Making Learning and Beautiful Work Visible

The real journey of discovery consists not of seeking new landscapes but in having new eyes.” – Marcel Proust

The intention of this booklet is to inspire quality in both display and curation to facilitate learning

When students, staff and visitors walk into our learning space what do they notice?

What does our space communicate about who we are and what we do?

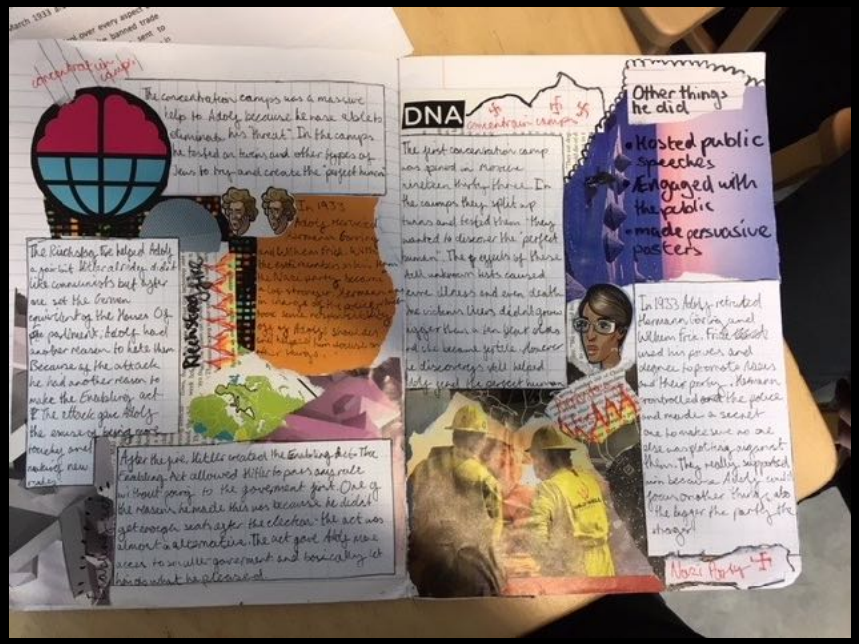
Welcome to my world …

Visible Learning and Teaching occurs when teachers see **learning** through the eyes of students and help them become their own teachers.
John Hattie

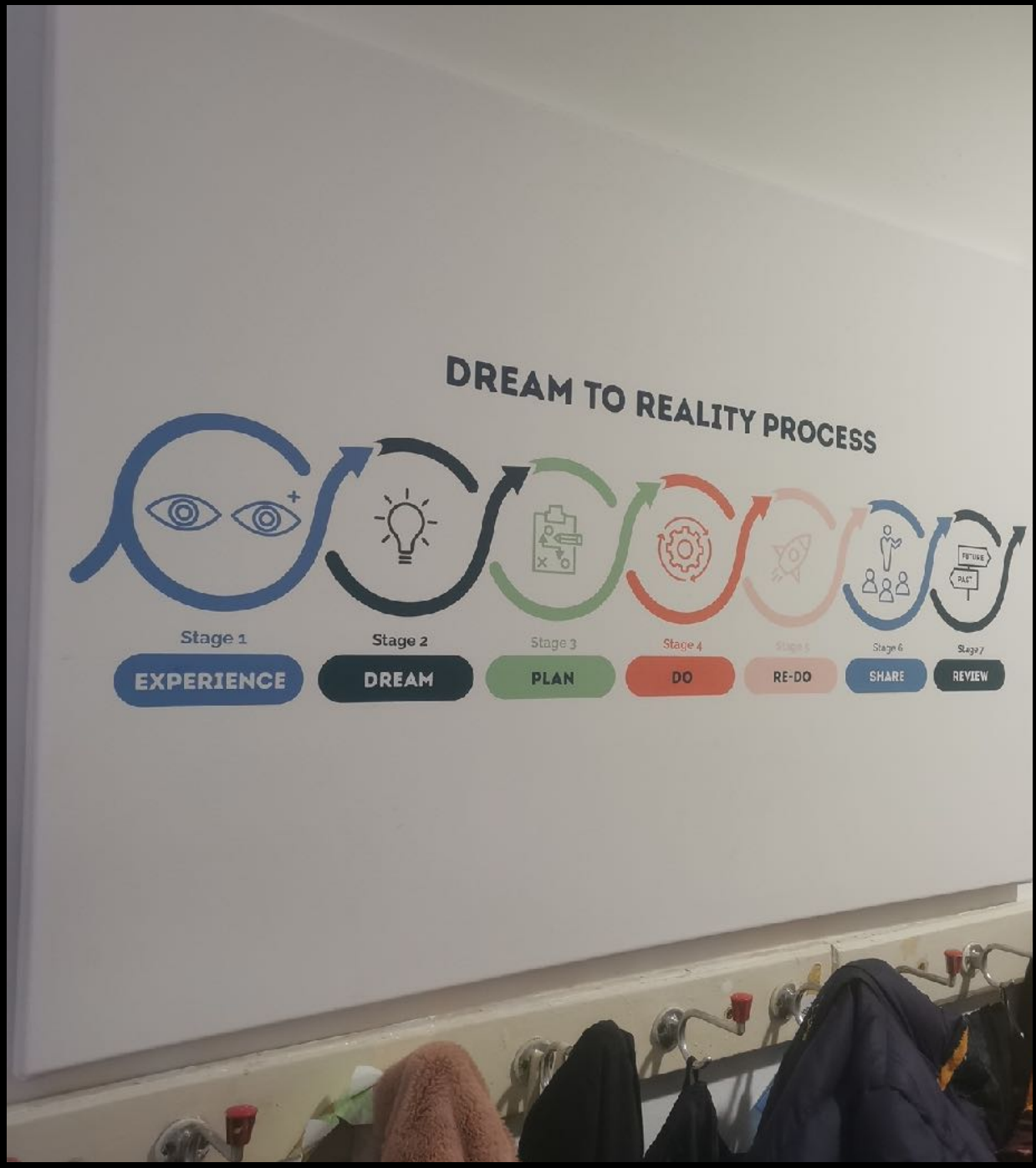
Consider the Purpose

Consider the Audience

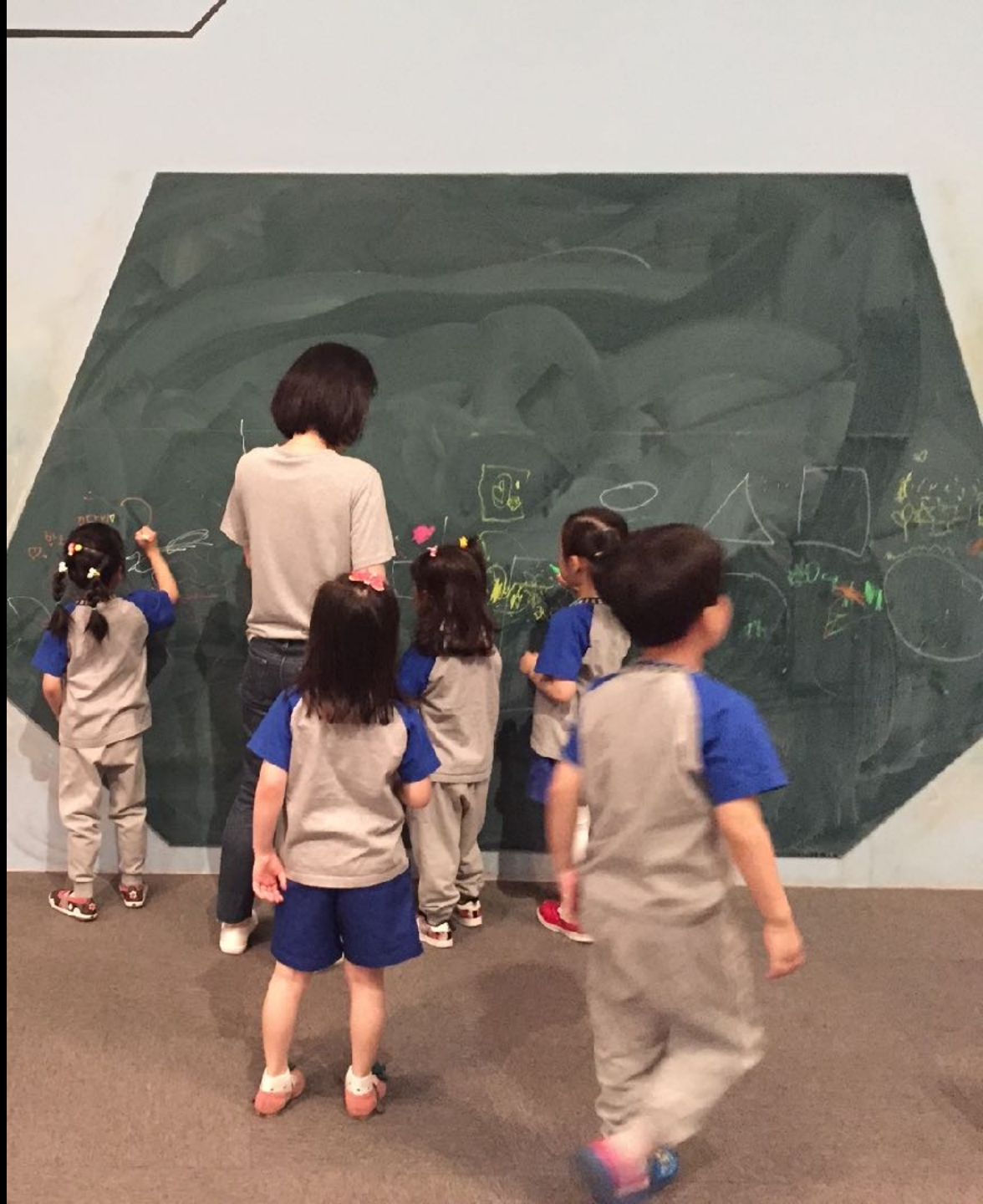
Show what great looks like



Provide information and guidance

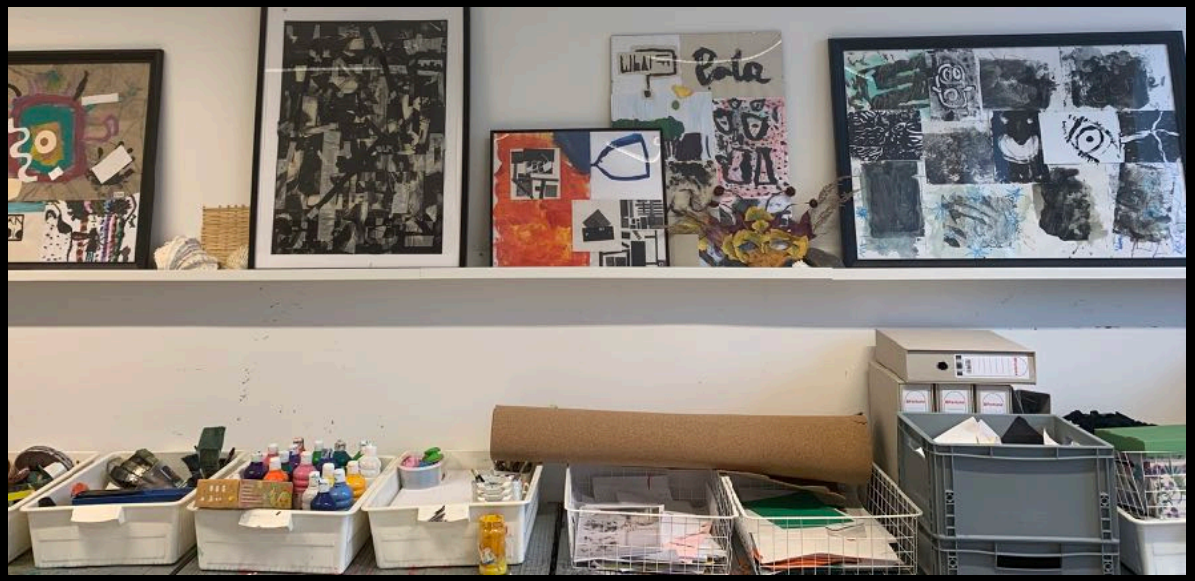


It can be dynamic and just at the right height

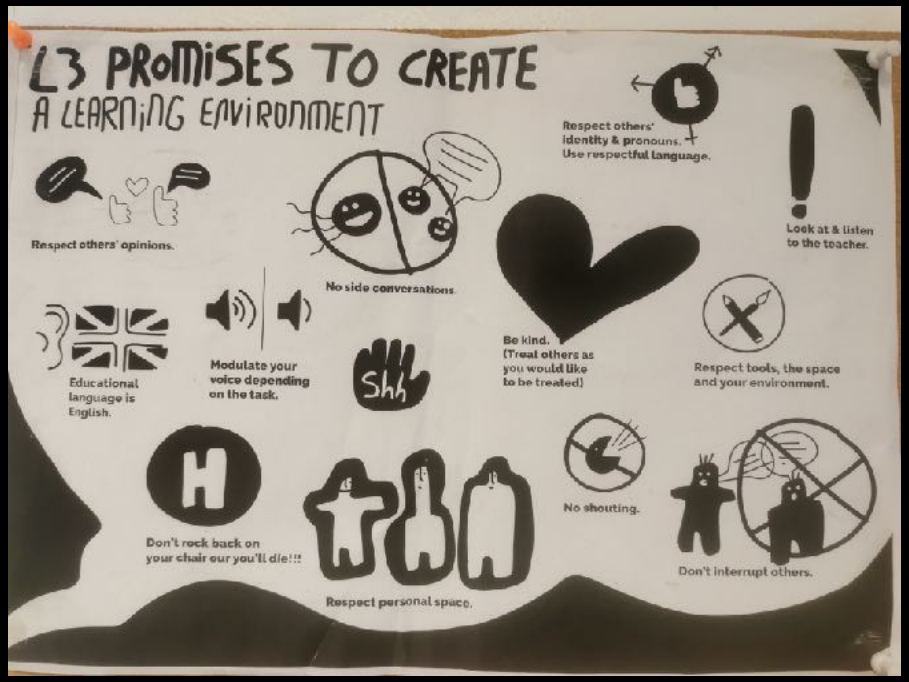


Tells you what is going on

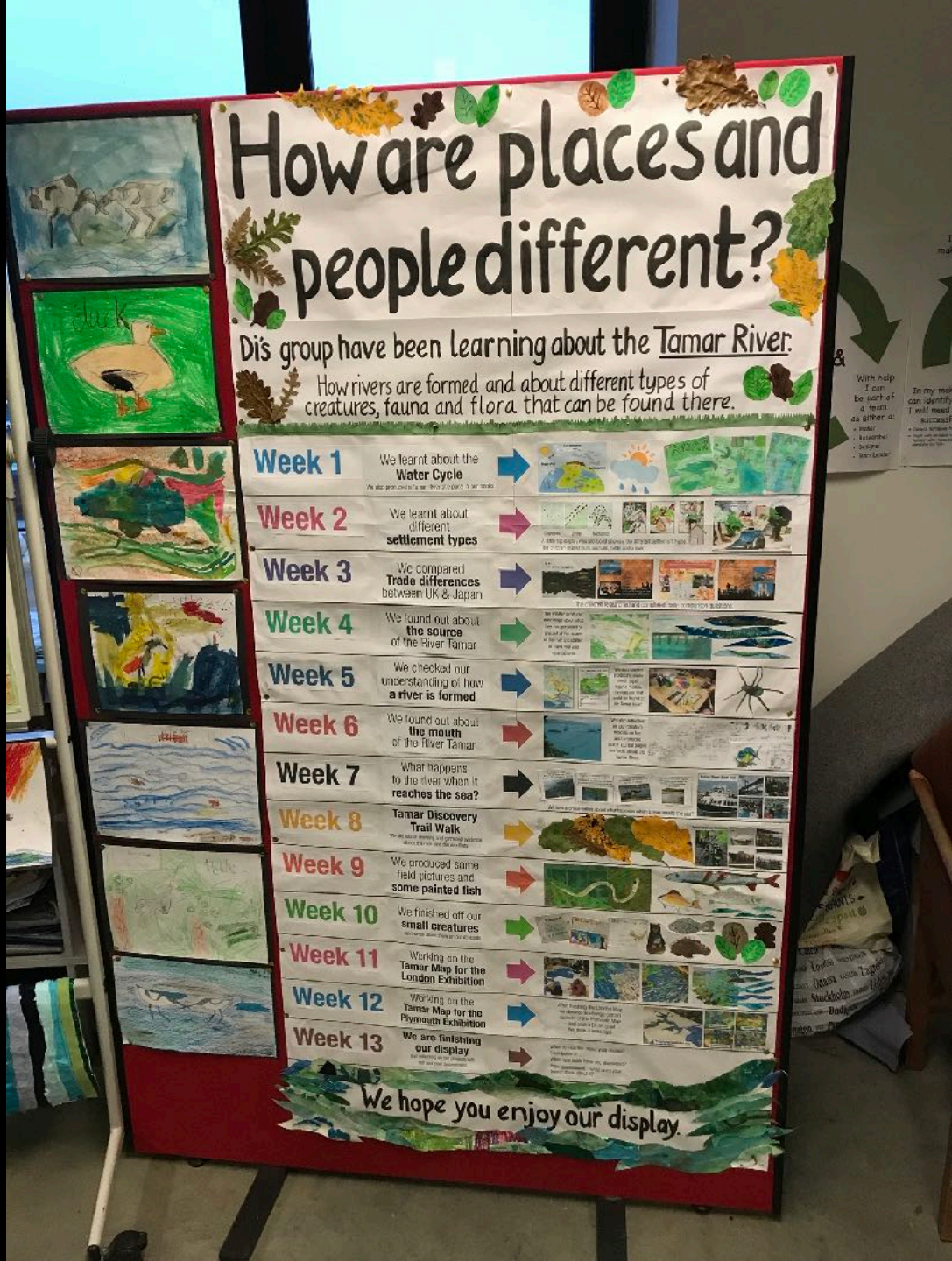
Great work can be framed



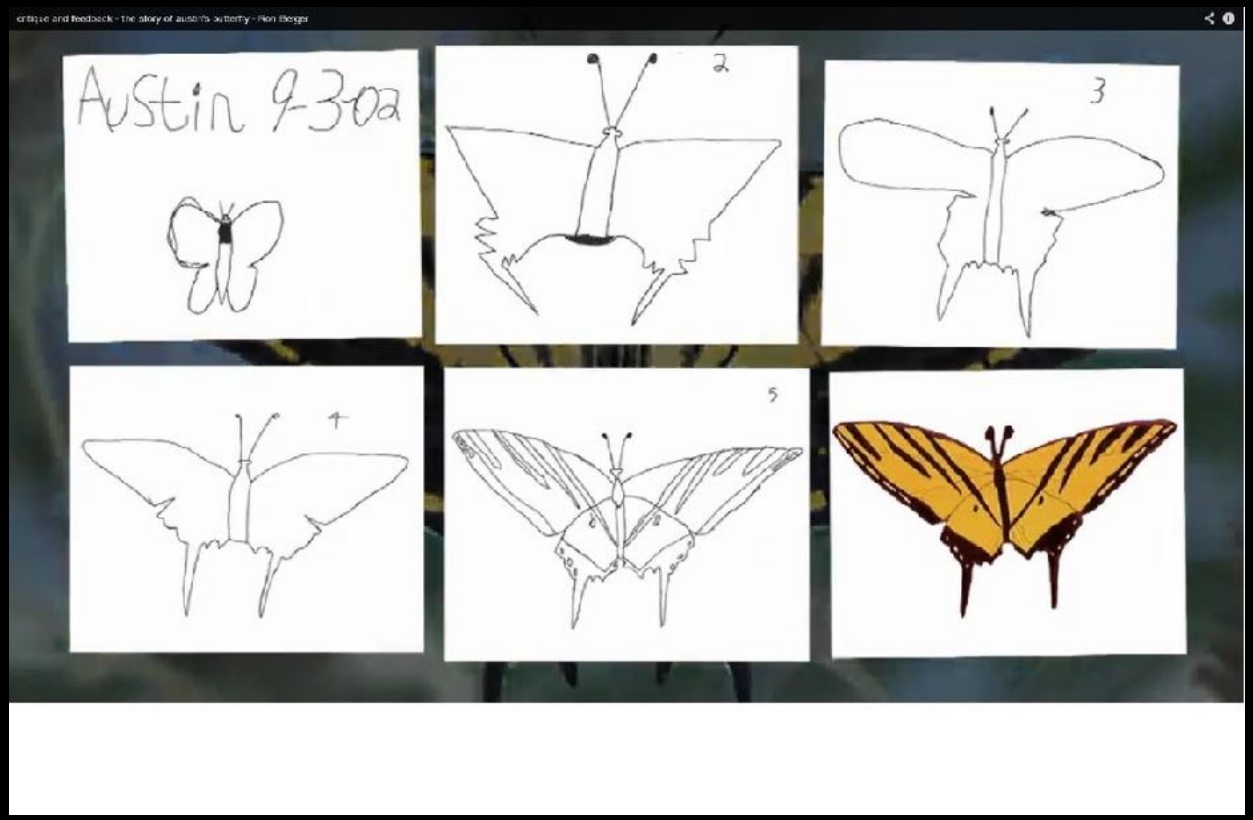
Shares our expectations



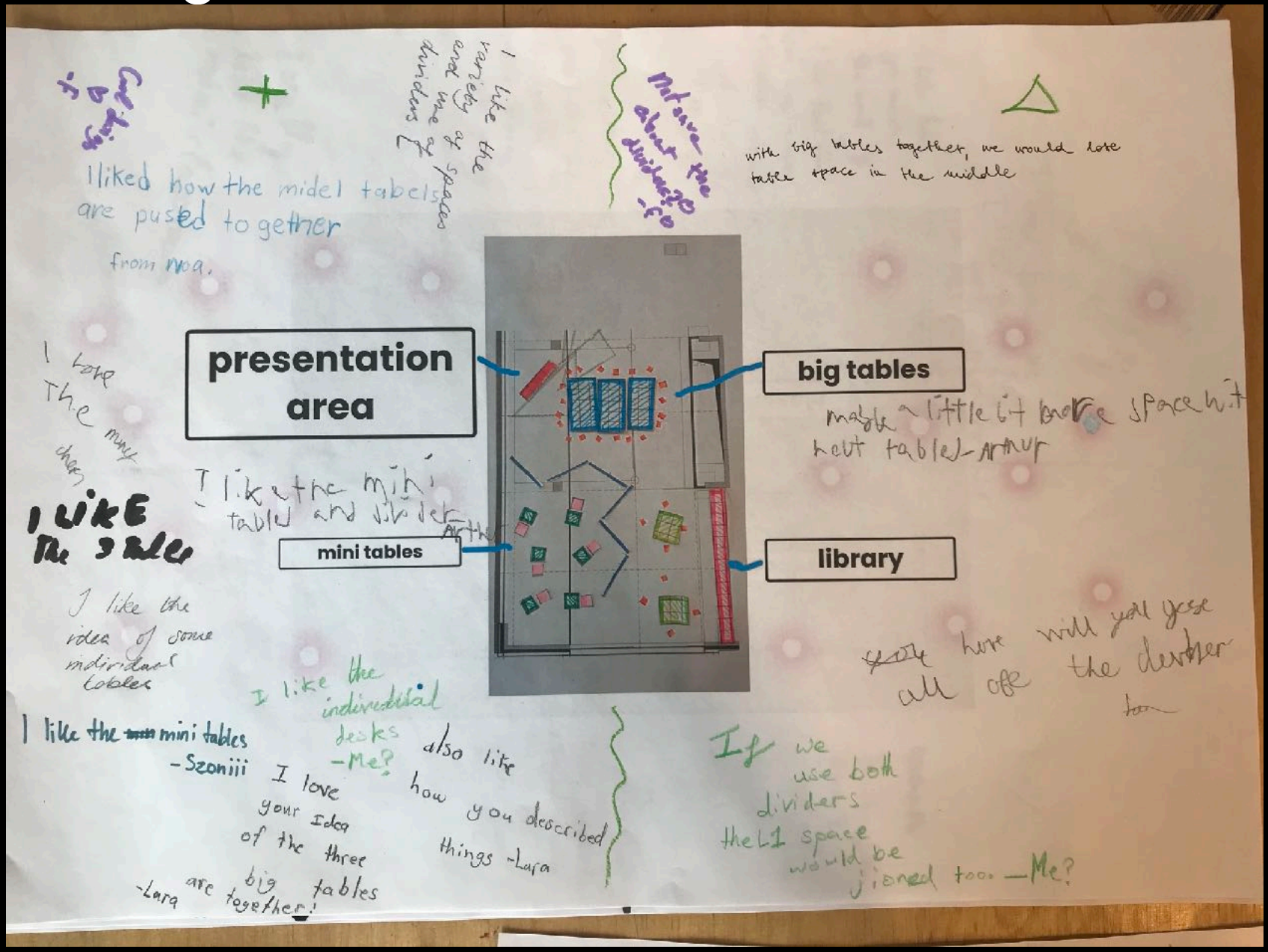
Shows a process



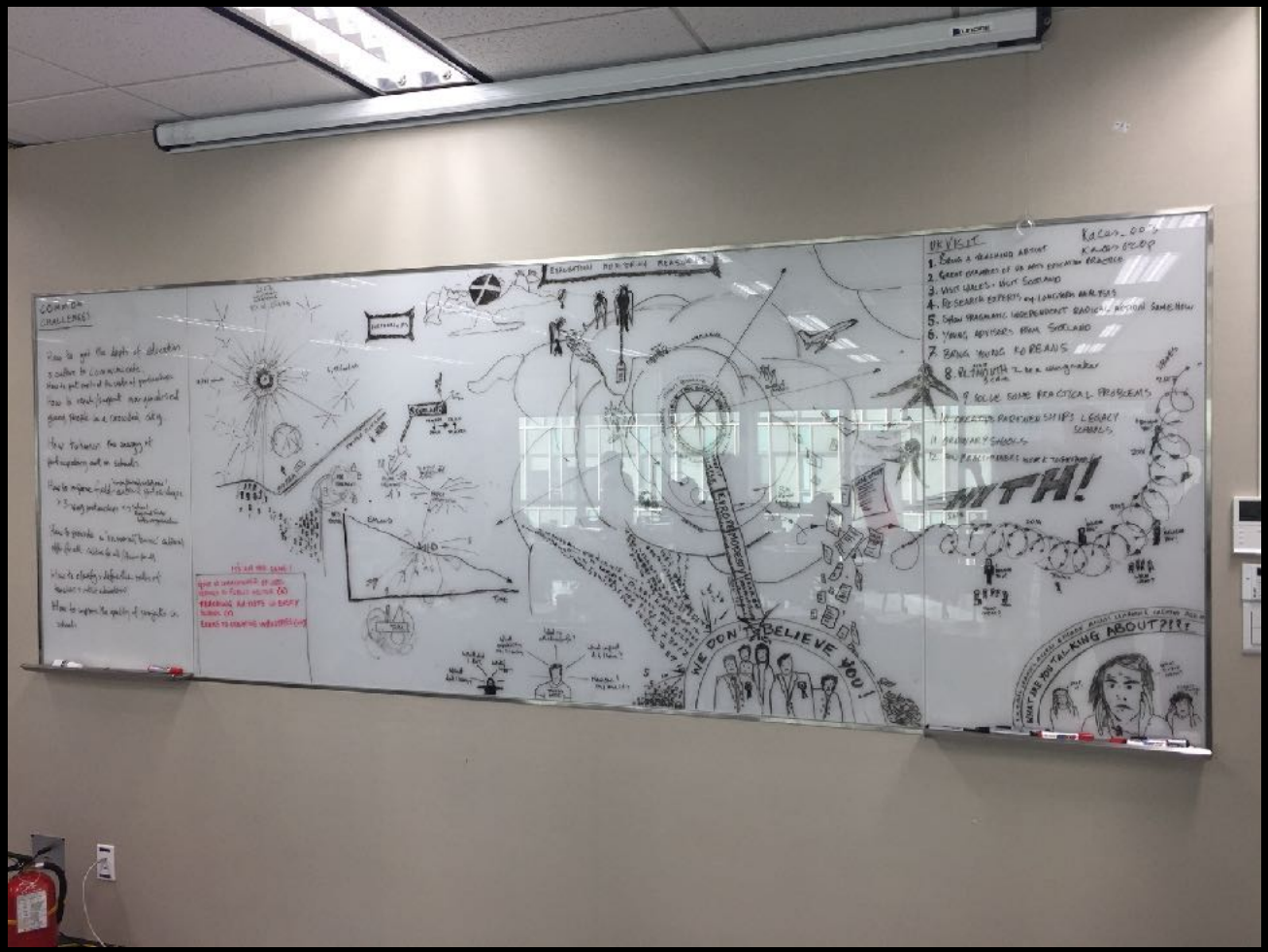
Shows how to achieve greatness e.g. model redrafting, assessment criteria



Encourages Feedback

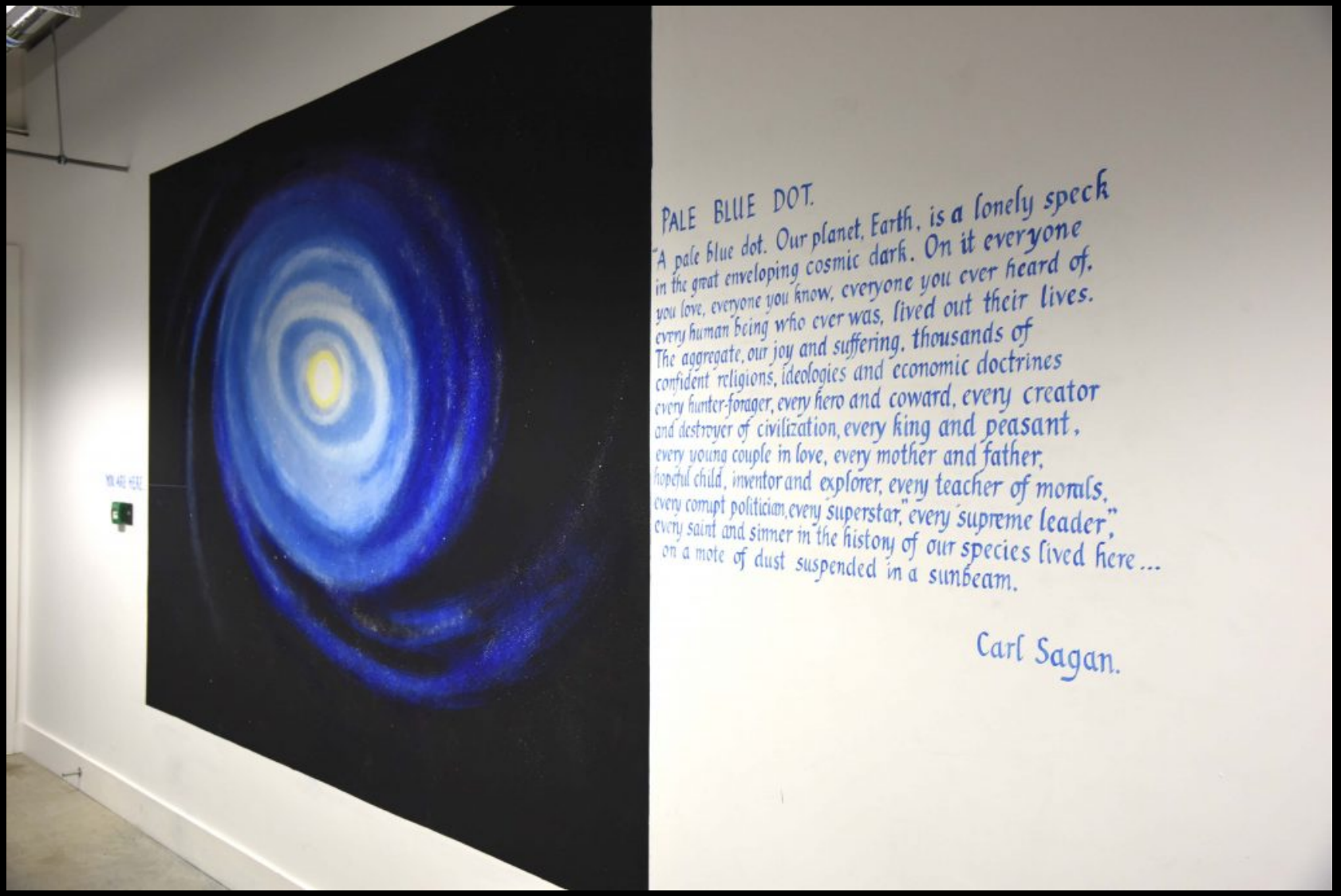


Shows development of ideas and thinking



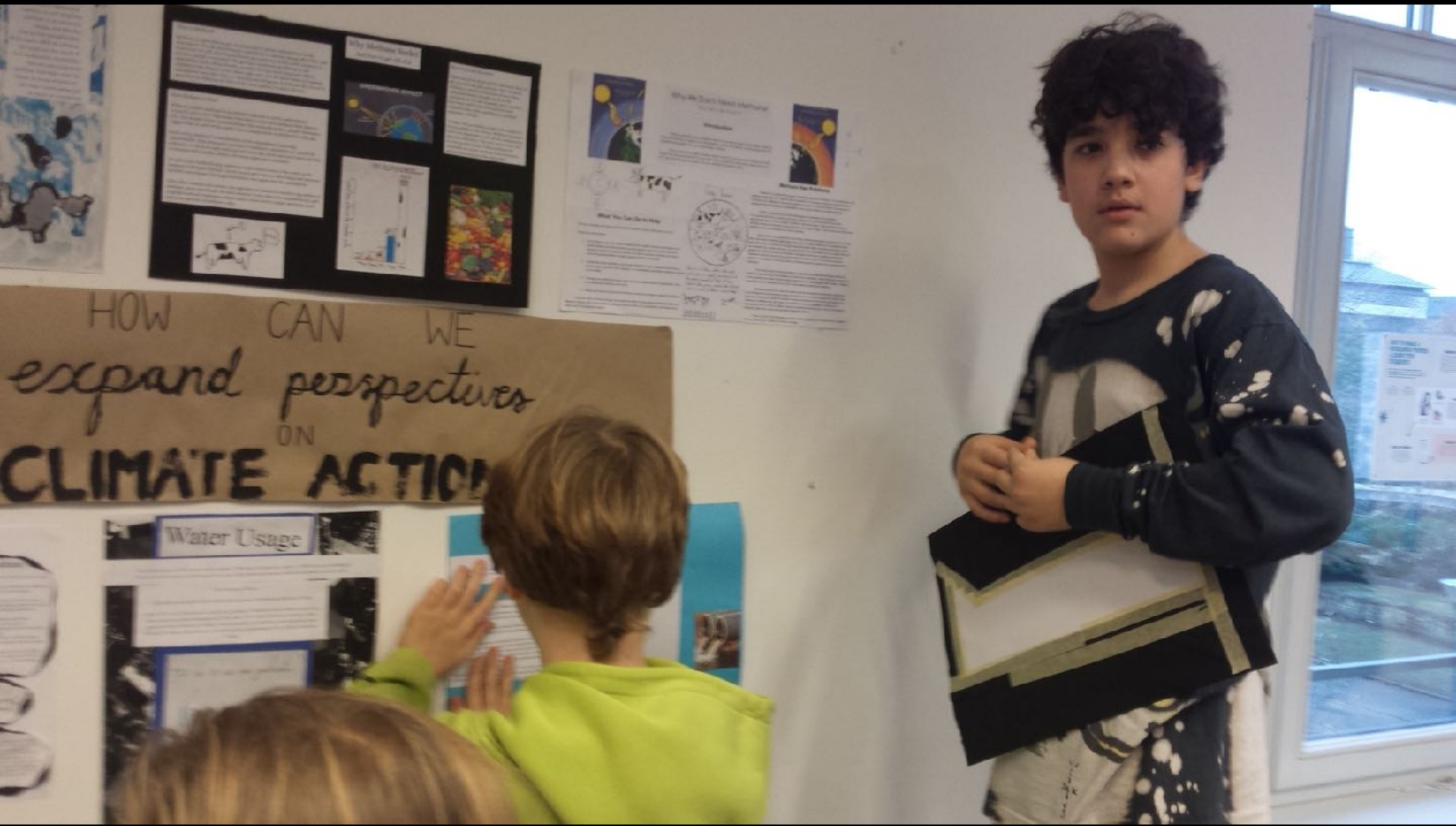
Tells us where we are

Provokes thought



Makes you stop and read

Asks a question …



Connects shared spaces…

Reflects the culture

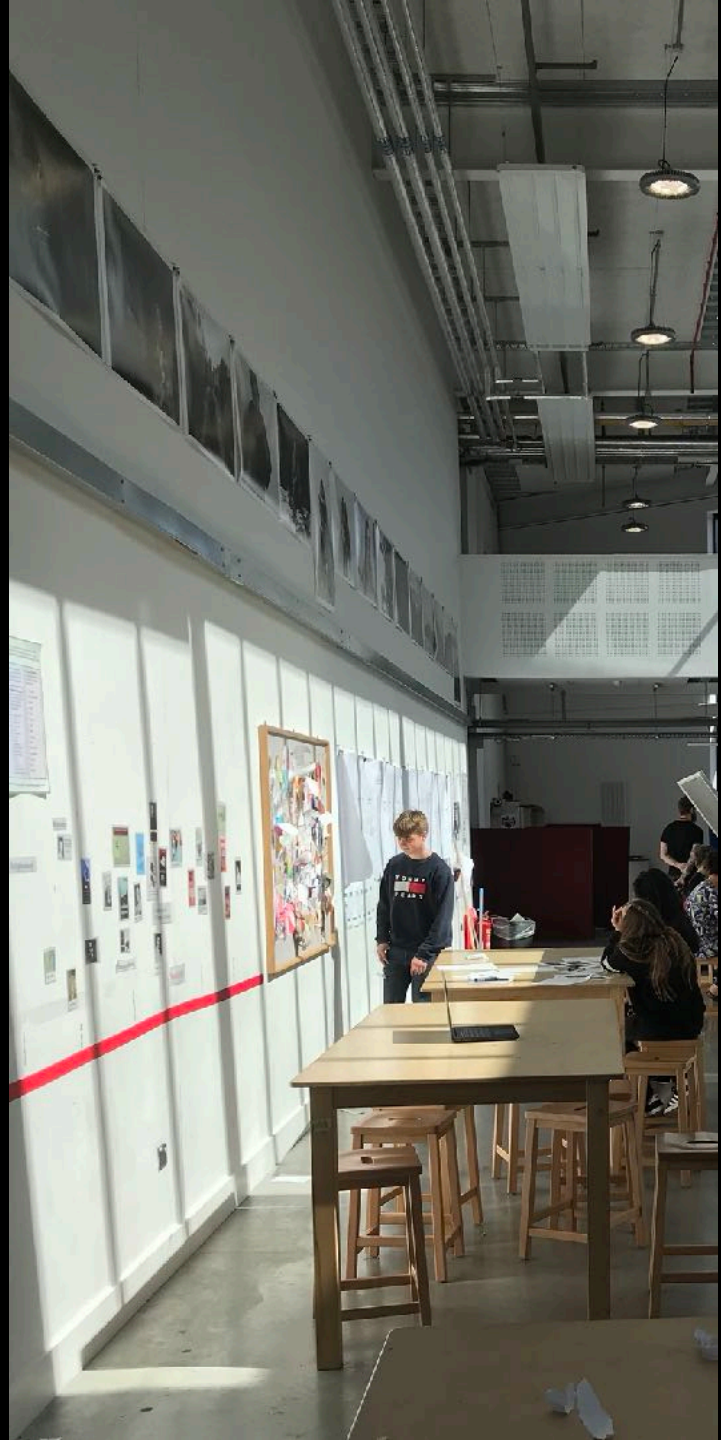
Celebrates what we do …

An inspiring quote shared by owl mail

Promotes values and values effort

Shows work in development

Shows
process in
development

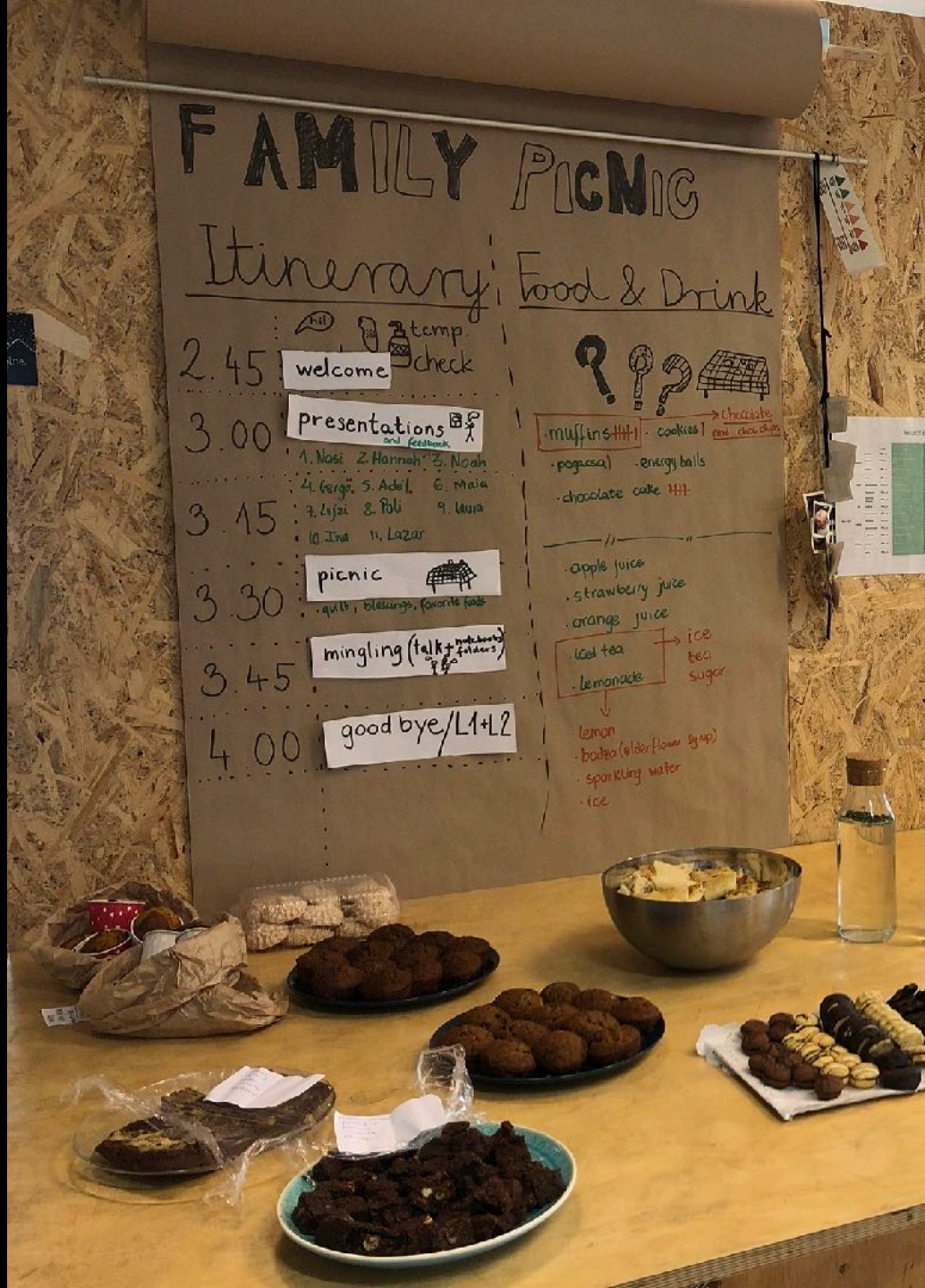


3-D?
Height?

It is memorable and connects to strong memories

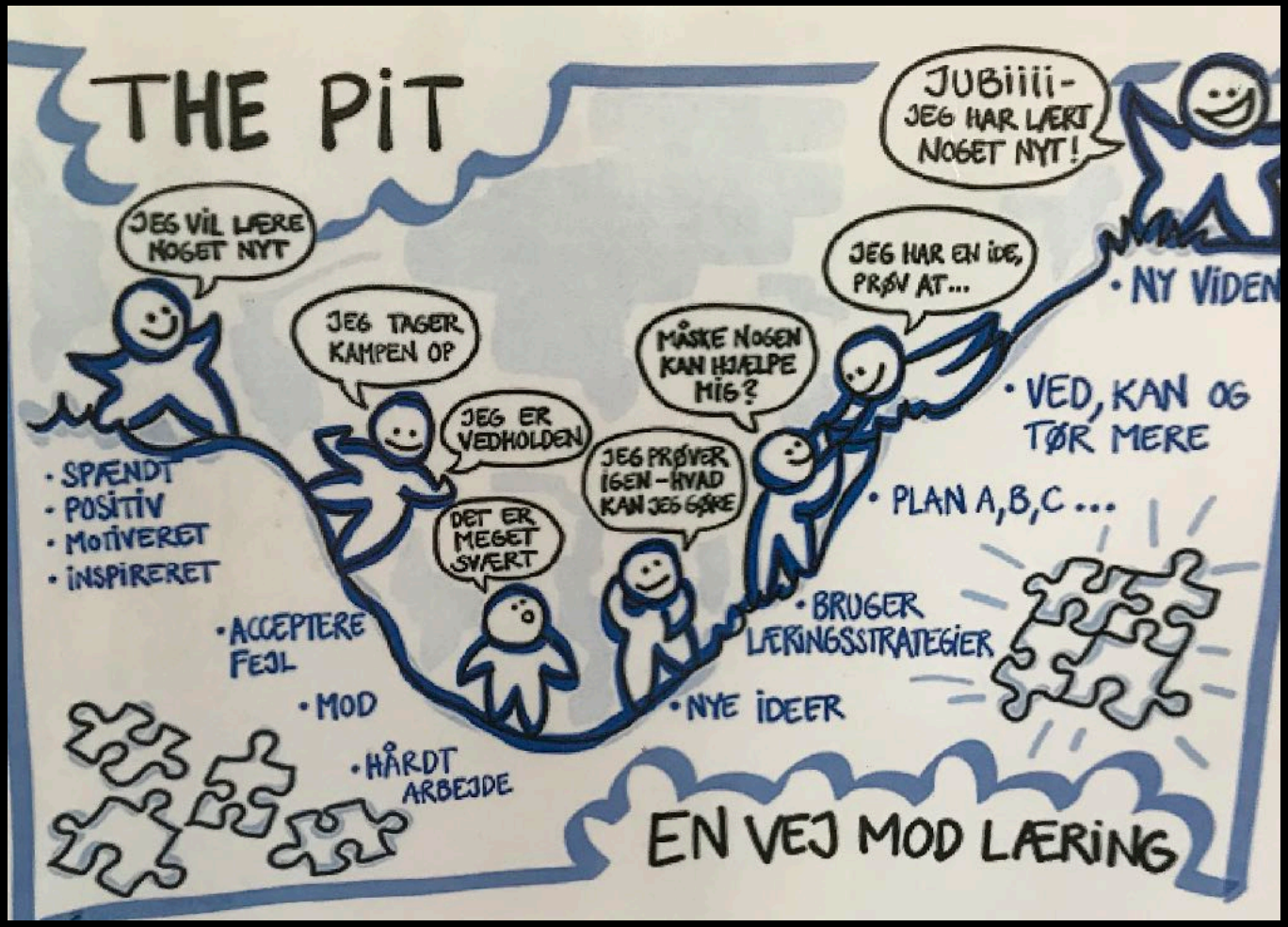
Highlights where you are heading

What do you notice about colour and materials?

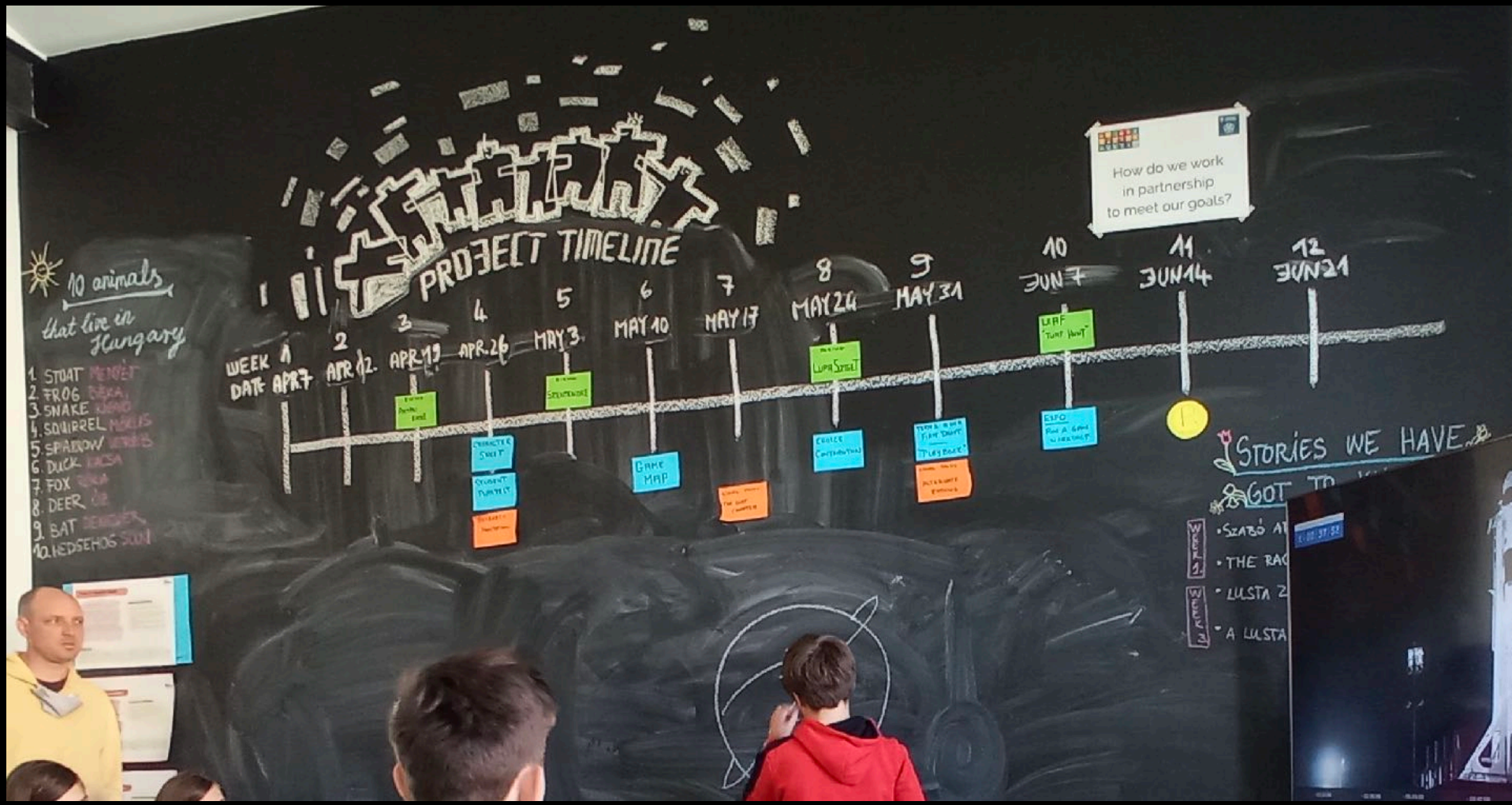


Sharing ideas and dreams

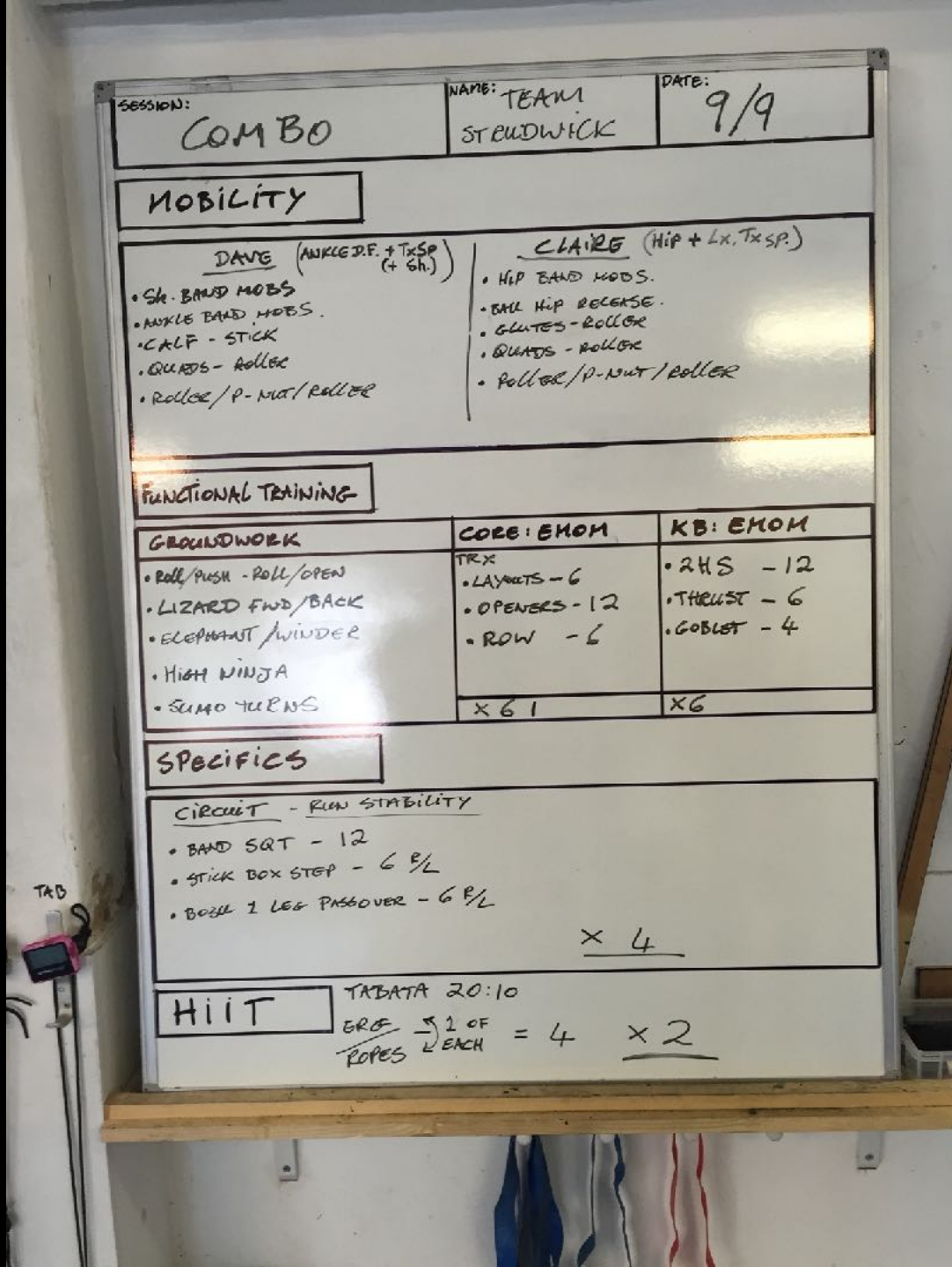
Explains the process of learning



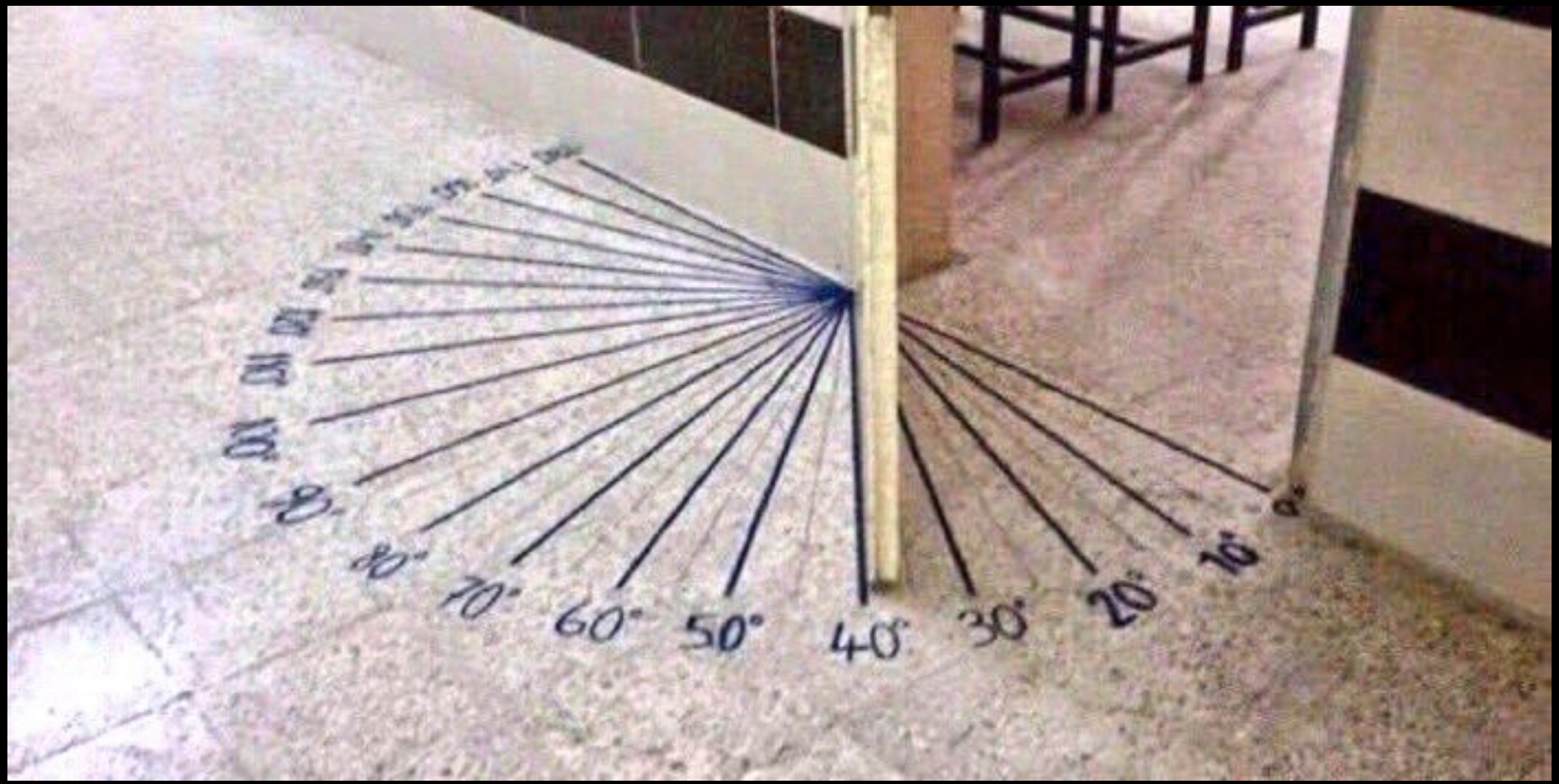
Shares the process of our learning



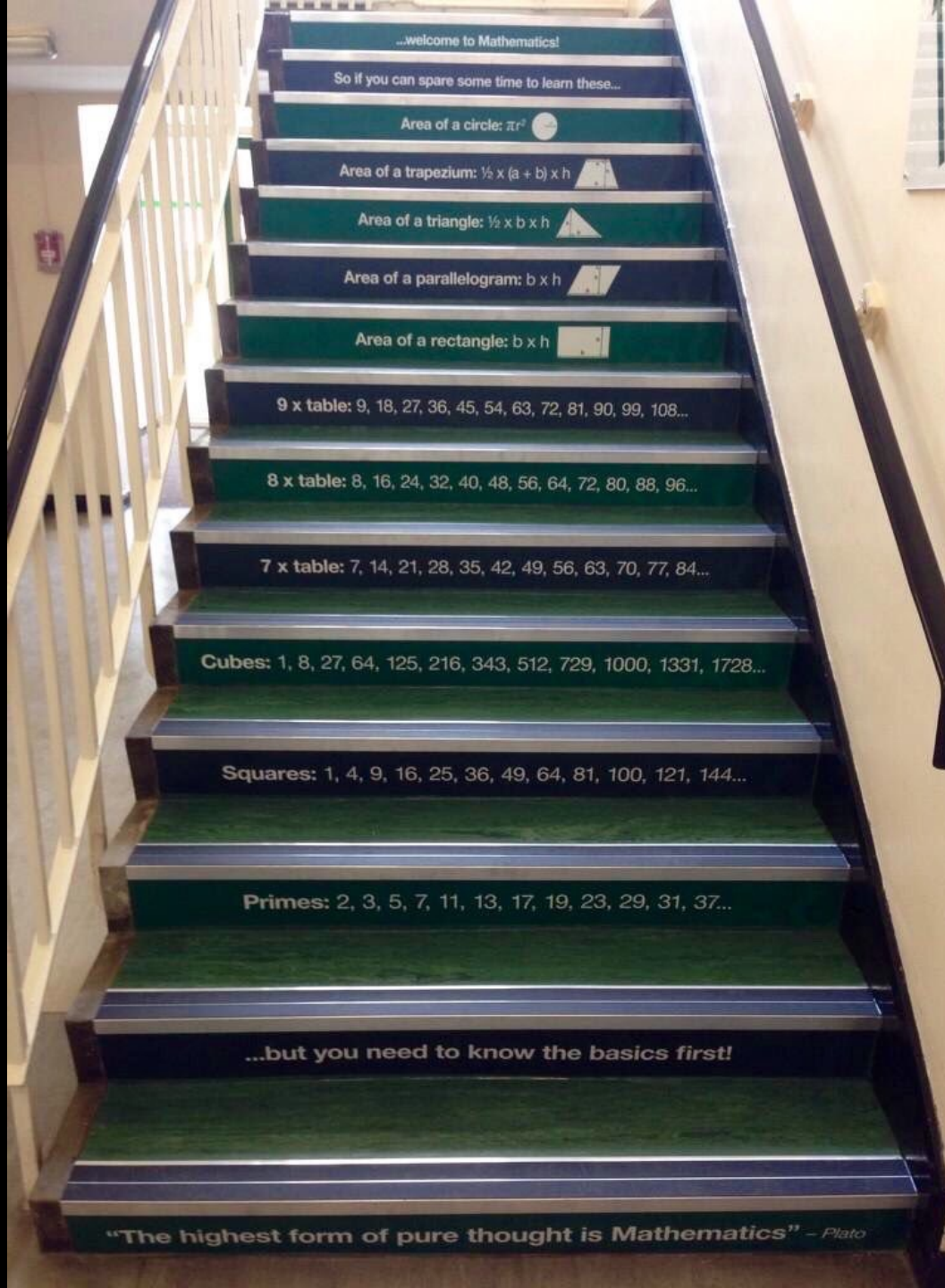
Can be used for any area of life



Don’t forget about Maths?

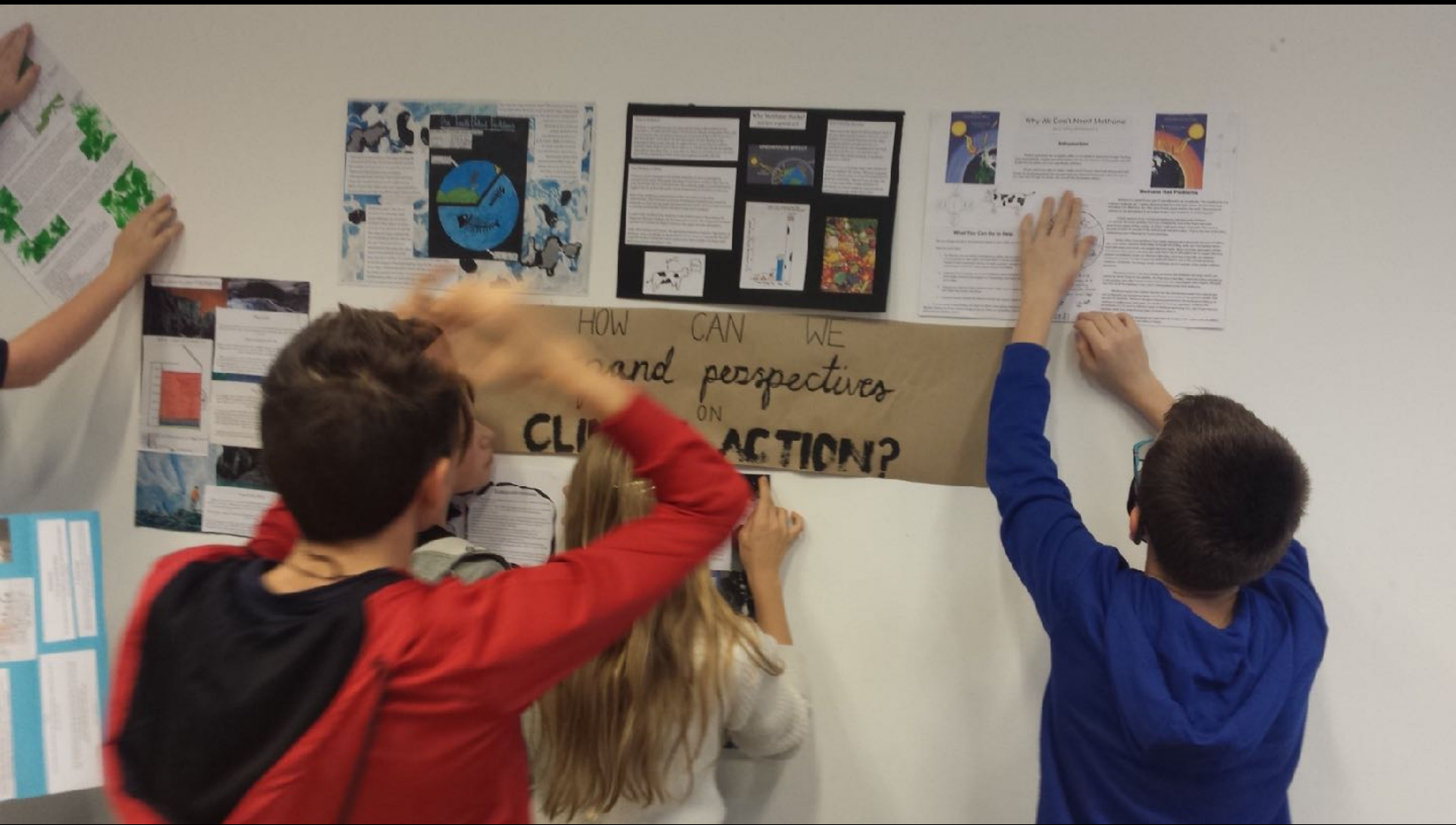


Ah yes, what about Maths…

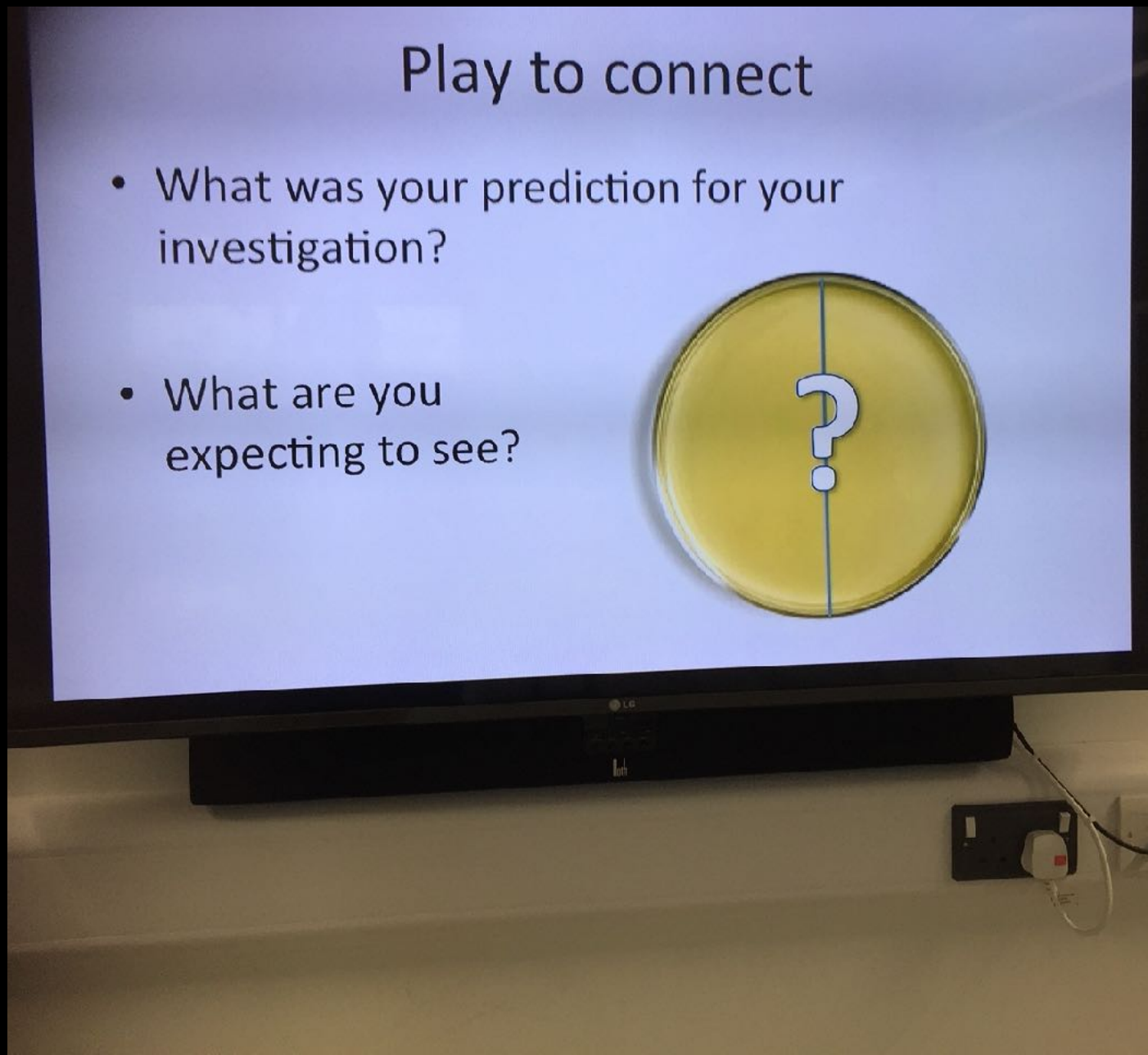


How do we involve the students?

How do they get to curate learning?



Digital Screens can be flexible



What learning are you supporting?

Who might need this?

Look at infographics

THE COST OF FAST FASHION

From climate change to microplastic pollution, the global fashion industry has a huge and growing environmental impact on our planet.

10%

The fashion industry produces an estimated 8–10% of global CO_2 emissions

35%

About 35% of all microplastics entering the oceans come from washing synthetic clothing and textile waste

150 billion

150 billion garments were produced in 2012. Fashion brands now make twice as much clothing as they did in the year 2000

9000

Textile waste weighing the same as 9000 Eiffel Towers ends up in landfill or is burnt every year

32 million

The fashion industry consumes 32 million Olympic-sized swimming pools of water per year, much of it used to grow cotton

51%

More than half of the textiles used in fashion today are polyester, a synthetic fibre made from fossil fuels

Data taken from Niinimäki, Kant al (2020), The environmental price of fast fashion, Nature Reviews Earth & Environment.

Look outside of Schools. Curation in a gallery, museum, Street or …

WC …

What really?

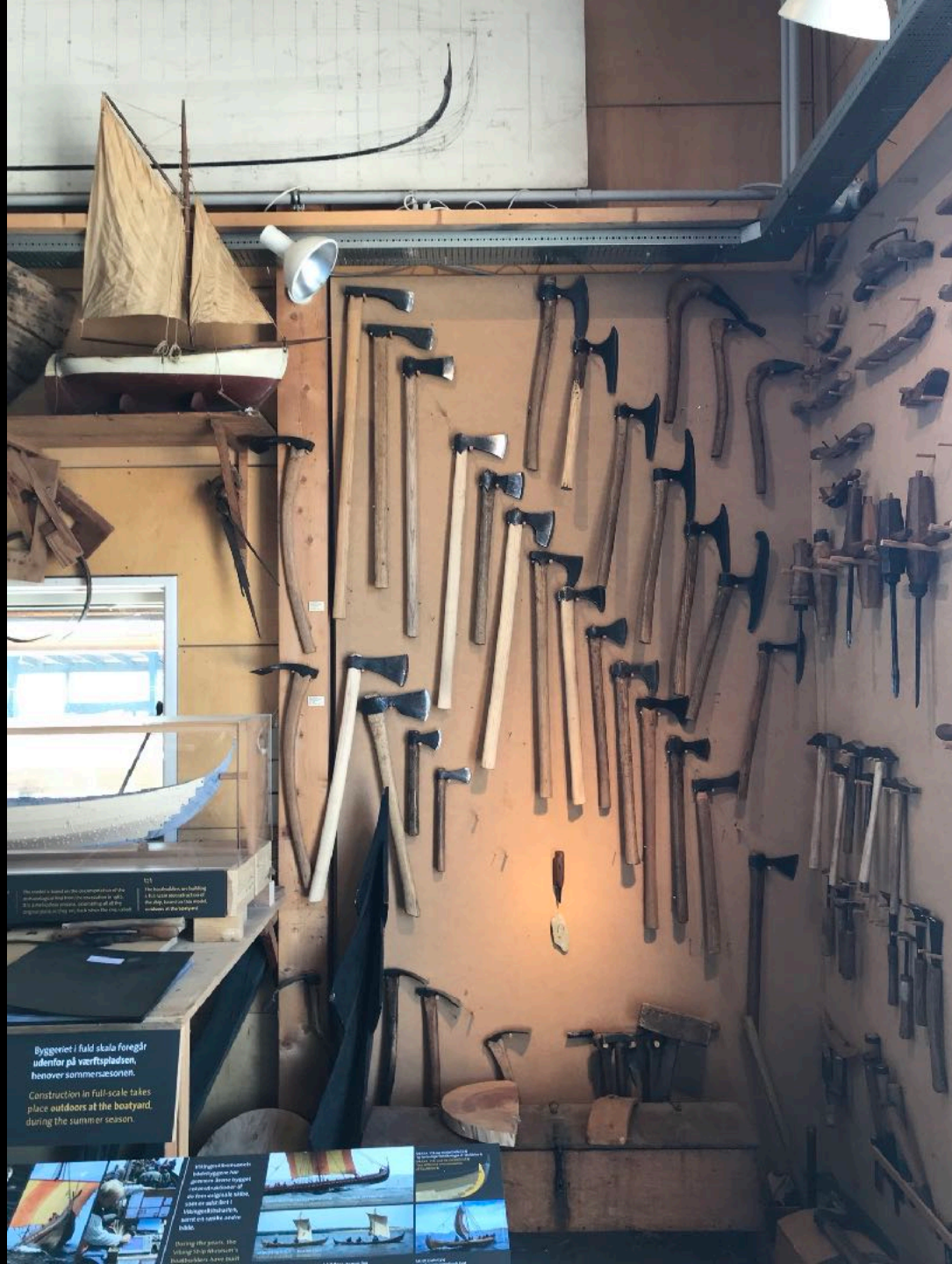
Maybe not …

but the real world …

It draws you in…

It reframes the everyday …

Order and tools can be stunning and practical



An expression of community and peace

The words entrance (an opening, door …) and entrance (something so beautiful you have to look) are spelt the same

How does a classroom become a museum?

How else would you curate Roman shields?

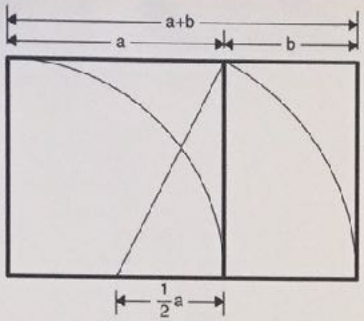
How creatively can you display?

How do you use spaces which get taken for granted?

How do you use an artist to make an idea more engaging?

Almost forgot what about Maths…

The Golden Ratio



In classical Greek geometry, drawings were made without any scaled measurement tools, just a compass to draw circles and mark lengths, and a straight edge to draw lines. With only these tools, the Greek geometers could construct many kinds of geometric figures. Here is one construction they did, called the **Golden Rectangle**.

This particular rectangle has pleasing proportions to the human eye, and the parts of its length, labeled **a**, **b**, and **a+b** have some very special mathematical properties.

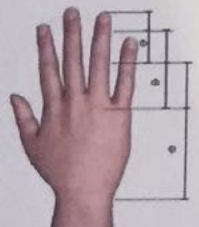
You may recall that a geometric mean is a value between two others, chosen so that the square of that value equals the product of the other two. For example, 4 is the geometric mean between 8 and 2, since $4^2=16$ and $8 \cdot 2=16$. We can express this relationship as a proportion, a statement that two ratios are equal. Here are a few proportions; the last one is from the Golden Rectangle.

$$\frac{8}{4}=\frac{4}{2} \qquad \frac{9}{3}=\frac{3}{1} \qquad \frac{80}{20}=\frac{20}{5} \qquad \frac{1.61803}{1} \approx \frac{1}{0.61803}$$

The proportions above all show a geometric mean, but only the last one also shows the relationship: $\frac{a+b}{a}=\frac{a}{b}$. This is so special that $\frac{a+b}{a}=\frac{a}{b}=\phi$ is called the **Golden Ratio** or the **Golden Mean, Phi.** 3rd century B.C. Greek geometer Euclid put it this way, "As the whole line is to the greater segment, so is the greater to the less." This ratio, as shown in the proportion above, has the following value:

$$\phi = \frac{\sqrt{5}+1}{2} \approx 1.6180339887...$$

The Golden Ratio turns up in many places in mathematics, nature, and art. Here are a few examples:



The Fibonacci Sequence

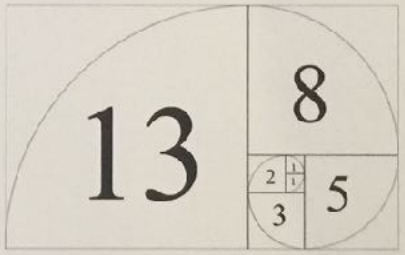
Fibonacci was a 12th century Italian mathematician, best known to the modern world for a number sequence named after him, commonly called the Fibonacci Numbers. He did not discover this sequence of numbers but used them as an example in his most important work, *Liber Abaci*. The sequence begins with two ones, and the next term is always found by adding the two previous terms.

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, ...

The numbers in this sequence have special mathematical properties as well. If you take these numbers two at a time, in order, and compute their ratios, you approach the Golden Ratio. Note that each of these ratios is of the form: $\frac{a+b}{a}$. (That makes sense, doesn't it?)

Ratio	Value
1/1	1.00000
2/1	2.00000
3/2	1.50000
5/3	1.66667
8/5	1.60000
13/8	1.62500
21/13	1.61538
34/21	1.61905
55/34	1.61765
89/55	1.61818

If we look at the sequence geometrically, by constructing squares whose side lengths are Fibonacci Numbers, we approach a Golden Spiral.



The Fibonacci numbers can be seen in art and nature as well.

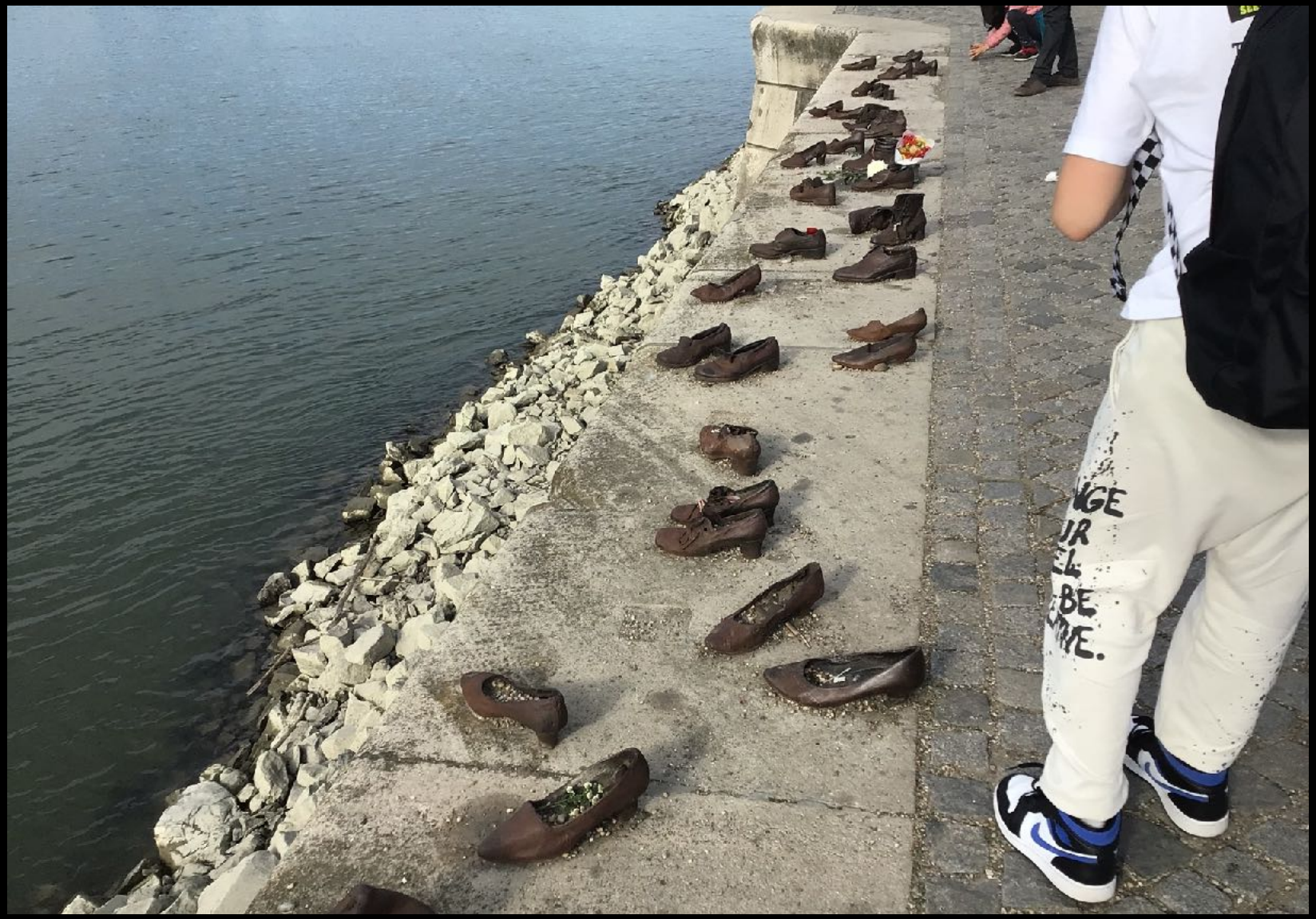
How high can you go?

Is this big enough?

What does curation look and feel like?

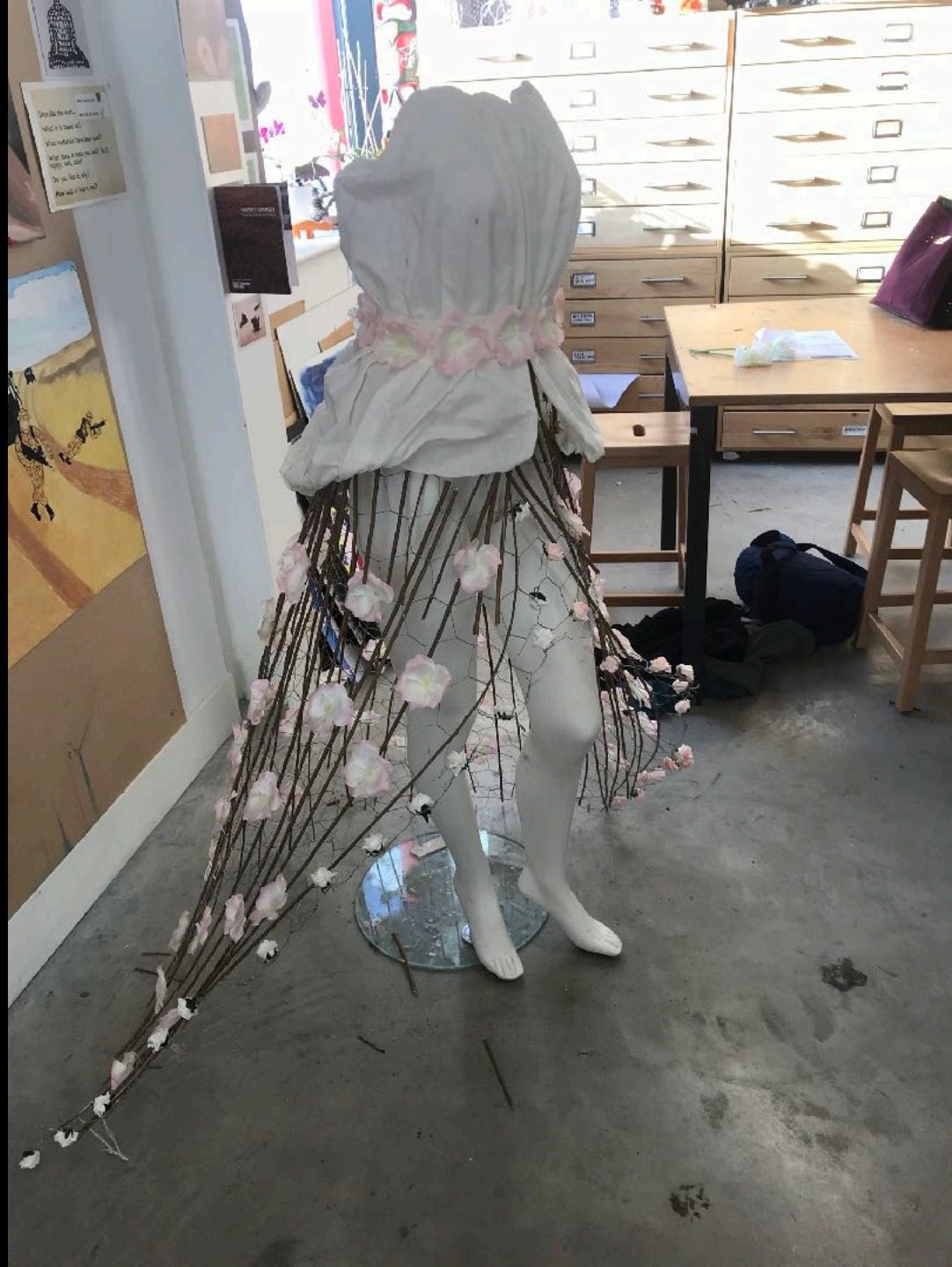
What does curation look like to a reindeer?

What story are you telling?



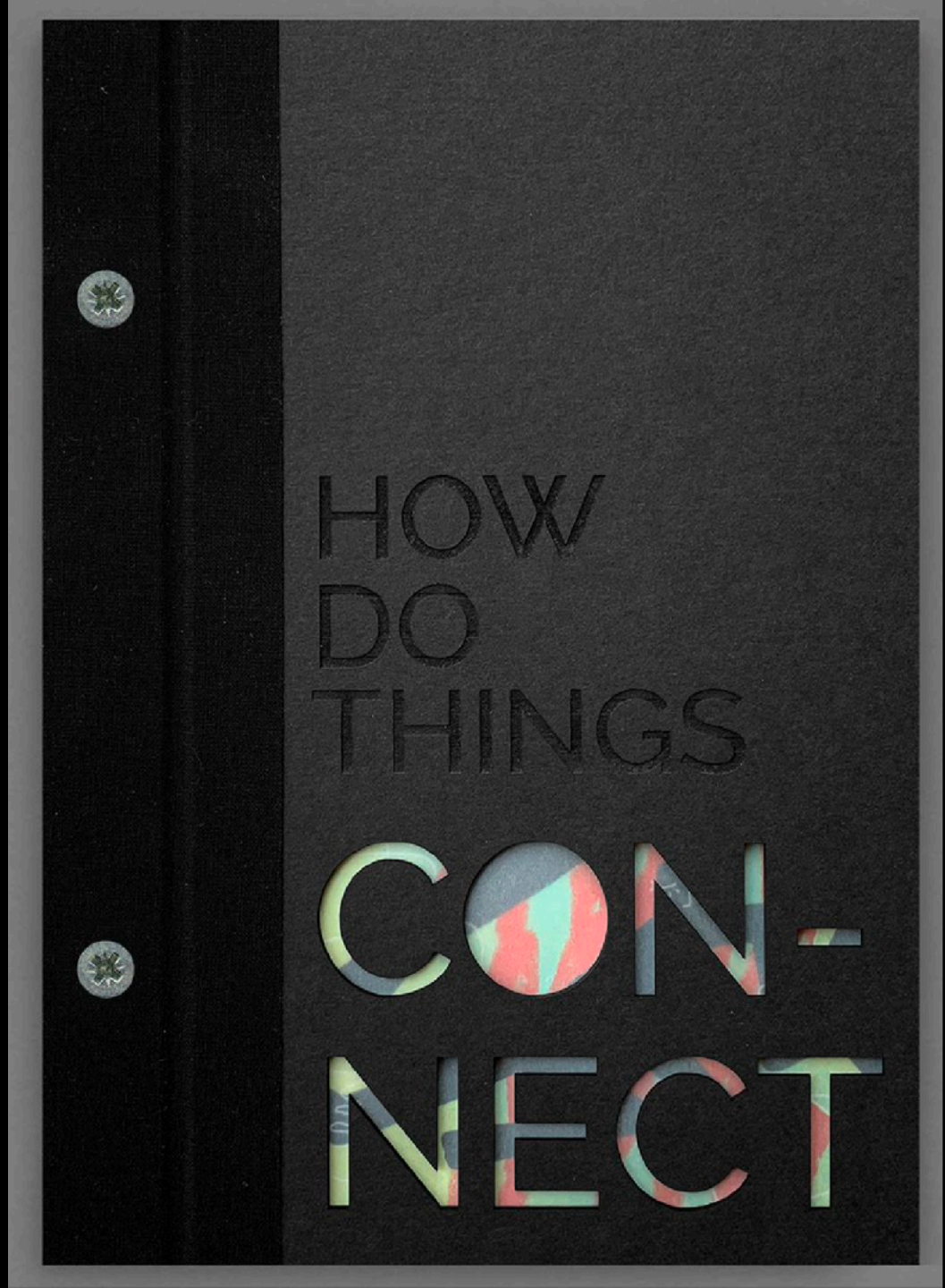
How can the student feel like an artist or designer?

How can I be the designer?



Will it stay up?

Does the student feel valued because a book has been made about their work?



Does space and curation have a moment?

When is there not enough or too much?

Is there a balance of purpose?

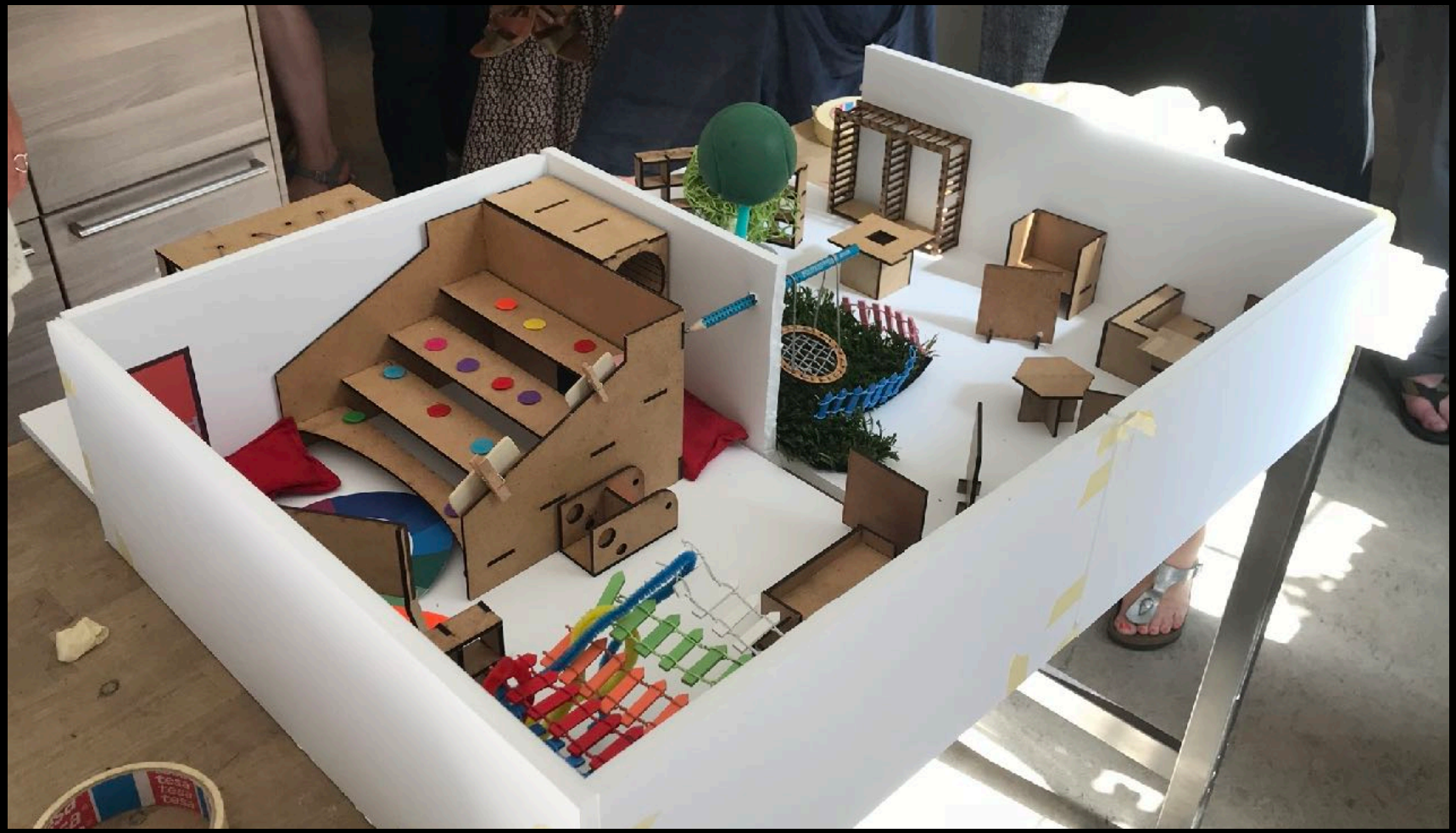
It can be random … create energy

Is curation a bit of a chocolate tea pot?

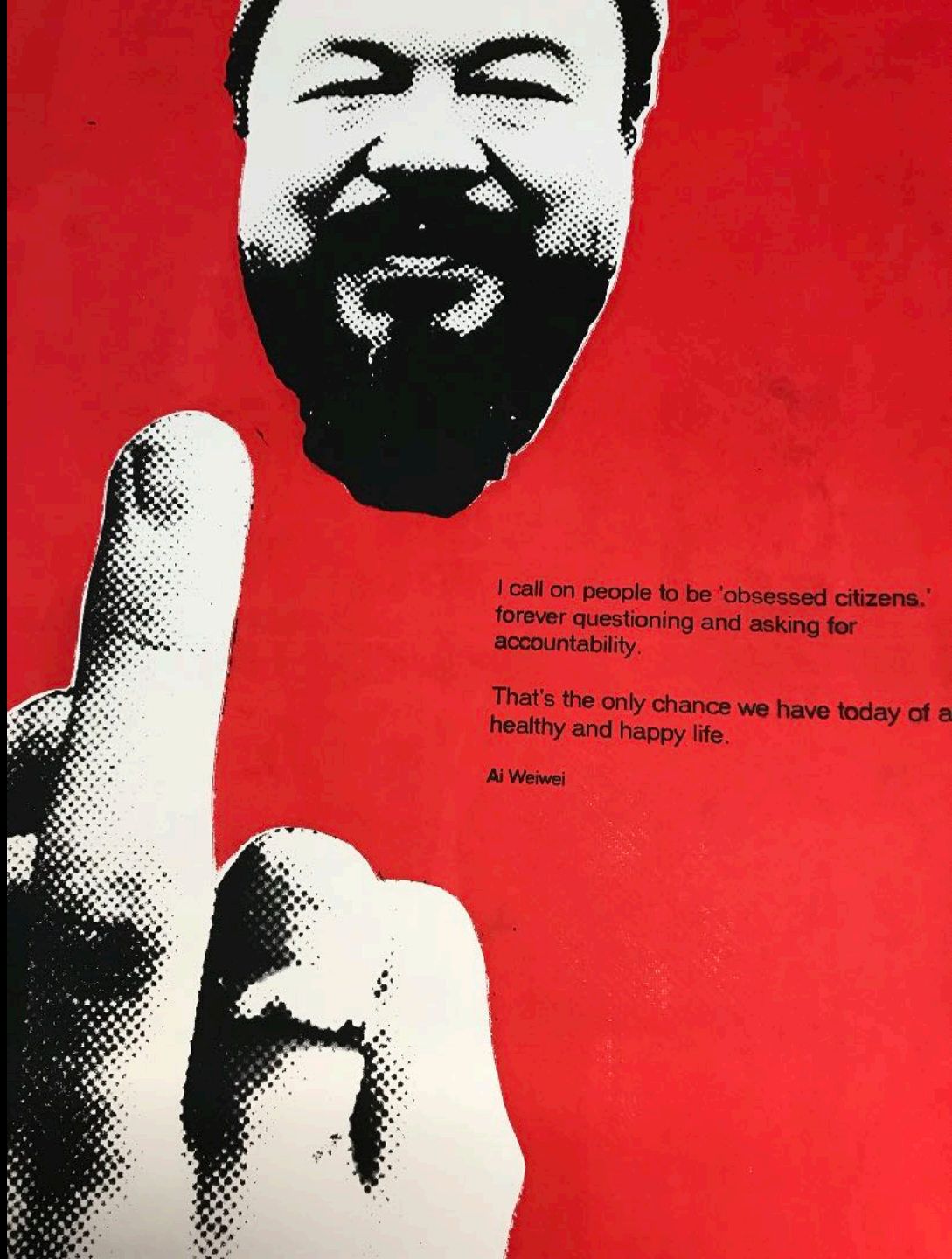
Be for big boys and girls too …

Captures and supports our learning …

Reflects team learning too …



Who leads in and office with this on the wall?



What ready made things might be helpful? Did I mention the Maths …

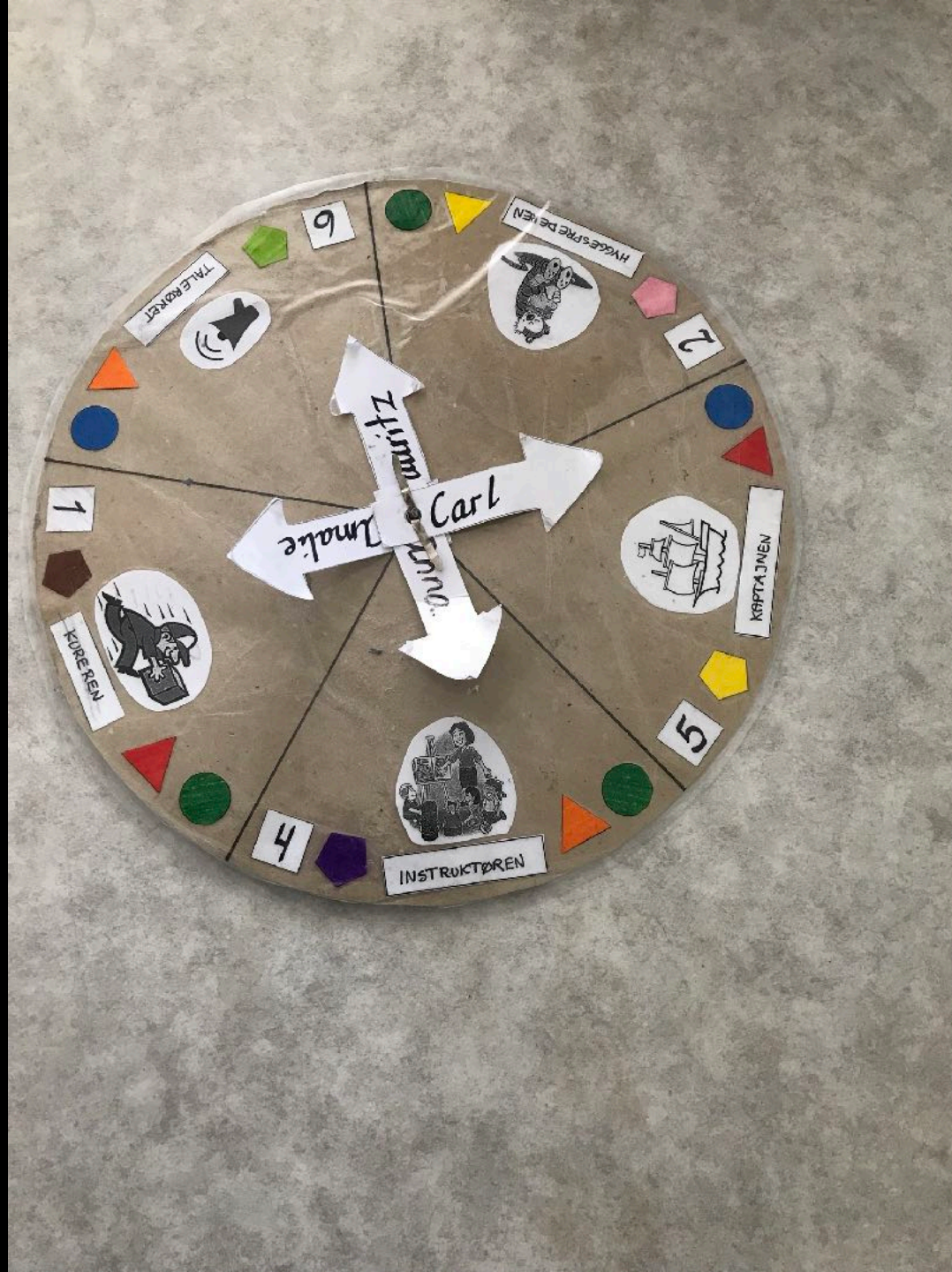
100 Square

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Who needs a map?

What learning are you supporting?

Who might need this?



Can be a portable teaching aid

So what do you want display to do?

Motivate and inspire?

Scaffold or promote learning?

Support the Ethos of the School?

Create engagement?

Tell a story?

or do something else …

Go on a walk around and look for ideas

Don’t forget about cats

But keep the most important things close to our hearts

Why Display and Curate?

What do you want to capture or promote?

How will this be done and by whom?

REAL School Wonder Trail

Install 387 MB

A collection of poetry and short films from the students of REAL School Budapest. October-December 2020

What Impact will you have?

Notes:

Notes:

Notes:

Notes: