

DESIGN *for*
CHANGE

developed by
RIVERSIDE

Design for Change

a design thinking guide for schools



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DFC - A Design Thinking Guide For Schools
Teacher Guide
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Revision 4.0

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Dear Teachers

Design for Change first began in 2009 at Riverside School (Ahmedabad) India, as a ONE week challenge to inspire children to Be the Change, and now reaches over 200,000 schools across the world.

Design for Change begins with the simple and powerful premise: 'I CAN'

More specifically, children can. The 'I CAN' model of design thinking consists of four simple steps: Feel, Imagine, Do and Share. Through these steps, children use the lens of empathy to uncover the overt and latent needs of the society around them, imagine potential solutions to the problems, then re-frame their ideas using a systemic view of the field.

By empowering students to identify the challenges that most affect them, their schools and their communities, Design for Change gives children a sense of agency and inspires them to make the world a better place.

This book is a response to the need we saw from teachers who expressed a desire to see their children use the design thinking process beyond just the challenge and as a year long immersive curriculum. Teachers were excited that this model offered a structured approach to teach and assess the 21st century skills. The Design for Change team collaborated with the best minds in the fields of design and education to introduce Design Thinking in schools.

We are excited to introduce you to the revised version of the Design Thinking Guide. It had a successful pilot over seventy schools across India in 2014-16. DFC is an inclusive idea and this was seen in the diversity of our pilot schools. We had schools from different education boards: CBSE, ICSE, IGSCE, IB, State Education Boards and NIOS. And our enthusiastic teachers and students came from private schools, affordable schools and government schools. They took to the spirit of Design Thinking Guide and contextualized it to fit it in their own frameworks and timetables.

Teachers and students from different parts of our country came together to take forward the Design for Change movement. They put in all their efforts and hard work to create a meaningful impact through this curriculum. We are extremely grateful for their support and feedback to help improve the Design Thinking Guide.

We heard some amazing things from both students and teachers. Both of them said that the Design for Change sessions fostered stronger relationships in the classrooms.

"I got an opportunity to become Friends with my students. I had more open and Frank conversations which helped me in teaching them better"

"Each student got an equal say in the classroom and we became the centre of focus. We could say what was on our mind."

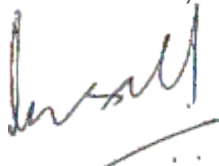
"We discovered the hidden strengths of each of our students, even the ones we thought were mischievous. They came forward to lead their class in this collective act of change."

"The whole class came together. We talked to each other, we listened to each other. And we supported each other's ideas to make the DFC project a success. We got to know what an interesting class we are"

"Our students became more aware about the people and the different issues around them. And they took initiative to change things that bother them."

These stories from students and teachers have inspired us to take forward the Design Thinking Guide and continue our learning journey with schools across the country and the world.

Excited to have your school on board!



Kiran Bir Sethi
Founder | The Riverside School | Design for Change

Being the Change, Changes the Being

Why Design Thinking in Education

Consider the Current Scenario

The **top 10** in demand jobs in 2010, did not even **exist** in 2004

Technical information **doubles** every two years

We are currently educating children for jobs that don't exist.....

With technology that has not been invented.....

In order to solve problems that we don't even know are problems yet!

That means for a student starting a 4 year degree, half of what they learn in their first year, will be **outdated** by the 3rd year of study!

Research by Karl Fisch | Scott McLeod | Jeff Bronman

What does this mean For the 21st century

**LEARNER
EDUCATOR
CURRICULUM**

The Preferred Scenario

Design starts with saying 'what if' rather than asking 'what's wrong'. This shift is significant otherwise we end up solving the wrong problems and wonder why change does not happen.

*Students are
NOT HELPLESS.
CHANGE IS POSSIBLE
and THEY can drive it!*

The **DESIGN THINKING** mindset is:

Human centered - builds on user patterns and behaviors
Collaborative - it works **with** the user instead of 'for'
Optimistic - at the heart of this mindset is the message that we are not helpless, that change is possible and that we can drive it.

The Design Thinking Framework

FIDS (Feel, Imagine, Do, Share)-4 steps to say I CAN

Design for Change has demystified the design thinking process into 4 simple steps-Feel, Imagine, Do, Share (**FIDS**). This empowers students to believe that they can make a difference to their environment and also provides a structured method to learn the **21st century skills**.

FEEL

*what bothers me the most, and transform **helplessness** into **empowerment***

Why is it important?

It develops **EMPATHY**

When you want to create a better solution, you need to empty your mind of all the assumptions and start afresh. This stage helps you **observe** and **identify** opportunities for change and **engage** with the user.

21 st CENTURY SKILLS

Self-Awareness, Effective Communication, Decision-Making, Critical Thinking, Interpersonal Relationships, Interviewing, Empathy Managing Emotion.

IMAGINE

*ways to take the **current** situation to a **preferred** state for self and others*

Why is it important?

It develops **ETHICS**

The biggest factor for how innovative your solution will be, depends on how clearly you **define** the problem. This ensures that you take **responsible action** for the change.

21 st CENTURY SKILLS

Effective communication, Decision making, Creative Thinking, Collaboration Critical Thinking, Ethics.

DO

*what it takes to bring about change with **courage** and **determination***

Why is it important?

It develops **EXCELLENCE**

Doing allows one to bridge the gap between **intention** and **action** for maximum impact.

21 st CENTURY SKILLS

Effective Communication, Problem Solving, Decision Making, Creative Thinking, Time Management, Human

SHARE

*my story to **inspire** others to **be the change***

Why is it important?

It develops **ELEVATION**

Sharing helps to **inspire** and let others know that it is **possible**.

21 st CENTURY SKILLS

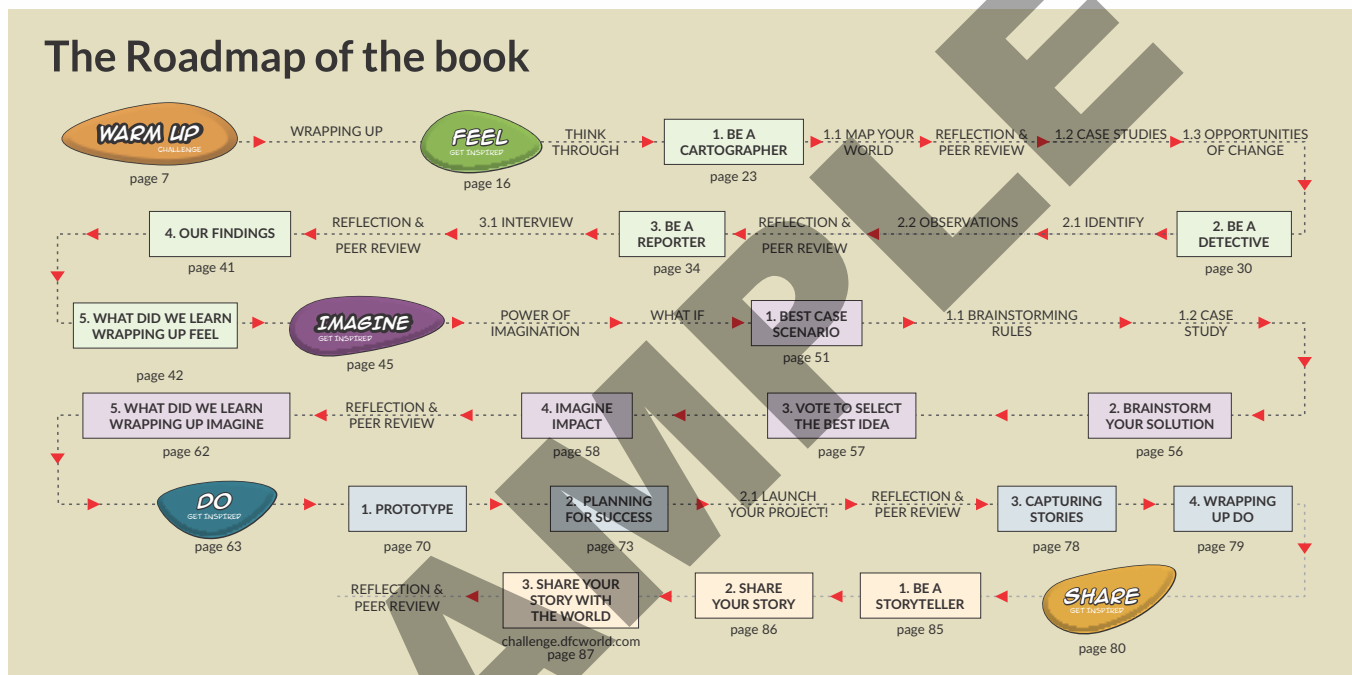
Decision making, Effective communication, Digital literacy, Creative thinking, Presentation, Problem Solving.

The Guide's Structure

The structure and design of The Guide is different to that of many conventional textbook formats. The expectation is that students will take an active approach to their learning with the teacher acting as a facilitator, guide and mentor.

Each of the four steps: FEEL, IMAGINE, DO, SHARE is explored using the same structure:

- **Inspire** : A real life case study of one school's actual DFC story in cartoon format with a YouTube link, so it can be viewed by students as a practical example.
- **Reflect** : Getting students to review the DFC story to discuss and bring out the different issues bothering them
- **Action**: Undertaken in pairs or groups and designed to bring to life, the theme being explored and build key skills.
- **Assess**: Students review their own work and growth through self and peer assessment tools given at the end of each section



Routine and timings

The Guide can be introduced as a whole course over a three to six month period. It covers 30 sessions which are divided into 60 minute time slots, making it around **30 hours** in the year. The guide offers enough flexibility to be comfortably included into your existing timetable.

Involving parents and others

This is a key part of the DFC culture given that the students are working to change the world around them. This is particularly relevant at the Share stage. We encourage you to get your students to talk to their families, friends and others about their DFC activity, so that when they get to the Share stage, they have a level of support and engagement that makes the sharing even more powerful and meaningful.

Documenting the journey

It is important that the students capture each stage of their DFC journey visually, as well as by writing in their copy of The Guide. This can be done by photo or video so you will need to make the relevant equipment available throughout each session, and assign individual students the responsibility of capturing each stage of the DFC process so that no moment is lost for the final story telling.

Materials and Tools

Though the guide needs only very limited learning materials and tools; certain sessions require additional materials which a teacher needs to provide.

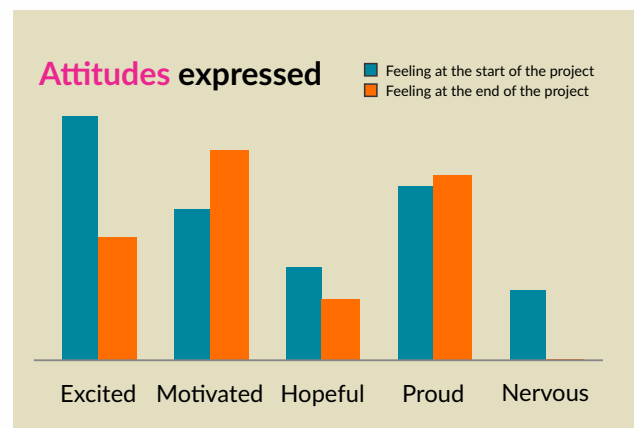
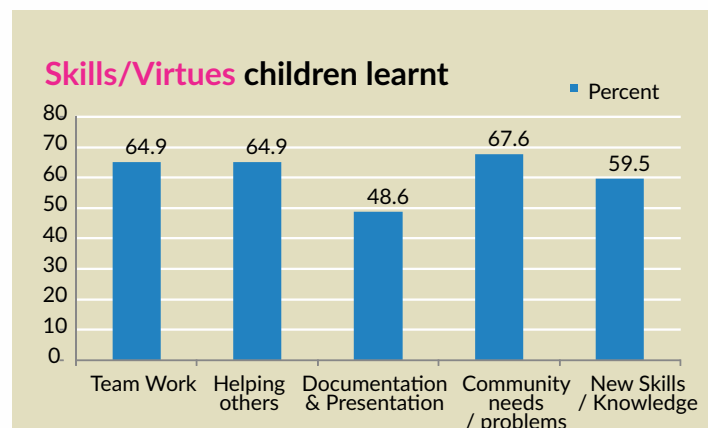
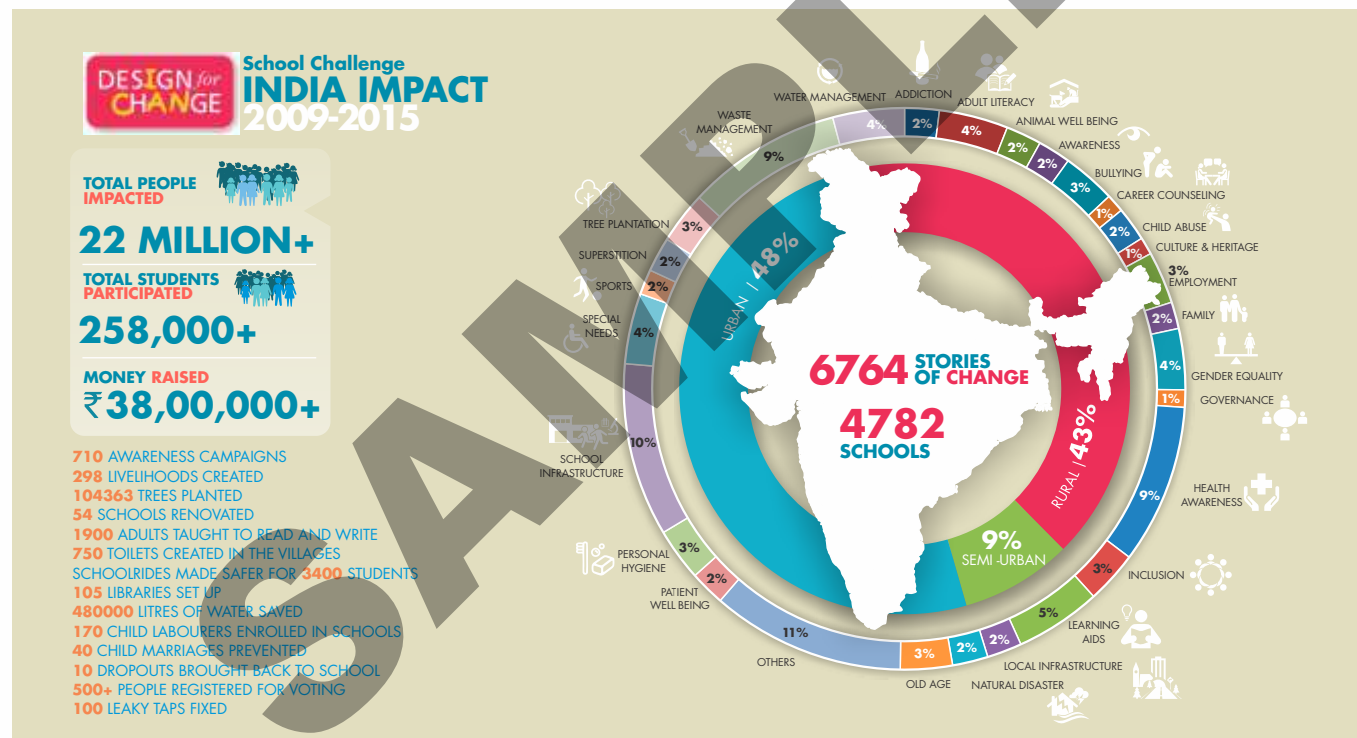
Learning Environment

Teacher needs to be mindful of the environment and surroundings in which students work on the Guide. While some sessions work best in classrooms, others benefit from open spaces.

Support Material-www.dfeworld.com

It is often said that inspiration is a **perishable commodity** and we need to keep replenishing it. Therefore, we strongly recommend the Design for Change website to get yourself and your students regularly inspired by the real stories of change.

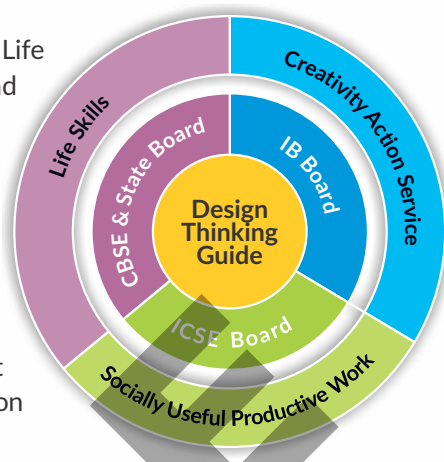
Design For Change Impact



Design Thinking Guide and your School

CBSE & State Boards

CBSE and State Boards have introduced Life Skills Curriculum in schools. Life Skills Education aims to enable adolescents to articulate their issues and know their rights; build their self-esteem and self confidence; and develop the ability to take responsibility for self, relationships and the immediate society around them. The major objectives of Life Skills Education are to develop skills to **empower young adolescents to respond to real life situations in positive and responsible ways**. DTG begins with children mapping their community and identifying the hot spots that they would like to work towards to bring a positive change. The process followed in DTG empowers children with the "I Can" mindset building their self confidence and acting as catalyst for their transformation into change-makers.



ICSE Board

In ICSE, Socially Useful and Productive Work (SUPW) is a mandatory subject and the focus is on building values of citizenship in children. The core idea is to provide children with a space to engage with society and develop skills through which they can add value to their community. DTG will be able to adequately provide the same and further build value of empathy in children leading to their fruitful engagement in society.

IB Board

DTG can be a part of CAS (Creativity, Action, Service). The objectives of CAS focus on students developing reflective thinking, *willingness to accept new challenges*, awareness of themselves as members of communities with responsibilities towards each other and the environment. These objectives are completely in synergy with what Design Thinking Guide also aims for, therefore DTG can be very easily incorporated as a part of CAS.

*Design creates culture.
Culture shapes values.
Values determine the Future*

-Robert L. Peters

PLANNER

MONTH	KEY FOCUS OF THE MONTH	WEEK 1	WEEK 2
JUNE			
JULY			
AUGUST			
SEPTEMBER			
OCTOBER			
NOVEMBER			
DECEMBER			
JANUARY			
FEBRUARY			
MARCH			
APRIL			
MAY			

[illegible]

LETS GET STARTED!

Session 1

60 mins

Why Design for Change

OBJECTIVE

Inspire children about the power of Design Thinking and how it can be used to make the world a better place. Introduce them to the 4 step framework of Feel, Imagine, Do, Share and how this builds the I CAN superpower in every child.

INTRODUCTION - 20 mins.

If you have access to internet, a great way to inspire students is to show the DFC promotional video and some stories to show them how students are using design thinking to be role models of change.

DFC India Promotional Video (2 mins.)

<https://www.youtube.com/watch?v=HyYmr0Z7mLQ&t=2s>

Potholes on the Way to School (2 mins.)

<http://www.youtube.com/watch?v=O56wsPDRBGQ>

Education Drive (3mins.)

<http://www.youtube.com/watch?v=So3U8X-3fws>

Let me Feel your Face (2mins.)

<http://www.youtube.com/watch?v=Qfv9RNxMFEk>

IF YOU DO NOT HAVE INTERNET

Hand over the Design Thinking Guide to the students and allow them 10 minutes to explore the guide. Ask them questions about how they feel about the guide. Get them to understand that they are going to be part of a global movement.

	PAGE NO.	TIME	DESCRIPTION
1	1 to 5	15 mins.	Why Design for Change Start by getting the students in groups or individually read aloud/share 'Why Design for Change' comic strip from pages 1 to 3. Then, review the world map on pages 4-5 and show them that they will be part of a global movement. You can ask students to identify the superpower used by the children in DFC stories. Have a discussion with them about what is their superpower
2	1 to 5	15 mins.	Ask students if they have any thoughts, comments or responses to what they have just read. Get them excited that the four steps of Feel, Imagine, Do and Share will help them ' Be the Change ' and make them believe that ' I CAN ' are the two most powerful words in their vocabulary.
3	None	10 mins.	Closing the Loop Get children to share about what the I CAN superpower is and how does one get this power. This will help you assess if the 4 step framework has been understood. What words did they use to describe the book in terms of layout and design.

TEACHER TIPS

1. Teachers should let the children explore the book. Allow children to react and respond to the feel of the book. Pay close attention to how children approach and interact with the book.
2. To save time download the videos before the session.

WHY DESIGN FOR **CHANGE**



THERE ARE SO MANY
PROBLEMS IN THE WORLD...



FROM GLOBAL WARMING...



TO SCHOOL
BULLIES...



THERE ARE SO MANY PEOPLE
TELLING YOU THAT

**YOU
CAN'T!**

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

THIS IS
**YOUR
CHANCE!**

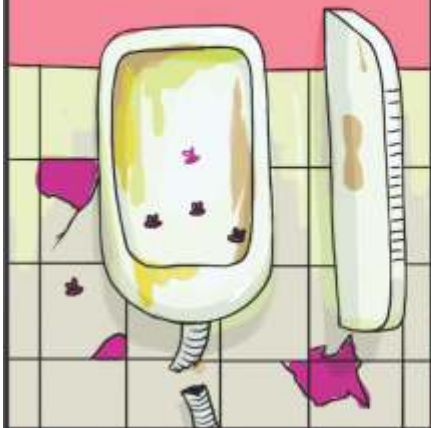
DID YOU KNOW?
CHILDREN AROUND THE
WORLD ARE CHANGING THE
'BAD' AND MAKING IT 'GOOD'
WITH THE POWER OF
THEIR IDEAS!

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.



**CHANGE
LIVES**

**YES
WE
CAN**

SHARE IT

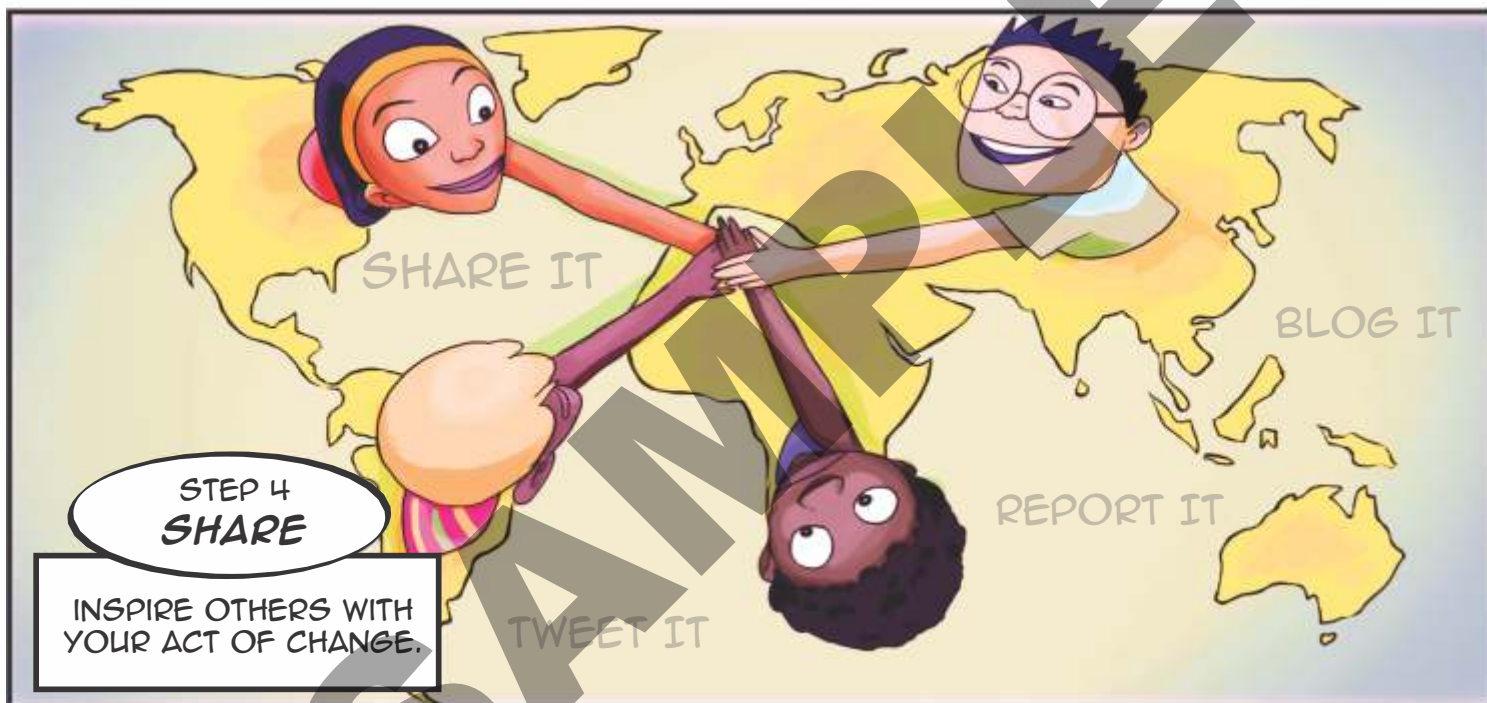
BLOG IT

REPORT IT

TWEET IT

STEP 4
SHARE

INSPIRE OTHERS WITH
YOUR ACT OF CHANGE.



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

DFC PROJECTS IN COUNTRIES ALL OVER THE WORLD!



WE CREATED
BICYCLE PATHS
TO **TACKLE OBESITY!**

WE STOPPED
13 CHILD MARRIAGES!

WE CLEANED UP
BEACHES AND **CONVERTED
WASTE INTO FUN
PRODUCTS!**

WE CONVERTED
**GARBAGE DUMPS
INTO PLAYGROUNDS!**

WE CREATED A
TOY PLANE FROM
RECYCLED WASTE
THAT IS DESIGNED TO
**DROP SEEDS IN
DRY REGIONS**



WE DESIGNED
ALTERNATIVES TO
PACKAGED FOOD!

WE LIGHTEN
THE DREAM
OF BLIND KIDS

WE PRESERVED
THE SONGS OF
OUR TRIBAL CULTURE!

WE REDUCED
THE WEIGHT OF
SCHOOL BAGS
BY 50%!

WE CLEANED
THE OLD AGE HOME,
COOKED HEALTHY FOOD
FOR THEM AND HELD
A TALENT SHOW!

Session 2 : Warm-up Challenge

Overview

This is a quick introduction to the idea and process of design thinking and is to be taught in one 60-minute session. Since it is a very quick exercise, it is important for teachers to monitor timing carefully to make sure students complete all parts of the exercise and that they get a clear understanding of the four-stage DFC process.

This session also starts to build skills in questioning, listening, analysis, giving / receiving feedback and reflection.

Unit at a glance

Total 1 session x 60 mins.

SESSION NO.	PG. NO.	TIME	TOPICS	WHERE
2	-	5 min	Tone Setting and Grouping	in class
	7	5 min	Design a school bag for your partner	in class
	8	15min	Step 1: Feel	at home
	9	10 min	Step 2: Imagine & Do	in class
	10	10 min	Step 4: Share	in class
	11	5 min	Wrapping up	in class
	11	10 min	Closing the loop: Shift	in class

60 mins

OBJECTIVE

This session is designed to introduce children to a very quick exercise that takes them through the four steps of the design process.

21st Century Skills : Empathy, Creative Thinking, Critical Thinking, Listening

	PAGE NO.	TIME	DESCRIPTION
1	-	5 mins.	Tone setting and Grouping Group the students into pairs for this challenge. Teacher Tip Give the pairs regular updates on timing so they complete the whole session effectively using the timings set out below. Let them know when they should move on to the next exercise. Walk among the pairs to check that they understand the exercises and are completing them effectively.

	PAGE NO.	TIME	DESCRIPTION
2	7	5 mins.	<p>Design a school bag</p> <p>This is a quick drawing exercise where each student designs and illustrates an ideal school bag for their partner on page 7 of their Guide. This is to be done without any interaction between the partners.</p> <p>Teacher Tip Inform the children before this session its not about how 'well' you can draw, its just about illustrating YOUR concept of a bag.</p>
3	8	15 mins.	<p>Step 1: Feel</p> <p>Each student has 7 minutes to interview their partner to get a better understanding of their partner's usage and needs in a school bag, covering the facts, form, function and relationship with the bag. Questions are given on page 8 of the Guide and the partner's answers should be recorded in the space below each question. You can ask the student to build on the responses of their partner and ask more questions, if required.</p> <p>Teacher Tip Make sure the pair swaps after 7 minutes so both get an opportunity to complete this exercise.</p>
4	9	10 mins.	<p>Step 2&3: Imagine & Do</p> <p>Each student has to redesign the bag keeping in mind their partner's need. They can do so through illustrations and words.</p> <p>Teacher Tip Encourage them to go beyond the obvious and probe deeper.</p>
5	10	10 mins.	<p>Step 4: Share</p> <p>Ask children to share their redesigned bag with their partner and ask for their feedback to further improve it. Next tell them to fill their responses for the given reflection questions. Ask them to first mark their own self and then get their partner's feedback on their listening skills.</p>
6	11	5 mins.	<p>Wrapping Up</p> <p>Ask children to reflect on what they learnt from this exercise and the new things they have been able to find out about their partner.</p>
7		10 mins.	<p>Closing the Loop</p> <p>'The Shift' gives an important insight to close the loop with. Discuss how the initial design has changed to the final design and link it back to how the Feel, Imagine, Do, Share process helped bust your initial assumptions. Emphasize the significance of designing WITH the user instead of FOR the user. Questions you may want to ask your group to check in on their understanding: How did you feel about the warm-up challenge? Three key things that you learnt? Do you feel ready to start the DFC journey? What did you find particularly challenging/exciting/inspiring and why?</p>

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'.

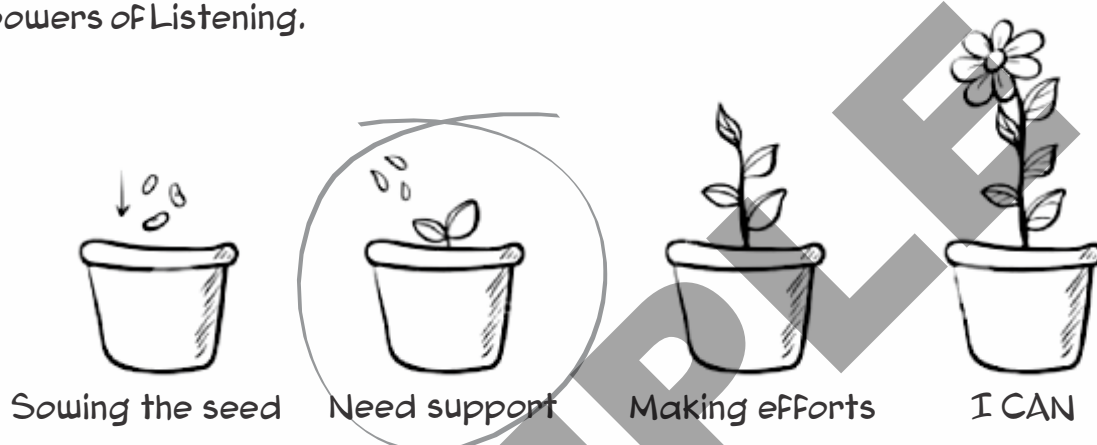
THE KEY SHIFT IS THAT WHEN YOU DESIGN **WITH THE USER** (IDENTIFYING REAL NEEDS) RATHER THAN **FOR THE USER** (ASSUMING THE NEEDS), THEN YOU GET SOLUTIONS THAT IMPROVE LIVES.

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 superpowers 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

SAMPLE

DESIGN FOR CHANGE ROADMAP



