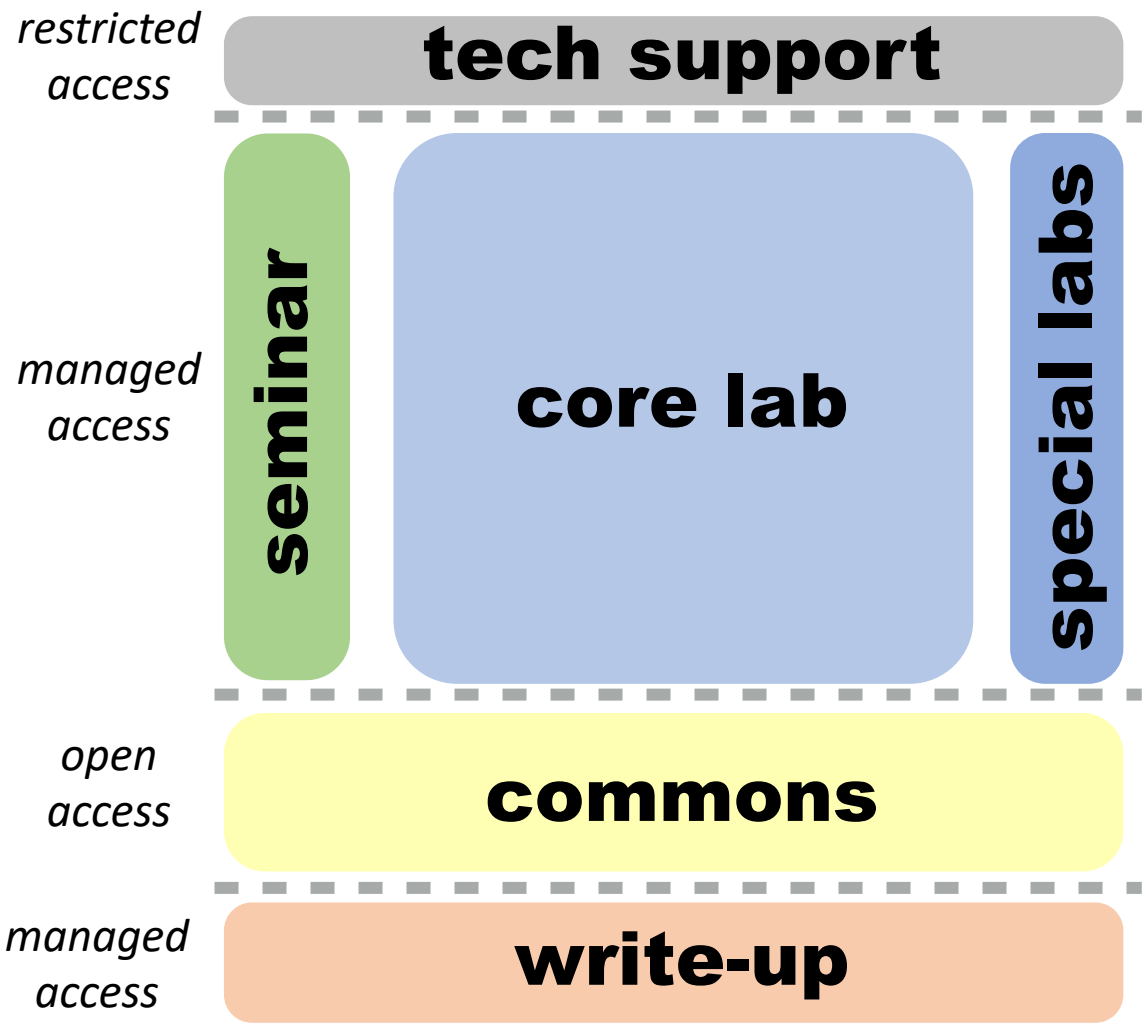
people & data

facilitate access to …

shared resources

encourage ongoing …

technical innovation



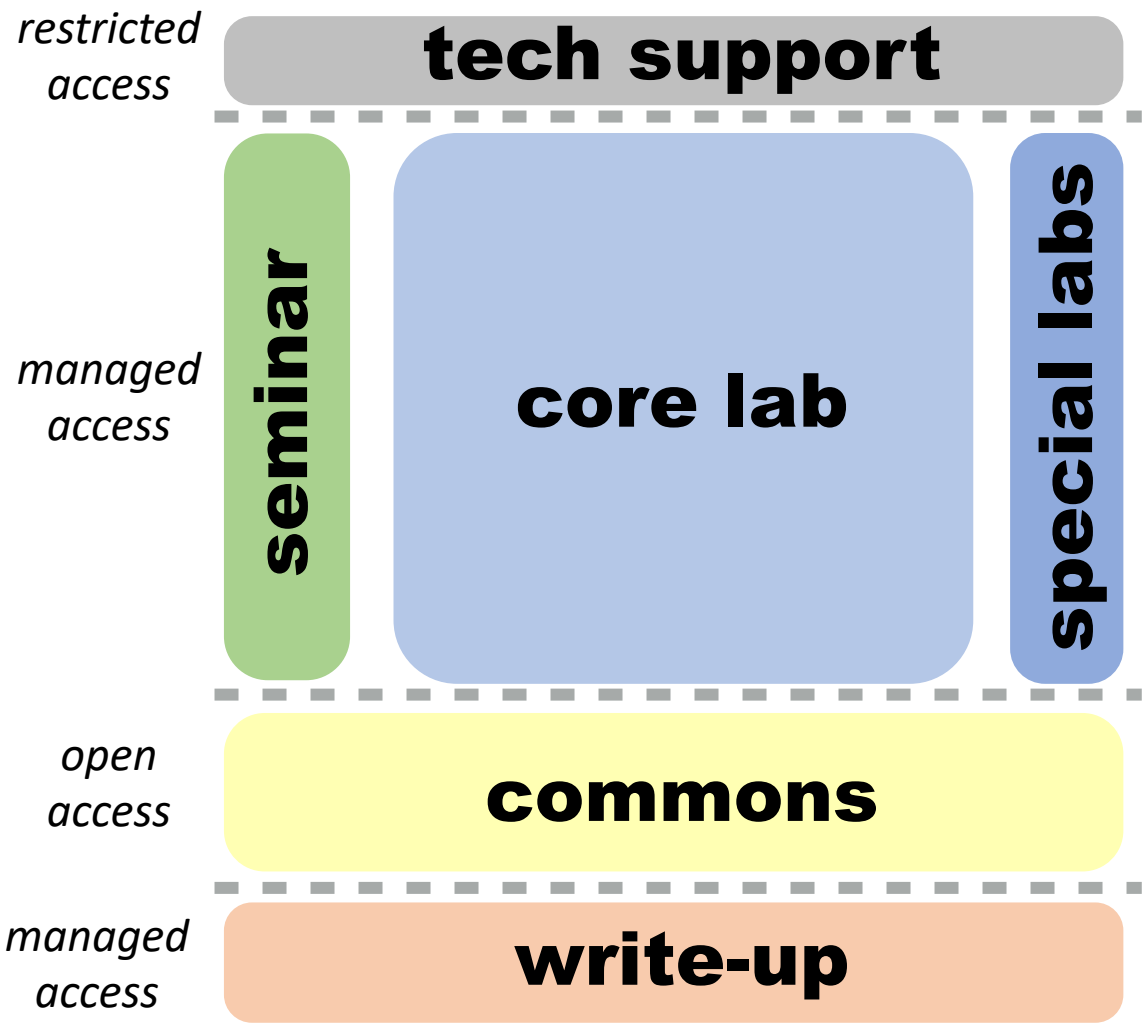
enhanced collaboration …

learn

teach

research

impact



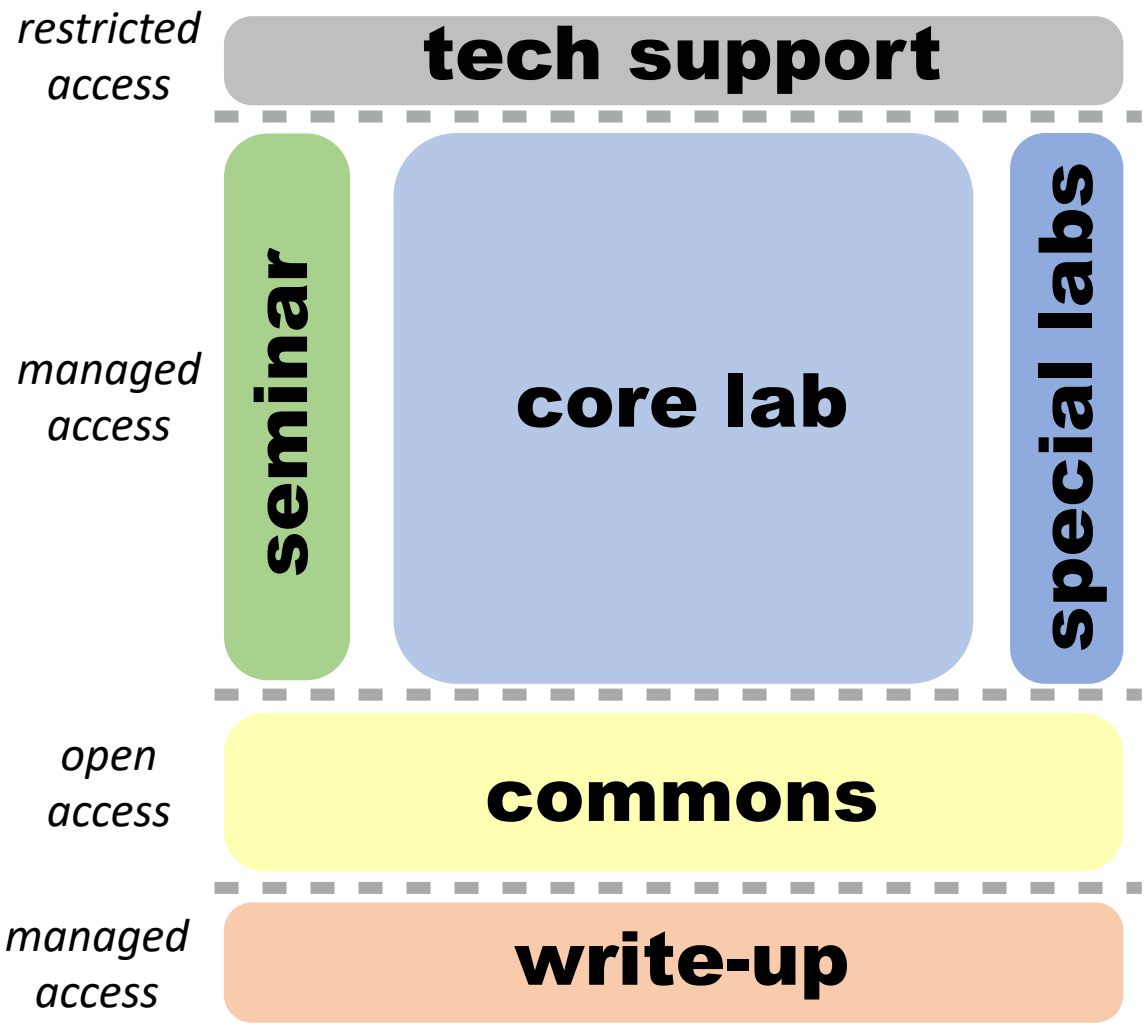
flexible pace of change …

refurb

remodel

extend

new-build



staying on track ...

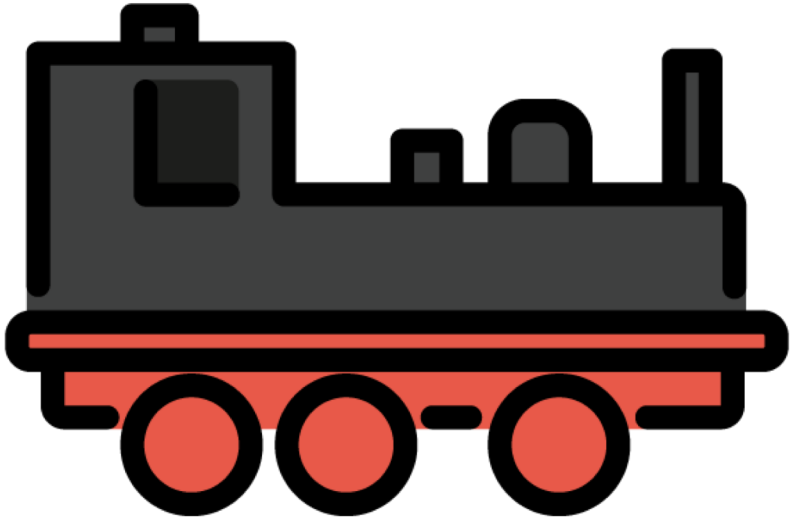
science

technology

engineering

arts

maths



overlapping conversations involving …

purpose

people

programmes

projects

processes

places

some thoughts to keep in mind …

nobody knows as much as everybody

decision-making is rarely smooth

new space models take time to evolve

nobody knows as much as everybody …

interviews – to gather information

1 currently works well, even better if …

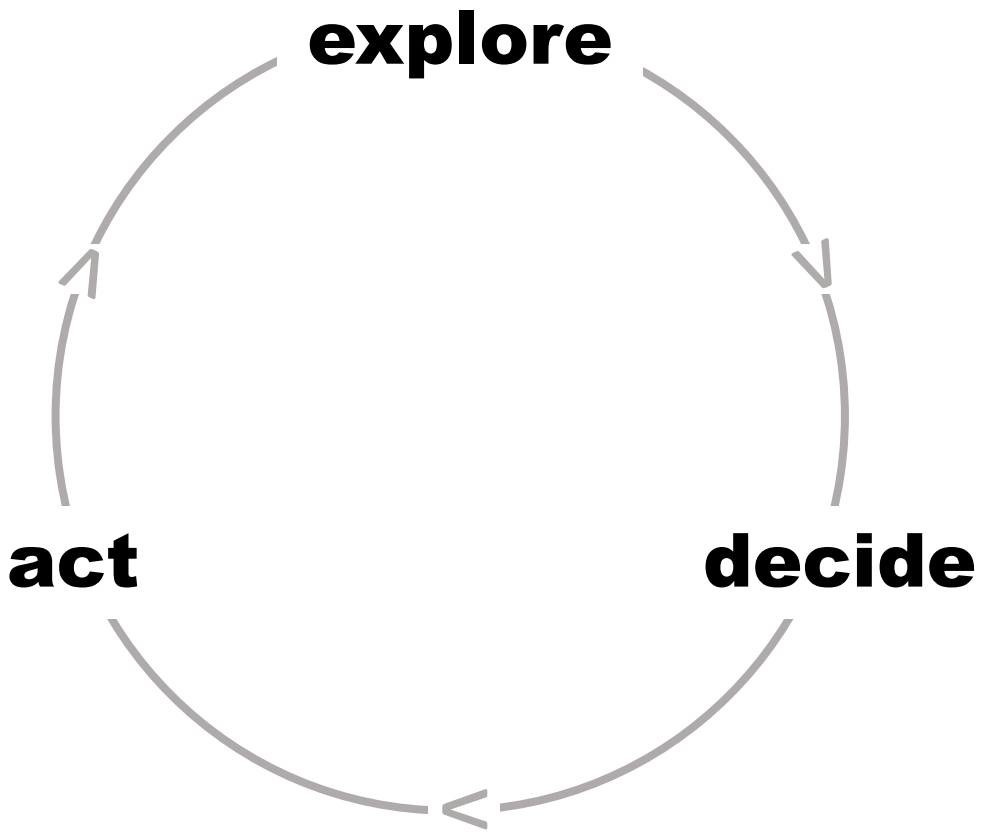
2 most important conversation is …

workshops – to shape information

3 what if …

4 who else needs to be involved …

decision-making is rarely smooth …



new space models take time to evolve …

what's the brief?

know in advance

close down options

entrenched position

stay curious

work with complexity

evolving position

moving forward ...

science

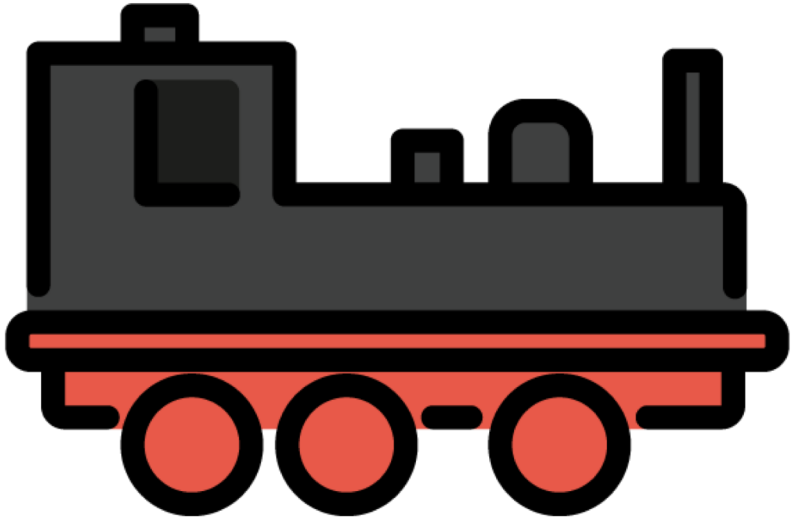
technology

engineering

arts

maths

new models need conversations that support transition from stem to steam



thank you

FiD

fiona duggan

+44 (0)7792 618 107

fiona@fidspace.co.uk

conference abstract

Engaging with the complexity of emerging requirements for STEAM (Science, Technology, Engineering, Arts, Maths)

Encouraging conversations that address changing patterns in learn, teach, research and impact activities

Seeking new ways to define, allocate, use, manage and fund space

Creating environments that are welcoming, productive, inter-disciplinary, flexible and (most important of all) provide a strong sense of belonging

A collaborative approach from start to finish – because nobody knows as much as everyone