

Design for Change

a design thinking guide for schools



CLASS: SCHOOL:

SUPERPOWER:

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Ideas and Tools for a Good Life.

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DFC - A Design Thinking Guide For Schools
Student Guide
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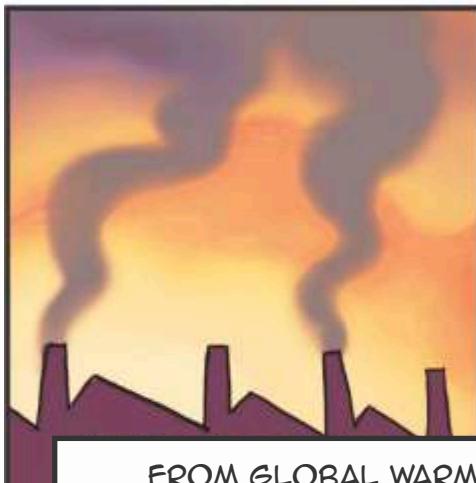
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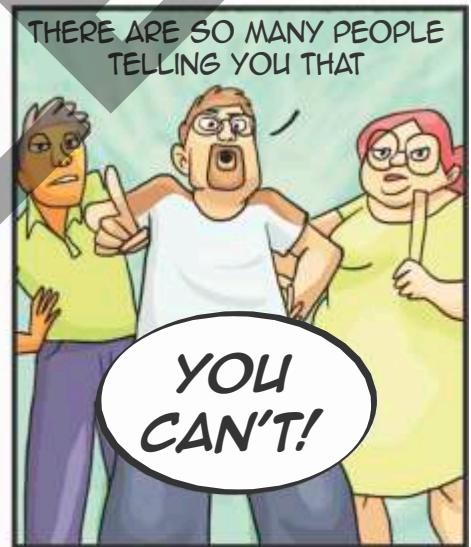
WHY DESIGN FOR CHANGE



THERE ARE SO MANY PROBLEMS IN THE WORLD...



FROM GLOBAL WARMING...



WHAT IF CHILDREN TOOK CHARGE OF THINGS FOR A WHILE?
HOW WOULD YOU DO THINGS DIFFERENTLY?

THIS IS
YOUR
CHANCE!

DID YOU KNOW?
CHILDREN AROUND THE
WORLD ARE CHANGING THE
'BAD' AND MAKING IT 'GOOD'
WITH THE POWER OF
THEIR IDEAS!

AND IT TAKES
JUST FOUR
SIMPLE STEPS TO
**BE THE
CHANGE!**



**STEP 1
FEEL**

WHAT BOTHERS YOU
ABOUT THE WORLD?



DIRTY WASHROOMS
GARBAGE



LONELINESS
ENVIRONMENT



FIND OUT MORE FROM PEOPLE AFFECTED BY THE
PROBLEM - HOW DO THEY THINK AND FEEL?



**STEP 2
IMAGINE**

IMAGINE WAYS TO MAKE THE SITUATION BETTER.

BE CREATIVE AND
AUDACIOUS.



LET'S GET THE
WHOLE SCHOOL
INVOLVED!

STEP 3
DO

GO OUT AND
PUT YOUR IDEAS
INTO ACTION.

SAVE THE

CHANGE LIVES

YES WE CAN

STEP 4
SHARE

INSPIRE OTHERS WITH
YOUR ACT OF CHANGE.

SHARE IT

BLOG IT

REPORT IT

TWEET IT

IT'S THAT SIMPLE!
I CAN IS YOUR
SUPERPOWER!

DFC PROJECTS IN COUNTRIES ALL OVER THE WORLD!





SAMPLE

LET'S GET STARTED...

WARM-UP CHALLENGE

Design an ideal school bag for your partner.

SAMPLE

STEP 1: FEEL

DIG DEEPER—Now interview your partner to understand about his or her current bag.

FACTS

- | | |
|---|----------------------------------|
| Your bag is made of: | Canvas/Plastic/Other |
| How does the material feel? | Soft/Slippery/Rough |
| How many zips/compartments does it have? | 1/2/3/4/5/More than 5 |
| Where all do you use this bag? | School/Home/After-Classes/Travel |
| Does the bag have Patterns/Logo/Pictures? | Yes/No |

USE

- | | |
|---|--------------------------------------|
| Do you use this bag everyday? | Yes/No |
| Does it smell? | Yes/No (if yes of what) |
| What all do you carry in your bag? | Books/Tiffin/Football/Pens/any other |
| Is it easy to find things in your bag? | Yes / No |
| How do you carry it? | One shoulder/Both Shoulders |
| Do you get tired while carrying your bag? | Yes/No |

RELATIONSHIPS

What do you think is special about your bag? Why?

What would you like to change about your bag?

Do you need something more in the bag?

STEP 2 & 3: IMAGINE & DO

Now that you know your partner better, use the information from the interview to redesign the bag.

SAMPLE

STEP 4: SHARE

Share this new design with your partner.

Ask your partner to compare the old and the new design. Will he/she prefer the new design over the first one. If yes why / If no why not? Get Feedback on how you can further improve on your design.

SAMPLE

WRAPPING UP

WHAT DID YOU LEARN THAT SURPRISED YOU?

Two things I learned about my partner:

Two things I learned about the way he or she uses the bag.

SAMPLE

THE SHIFT

CONGRATULATIONS! YOU HAVE JUST EXPERIENCED A VERY QUICK LESSON IN DESIGN THINKING. YOU USED THE FOUR SIMPLE STEPS OF FEEL, IMAGINE, DO, AND SHARE TO DESIGN A SOLUTION THAT IS NOT ABOUT BEING 'DIFFERENT' BUT ABOUT MAKING A 'DIFFERENCE'.

THE KEY SHIFT IS THAT WHEN YOU DESIGN WITH THE USER (IDENTIFYING REAL NEEDS) RATHER THAN FOR THE USER (ASSUMING THE NEEDS), THEN YOU GET SOLUTIONS THAT IMPROVE LIVES.



REFLECTION & PEER REVIEW

One of the important steps in realizing your super power is to understand yourself better. You can do this by working on your strengths and accepting your mistakes honestly. Given below are some reflective questions to help you observe yourself more closely.

We are constantly changing and building our strengths and our measuring scale needs to take that into account.

Circle the image to mark where you are at the present moment in the super-powers of Listening.



LISTENING WITH SENSES

Listening is more than just hearing. Pay attention to how well you listen and understand when someone talks to you.

Take 5 minutes to first put your markings under "I Think" and then pass it to your activity partner to get their thoughts on your present behaviour.

SUPERPOWERS	I THINK	MY FRIENDS THINK
I listen without interrupting in between	▢ ▢ ▢ ▢	▢ ▢ ▢ ▢
I make eye contact and listen with full attention	▢ ▢ ▢ ▢	▢ ▢ ▢ ▢
I listen without getting distracted	▢ ▢ ▢ ▢	▢ ▢ ▢ ▢

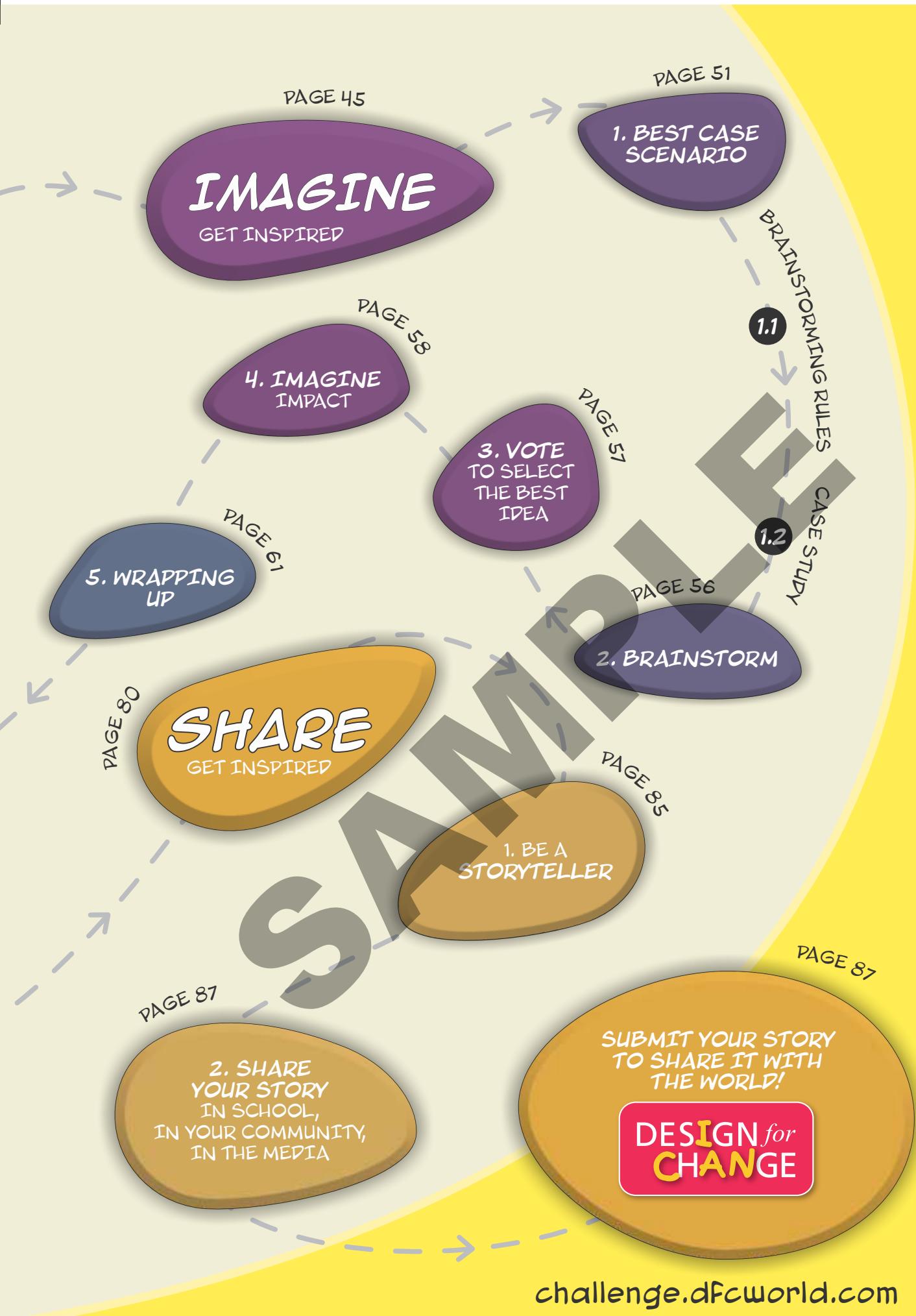
Now compare the stages you have marked for yourself and where your friend has put you for the present. Why might there have been a difference in the

SCRIBBLE PAD

SAMPLE

DESIGN FOR CHANGE ROADMAP

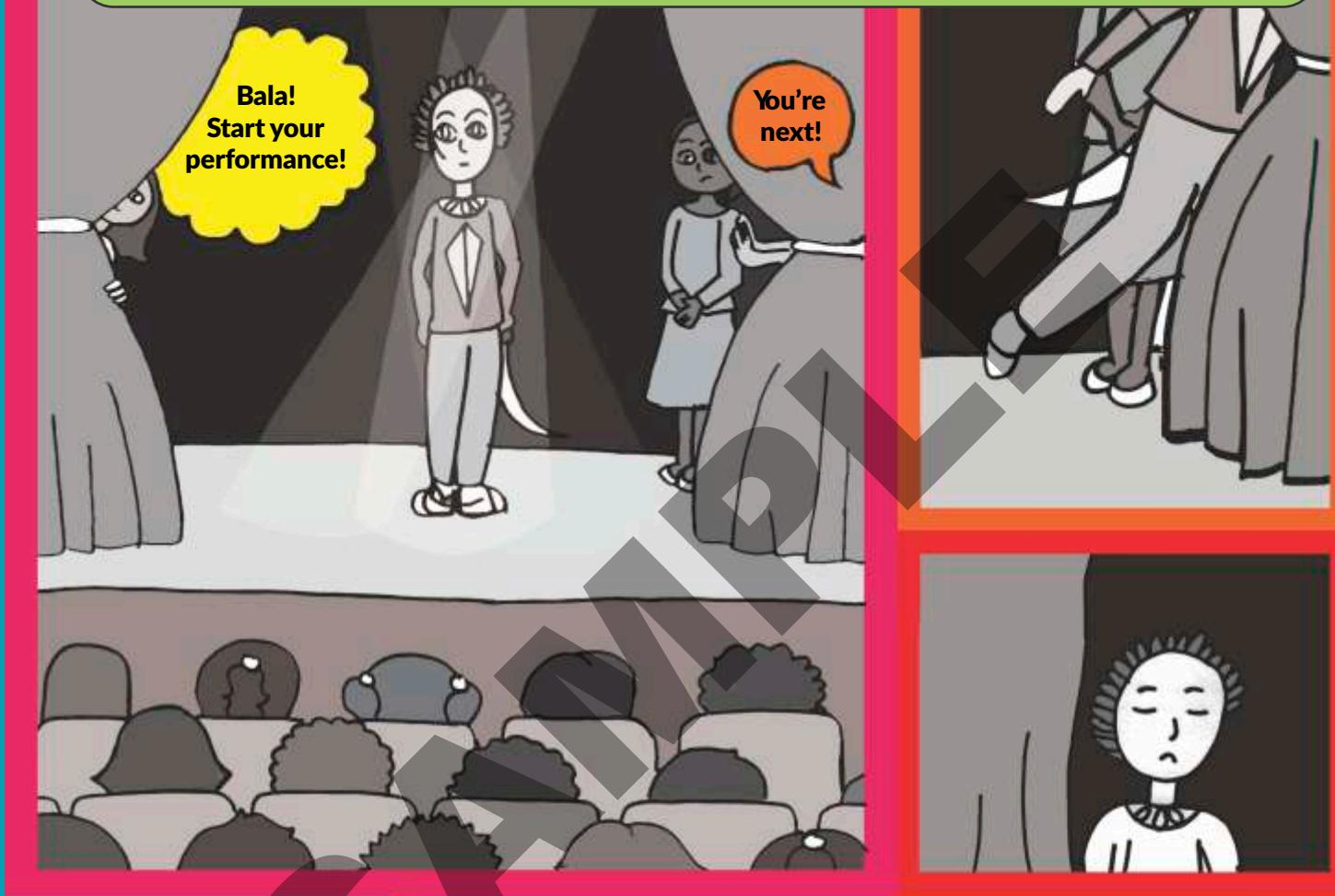


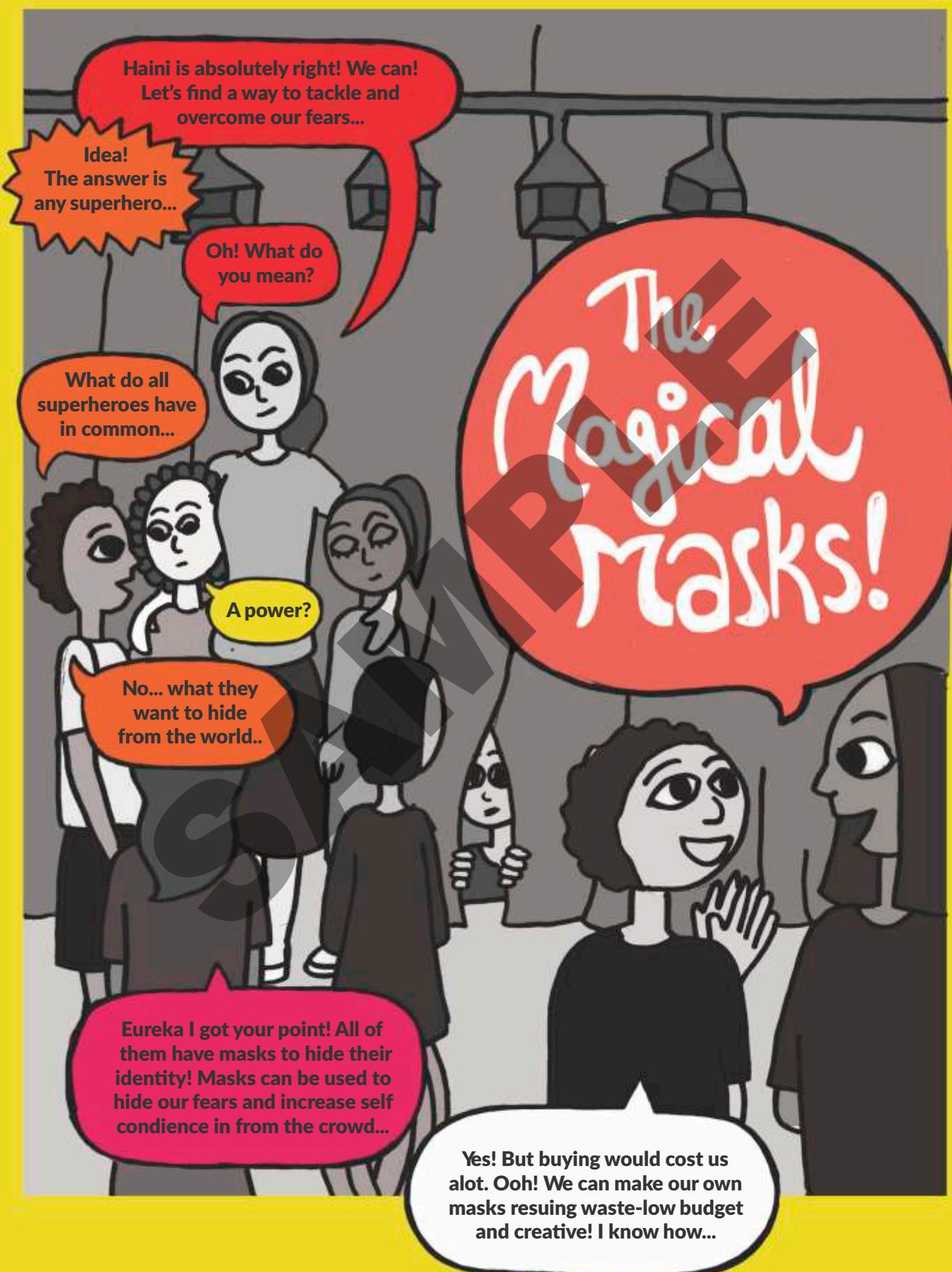


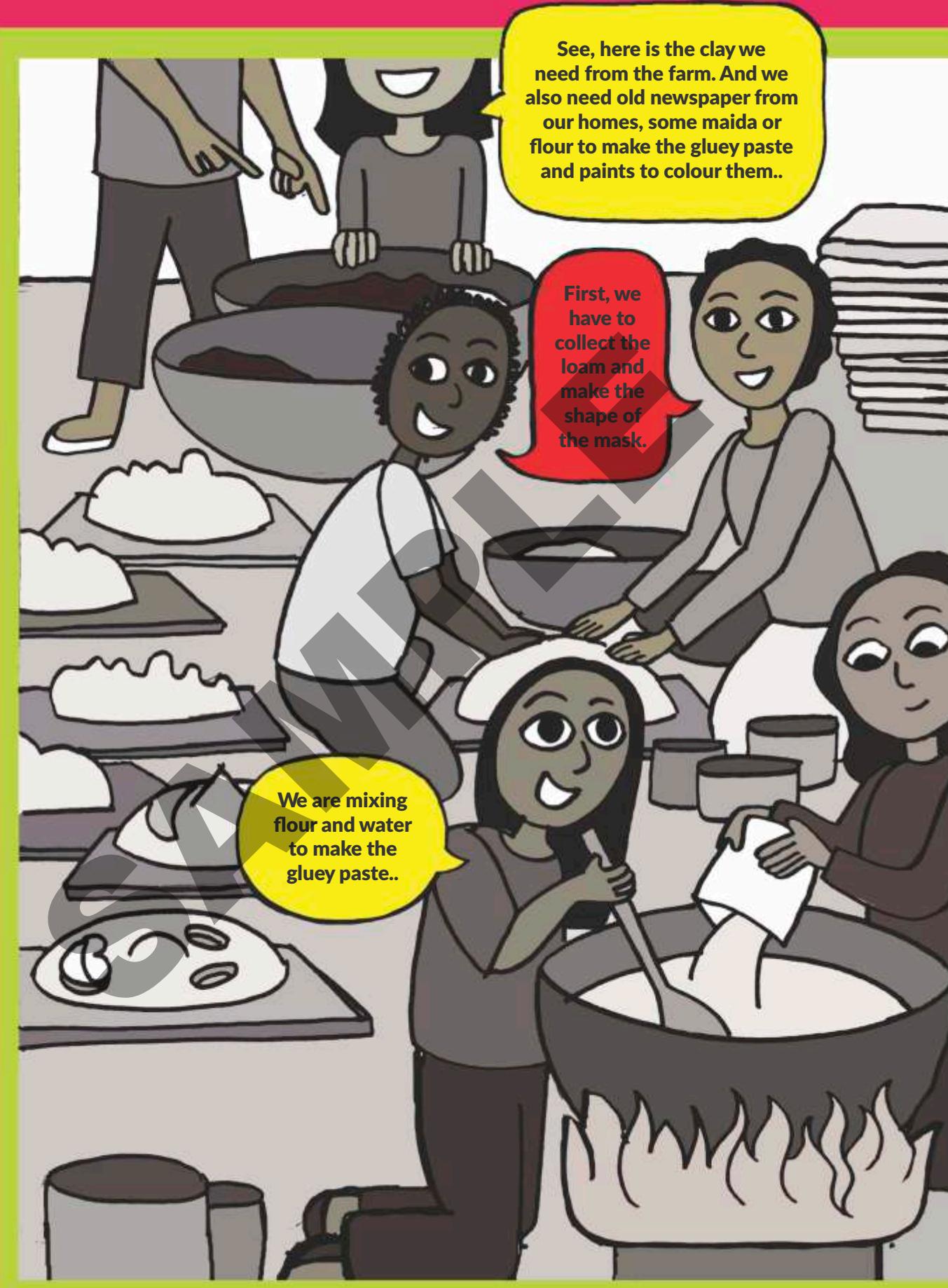
FEEL

Panchayat Union School in Thiruvarur
India
Real story: <http://bit.ly/2g2eW0d>

The first step towards making change happen is to try to understand how people feel. Let's read to find out how a team of students from the Panchayat Union School in Thiruvarur, Tamil Nadu, India noticed that their friends were suffering from low self confidence leading to stage fright. They came up with a creative solution to overcome this problem!



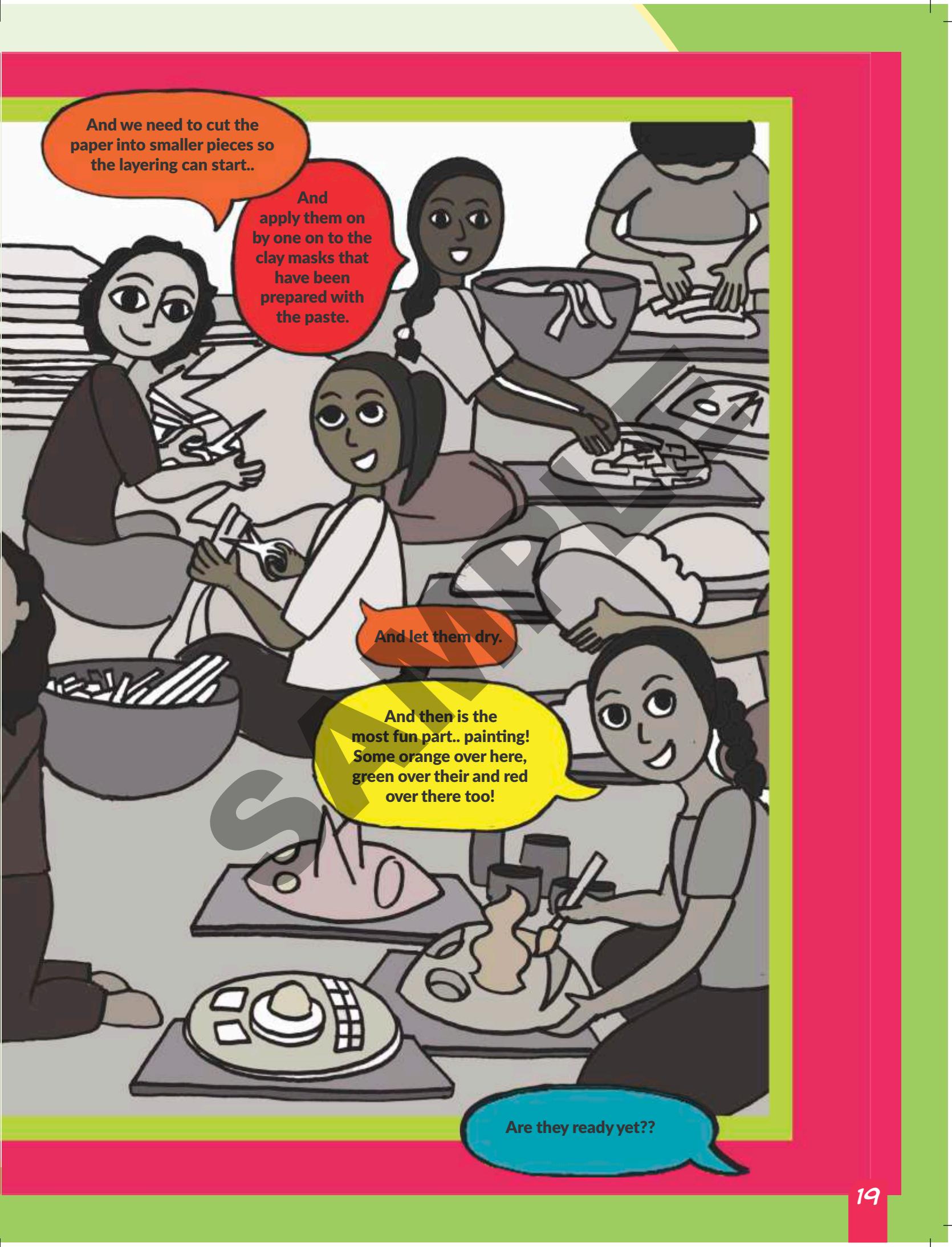




See, here is the clay we need from the farm. And we also need old newspaper from our homes, some maida or flour to make the gluey paste and paints to colour them..

First, we have to collect the loam and make the shape of the mask.

We are mixing flour and water to make the gluey paste..



And we need to cut the paper into smaller pieces so the layering can start..

And apply them on by one on to the clay masks that have been prepared with the paste.

And let them dry.

And then is the most fun part.. painting! Some orange over here, green over their and red over there too!

Are they ready yet??



Very soon they were!
And it was a huge success!

After wearing the masks, the dialogues came out very fluently and it helped in building confidence. They made not a single mistake, while wearing these!

Yes, it was amazing!

Now these masks will be shared with other classes in the school too. So many children can benefit from these!

It's true..
every child can
make the world a
better place...



We can!

And we did!

THINK THROUGH

1. What did the children think about their own-selves?

2. What did they do to tackle their situation?

3. After reading the comic, can you think of a time when you felt scared?
How did you overcome your fear?

4. What does the word 'confidence' mean to you? Do you think you can "give" confidence to someone? If yes then 'how' if no then 'why not'?

5. What would you have done differently if you were a part of this story?

NOW BEGIN YOUR STORY OF CHANGE!

① BE A CARTOGRAPHER

The first step to figuring out what you want to change is to look around you and record what you see. In this exercise, you will map your world.

Here are some ways in which you can observe your world. Consider not only the physical world but also the social and emotional world.

SEE

Use your power of *observation* & see the world with fresh eyes. Notice every physical aspect of a place.

For example...

Furniture | Garbage
Games | Spaces

HEAR

Use your power of *listening* to hear the conversations around you & impact that words have on people.

For example...

Language and discipline
Discrimination
Appreciation

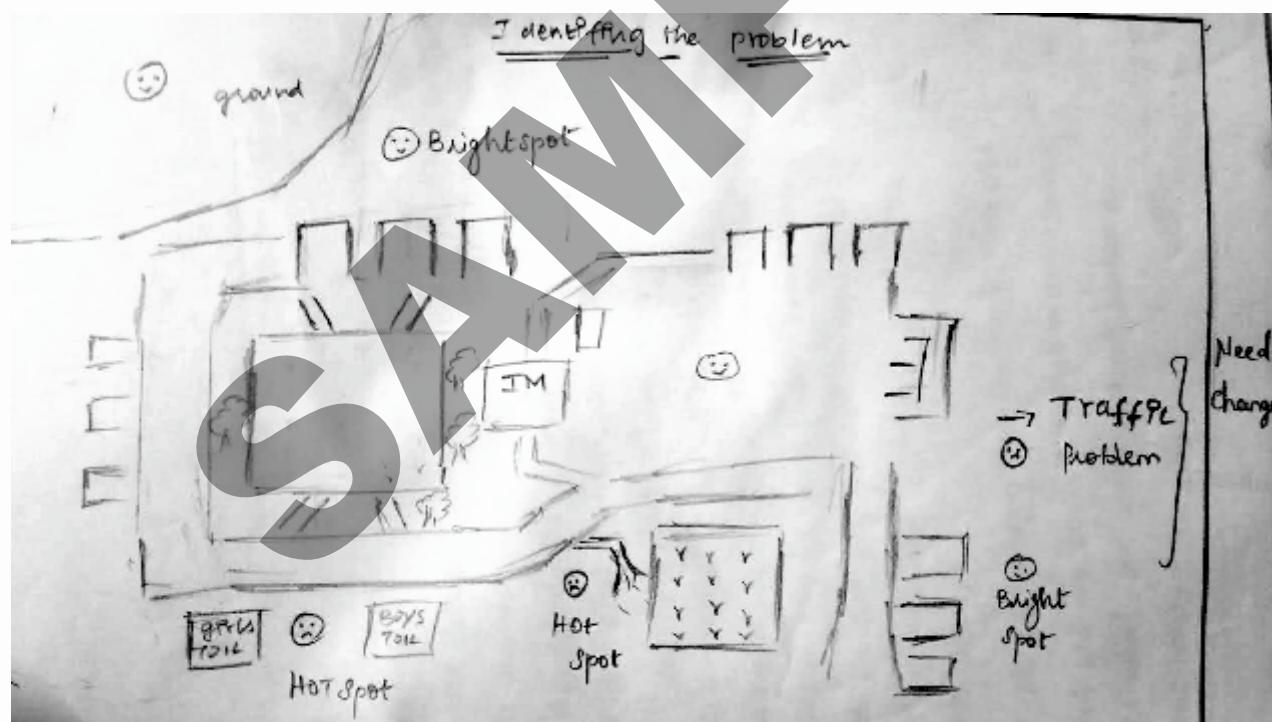
FEEL

Use your power of *attention* to become aware of your feelings in a given place or situation.

For example...

Bullying
Stress
Examination pressure
Bus Journey

An example of a map drawn by a student of Kamala Niketan Montessori School, Trichi



Here are some examples of what students in other schools identified as their hot spots...

- Our football field is not fit for playing
- Girls and boys in our class do not like working together
- We sometimes take our teachers for granted
- Our bathrooms are dirty
- Our school canteen is very chaotic
- People in our community do not consider girls to be equal to boys

1.1 MAP YOUR WORLD

Draw/Describe/Take pictures to make a map of your class, school, or immediate community. Add labels to your map that describe the places you drew. Mark the map with **Hot Spots** (things that bother you) and **Bright Spots** (things that are good but can be improved).

SAMPLE

You can either make a verbal map of words or illustrate your observations. Keep these questions in mind while making the map of your chosen location:

1. What did you see?
2. What did you hear?
3. What did you feel?

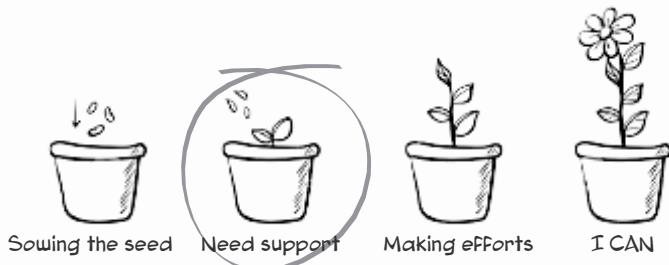
SAMPLE

You don't have to be an artist to map your world. Feel free to use photographs in your map.

REFLECTION & PEER REVIEW

Given below are some reflective questions to help you observe yourself more closely. We are constantly changing and building our strengths and our measuring scale needs to take that into account.

Use these images to mark where you are at the present moment in the super-powers of Observation.



OBSERVATION

You can be more empathetic by being more observant. Reflect on how aware are you of people, places and practices around you.

Take 5 minutes to first put your markings under "I Think" and then pass it to your activity partner to get their thoughts on your present behaviour.

SUPERPOWERS	I THINK	MY FRIENDS THINK
I notice my feelings.	1 2 3 4	1 2 3 4
I notice moods and feelings of others around me.	1 2 3 4	1 2 3 4
I notice opportunities of change in my surroundings.	1 2 3 4	1 2 3 4

Now compare the stages you have marked for yourself and where your friend has put you for the present. Why might there have been a difference in the marking of stages?

SCRIBBLE PAD

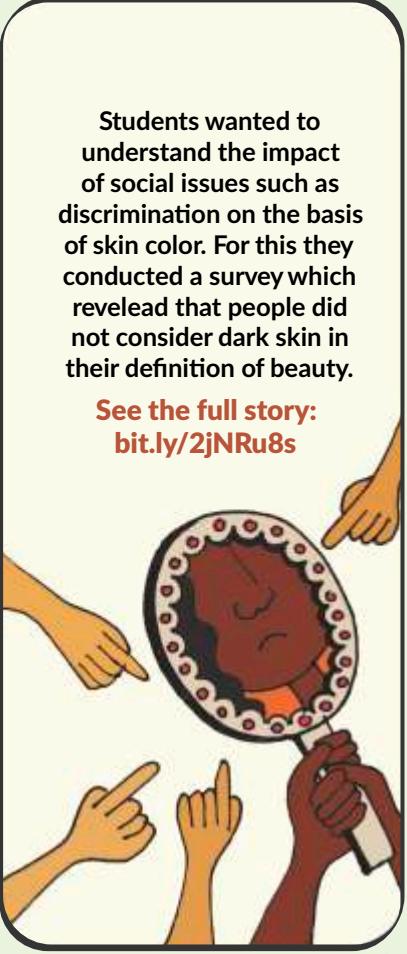
SAMPLE

1.2 CASE STUDIES

These are some "hot spots" that students around the world have noticed:

Students wanted to understand the impact of social issues such as discrimination on the basis of skin color. For this they conducted a survey which revealed that people did not consider dark skin in their definition of beauty.

See the full story: bit.ly/2jNRu8s



Observing their environment, the students noticed that the unsecured wall lead to vandalism and theft. They also noticed that children would leave school even before the time was over. The students didn't feel safe, so they decided to construct the wall to make sure it was more secure.

Get inspired at: bit.ly/2eCBP9Z



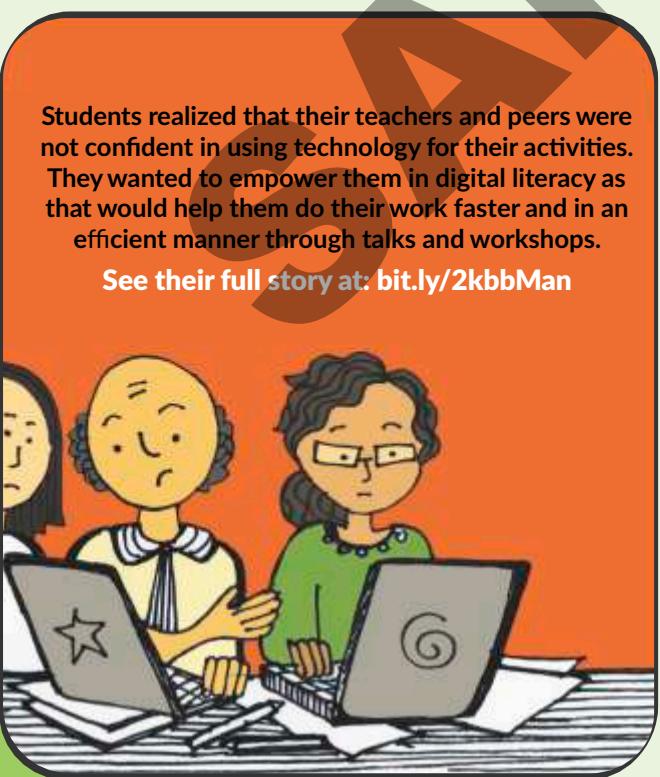
The children felt that there were many prejudices against homosexuals. They wanted to create a safe community where nobody felt judged. To do so, they spread awareness amongst members of the community and help them to understand and accept.

Know how at: bit.ly/2ei1xNR



Students realized that their teachers and peers were not confident in using technology for their activities. They wanted to empower them in digital literacy as that would help them do their work faster and in an efficient manner through talks and workshops.

See their full story at: bit.ly/2kbbMan



Students were concerned that cows that gave them milk were in captivity. They wanted them to grazed freely in the fields. For this, they wanted to spread awareness about this issue and approached the authorities to change the system.

See how: bit.ly/2dOgyL3



1.3 OPPORTUNITIES FOR CHANGE (INDIVIDUAL ACTIVITY)

From your map, list one hot spot and one bright spot that stood out the most. Mention why.

Hot Spot:



Why:

Bright Spot:



Why:

1.4 DISCUSS

Make small groups, share your hot spot and bright spot. Do you find any similarities in the observations?

Things that were similar:

Things that were unique:

1.5 VOTE

As a group select one hot or bright spot that you want to work on and write it below.

As a class vote for one hot or bright spot that you all want to work on.

The next two steps (Be a Detective & Be a Reporter) will help you understand your area of concern better and define the **real challenge**.

② BE A DETECTIVE

Detectives are trained to notice details that help them solve crimes. By breaking down the situation into parts, you are more likely to gain a deeper understanding.

2.1 NOTICE (INDIVIDUAL ACTIVITY)

How does a detective dig deeper? He/She notices who all were present at the scene of crime? What were they doing when the crime happened? What does the crime spot look like?

For e.g A few grade 7 students at Riverside School identified dirty washrooms in their school as their hot spot.

Environment

1. Storage in the washroom
2. Cleaning equipment

People

1. All the students who use the washroom
2. Cleaning staff

Behaviours

1. Training of cleaning staff
2. How children currently use the washroom

A good detective also writes down his hypothesis before going to the field. What according to you is causing the problem?

What according to you are the major causes of the selected 'Hot Spot'. Remember these are just your assumptions. You do not have evidence to prove them right

2.2 OBSERVATIONS (GROUP ACTIVITY)

Now go out and observe your chosen hot/bright spot for a week and get clues from field to dig deeper

DESCRIBE THE **ENVIRONMENT** AT THE HOT SPOT

WHO ALL ARE INVOLVED AND
AFFECTED BY THE HOT SPOT?
(LIST ALL THE GROUPS OF
PEOPLE INVOLVED)

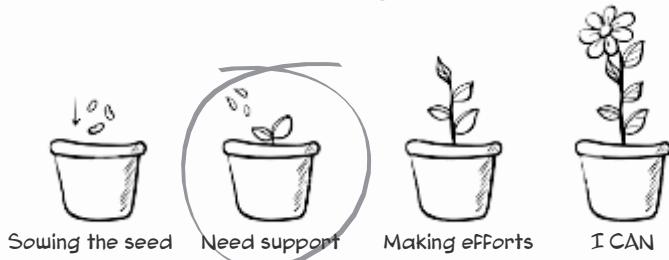
WHAT ARE THEY DOING? (OBSERVE THEIR **BEHAVIOR**)

HOT OR BRIGHT
SPOT

REFLECTION & PEER REVIEW

Given below are some reflective questions to help you observe yourself more closely. We are constantly changing and building our strengths and our measuring scale needs to take that into account.

Use these images to mark where you are at the present moment in the super-powers of critical thinking.



CRITICAL THINKING

To be able to solve a problem, one must understand it completely. Observe how you investigate the problems you come across everyday.

Take 5 minutes to first put your markings under "I Think" and then pass it to your activity partner to get their thoughts on your present behaviour.

SUPERPOWERS	I THINK	MY FRIENDS THINK
I take into account the people who are affected by the problem and their perspectives	▢ ▢ ▢ ▢	▢ ▢ ▢ ▢
I spend time understanding the reasons which might be causing the problem	▢ ▢ ▢ ▢	▢ ▢ ▢ ▢
I look at the problem from different perspectives before reaching a conclusion	▢▢▢▢	▢▢▢▢

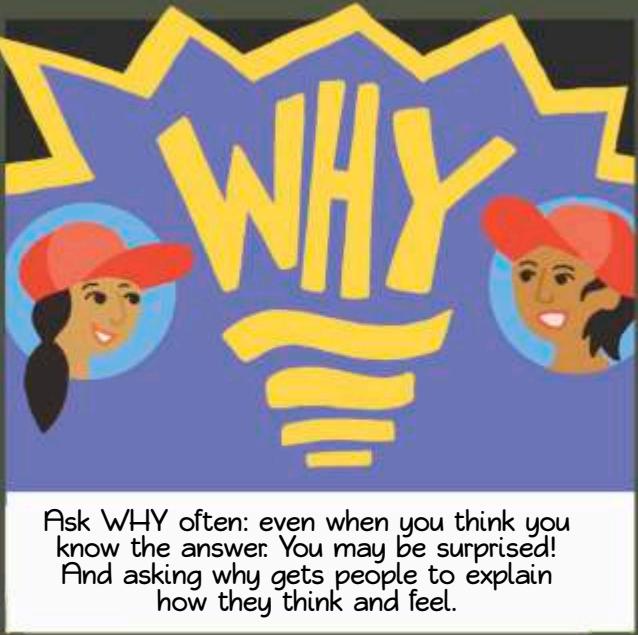
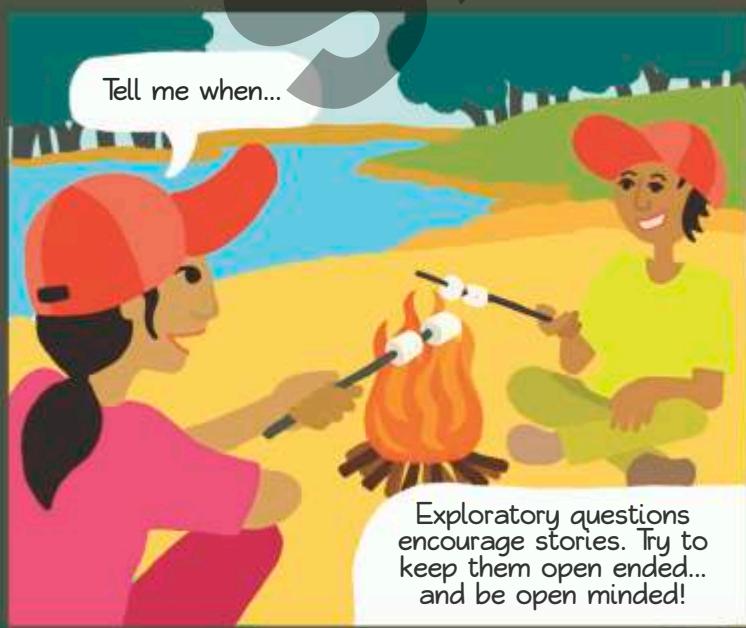
Now compare the stages you have marked for yourself and where your friend has put you for the present. Why might there have been a difference in the marking of stages?

SCRIBBLE PAD

SAMPLE

③ BE A REPORTER!

An interview is a journey. To understand the situation better, you will have to talk to people, like a reporter! Read the comic below to learn how to interview...



AVOID
YES-OR-NO
QUESTIONS!

For example, instead of asking, "is the grass green?", ask, how would you describe the grass?

Follow the interesting details and learn more! If you follow up and ask questions about what you hear, you'll learn more!

Aim for short questions...

?

And long answers...

Avoid interrupting people or suggesting what they should say.

If you are talking all the time or thinking about what question you will ask next, then you'll miss what's most important.

Explore! Don't be afraid to get off your script!

If you hear something surprising, follow it and see where it takes you. The goal is to explore the unknown.

And remember...
Silence is golden.

If there is a quiet moment, try to pause and let people think... that's usually when they say the most interesting things.

3.1 INTERVIEW (PAIRED ACTIVITY)

In the same groups, interview two people affected by the situation you chose. You can use two kinds of questions.

1) Factual questions:

These questions reveal details and information.

2) Exploratory questions:

These questions help you discuss and inquire deeper about the subject.

Factual questions

Exploratory questions

Who (Name & designation):

Why you want to talk to them:

What information did you get from this interview that you did not have before?

Factual questions

Exploratory questions

Who (Name & designation):

Why you want to talk to them:

What information did you get from this interview that
you did not have before?

INTERVIEW NOTE PAD

Use the scribble pad to take down your interview notes here.

SAMPLE

INTERVIEW NOTE PAD

SAMPLE

REFLECTION & PEER REVIEW

Given below are some reflective questions to help you observe yourself more closely. We are constantly changing and building our strengths and our measuring scale needs to take that into account.

Use these images to mark where you are at the present moment in the super-powers of improvisation.



IMPROVISATION

Improvisation is your ability to effectively respond to a situation by changing your attitude and tone. It allows you to understand the situation from another's perspective and respond accordingly.

Take 5 minutes to first put your markings under "I Think" and then pass it to

SUPERPOWERS	I THINK	MY FRIENDS THINK
I am able to change my tone and conversation based on how the other person is thinking or feeling.	⊕ ⊕ ⊕ ⊕	⊕ ⊕ ⊕ ⊕
I am comfortable with changing the plans to suit the situation	⊕ ⊕ ⊕ ⊕	⊕ ⊕ ⊕ ⊕

Now compare the stages you have marked for yourself and where your friend has put you for the present. Why might there have been a difference in the marking of stages?

4 OUR FINDINGS

Now that you have noticed details as a **Detective** and looked at different points of view as a **Reporter**, organize your findings to reveal the **REAL CHALLENGE**.

While being a detective, what was your key observation about people's behavior and physical environment which results in this situation?

WHAT IS THE REAL CHALLENGE?

Through being a reporter, what did you learn about people's thinking and behavior?

Real Challenge: According to you, what are

CONGRATULATIONS!!!
YOU ARE READY TO LEAD THE CHANGE

5 WRAPPING UP: FEEL

How did talking to people change your perspective?

Why is the feel stage important?

THE SHIFT

THIS STAGE INVOLVED LOOKING, DISCUSSING AND ANALYZING SITUATIONS CLOSE TO YOUR HEART. IT ENCOURAGES YOU TO OBSERVE AND BE OPEN TO THE WORLD AROUND YOU.

BY NOTICING DETAILS AND BEING OPEN TO DIFFERENT POINTS OF VIEW, YOU LEARN TO BECOME MORE EMPATHETIC TO PEOPLE, PLACES AND THINGS INVOLVED IN THE SITUATION.

THIS IS IMPORTANT TO IDENTIFY WHAT THE REAL PROBLEM IS. OTHERWISE, IN OUR HASTE WE OFTEN END UP SOLVING THE WRONG PROBLEM.

YOU ARE NOW READY TO EMBARK ON THE NEXT STEP - **IMAGINE** - TO COME UP WITH SOLUTIONS FOR YOUR CHALLENGE!



SCRIBBLE PAD

SAMPLE