

# Design Thinking Workshops

#### Introduction







Sciensation is a science media organization, based out of Hyderabad, which conveys the excitement of doing research, through quizzes, lectures and events.

Sciensation is a society registered (Regd No 701 of 2013) under Andhra Pradesh Societies Registration Act 2001

# History



Year	Venue	Champions
2011	DAV, Safilguda	E&L School, Nallakunta
2012	Harihara Kala Bhavan	Bhavans Sri Ramakrishna Vidyalaya, Sainikpuri
2013	Bhartiya Vidya Bhavan	Little Flower High School, Abids
2014	Bhartiya Vidya Bhavan	Bolton School, Secunderabad
2015	T-Hub, Hyderabad	Bhavans Atmakuri Ramarao School, Jubilee Hills, Manthan International School, Tellapur

Sciensation's flagship programme is the Sciensation quiz which is a hybrid between a debate and a quiz

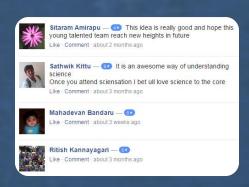


#### **Testimonials**



Sciensation Quizzes/ Lectures have received good feedback. Several students who hated science, start liking science and scientific research after our programmes.

Video testimonials on our website.







Sciensation Media Rated 4.8/5

# **Design Thinking**



- Originated out of Stanford University.
- Seeks creative and user-centric solutions.
- Taught extensively in ivy-league business schools.
- Introduces students to analysis and synthesis.
- Used for Product Development, especially Mobile App UI/UX design.

## Re-Visioning



- Gitanjali Senior School, Begumpet, Hyderabad was the first school to initiate this concept, along with Sciensation.
- Policy Research Conclave: students studied policies and suggested changes, based on intensive data collection and research.
- Guests, especially Mr Sujiv Nair, CEO, TASK, felt that college level projects were done by school students.

# Media Coverage





Trust the younger generation to show a mirror image of the society and issues while coming up with innovative solutions. At the Policy Research Conclave 2016 titled "Re-visioning" held at Gitanjali Senior School, scores of school students showcased their models to address a range of problems including civic, alternative energy, quality education, and women safety, with the aid of technology. The day-long event saw the participation of students from 20 city schools.

#### The Difference





**Cooking Contest** 



**Recipe Contest** 

The second competition is lot more intellectual and abstract!

# Why?



Design Thinking is taught extensively at the world's best B-Schools.

Strong intellectual exercises can help in developing tomorrow's leaders, who understand research and strategy.





44 The Big ide

The Organizational
"I'm Sorry"
Haurice E. Schweltzer et al.

9¢ Risk Managemen

Cybersecurity: Lessons from the Pentagon James A. "Sancy" Winnefeld Jr. et al.

How to Embrace Complex Change

# THE EVOLUTION OF DESIGN THINKING

IT'S NO LONGER JUST FOR PRODUCTS. EXECUTIVES ARE USING THIS APPROACH TO DEVISE STRATEGY AND MANAGE CHANGE.



#### Research



- Students understand how to pilot ideas, scale successful ones and evolve robust systems.
- With change being faster than it ever has been, the old rules may not work.
- Students may have to learn to discover new rules, especially in areas which are at an academically nascent stage.

# Workshop Themes



- Pedagogy: Redesigning our learning methodologies to relax anxiety and handle intimidating topics better.
- Hackathon: Ideating app/tech solutions to problems.
- Society: Solving problems of the society.
- Futuristic Science Fair: Showcasing latest science and techology.

## Pedagogy



- Students shall pick up topics which intimidate/don't excite them.
- They shall use design thinking methodologies to evolve alternate ways of understanding these concepts.
- This engages the students and gets them to understand the topic, while balancing breadth and depth.

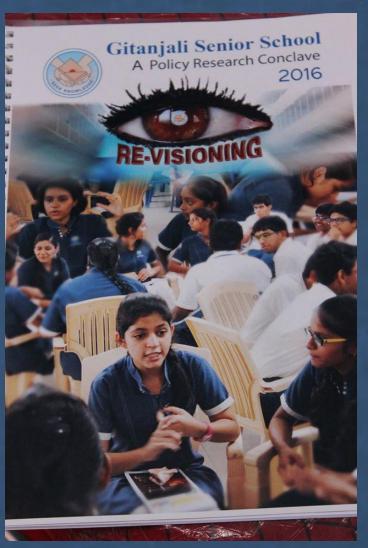




### Expo



- The workshop can also culminate in a futuristic expo, with research based projects.
- With technology getting smarter, it may be essential to have projects which are intellectually demanding.



# Design Thinking

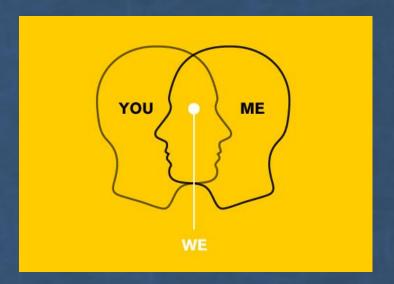


- Empathy: Understanding the end-user.
- Define: Articulating the problem statement.
- Needfinding: What does the user want?
- Benchmarking: Who else is solving this?
- Ideating: How do we solve this?
- Prototyping: How do we test our ideas?
- Choosing: What is our best idea?
- Implementing: How do we do it on a large scale?
- Learning: Can we solve it better?

# **Empathy**



- Who are the stake-holders?
- Whose lives would be affected by the chosen problem?
- Describe their life. What are their problems?
- It helps in developing usercentric solutions.



#### Define



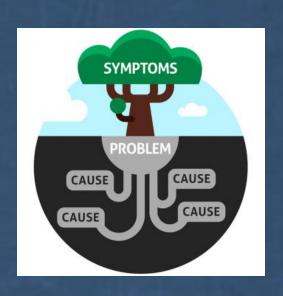
- How can we define our problem statement using one single sentence?
- Do words shape our thoughts?
- Why is it important to use right of words?
- Why have a one line problem statement? Focus?

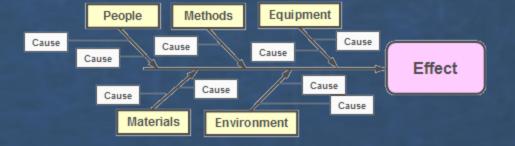


# **Need Finding**



- What are the root causes of the problem?
- Constructing question tree.
- Toyota 5Whys technique.
- How do we know that our diagnosis is correct?





# Benchmarking



- Are we re-inventing the wheel?
- Who else is solving this problem?
- How are they solving?
- How effectively?
- Literature Review?



# Ideating



- Can we list at least 3 ideas to solve each of the root causes?
- Can we adapt well known solutions to our context?
- Where can we look for ideas?



# **Prototyping**



- How can we pilot the ideas on a small scale?
- How closely do our experiments replicate natural circumstances?
- Natural experiment or Controlled experiment?
- Surveys? Implicit Association tests?



# Choosing



- Which idea works the best?
- Which idea is the most feasible one?
- Benefit/Cost ratio of the ideas.
- Scalability of the ideas.



# **Implementing**



- How do we test our idea on a large scale?
- How do we break it down into phases?
- What kind of resources/institutional support do we need?



## Learning



- Did we get the process right?
- Were we in a hurry?
- If we were to do this again, what would we change?
- Iterate fast, make mistakes fast, evolve fast!







Let's discuss, debate, discover!

Thank You!