

TINKERING LAB

CURRICULUM FOR CODING, ROBOTICS, IoT & AI-ML

A complete STEM solution that consists of a year-long curriculum aligned with NEP 2020.



About TINKERLY

Tinkerly was founded in 2015 with the objective to make STEM learning easy, engaging, and accessible for kids at an early age. It is a leading edtech company preparing young minds for futuristic job opportunities by teaching them Robotics, IoT, and AI with physical kits. Students not only learn how to code but also how to create innovative products using that code. Tinkerly's offerings include Tinkering Lab, Coding Curriculum, STEM educational Kits, and Let's Tinker Mobile App.

Backed by India's leading Education and Publishing group Navneet Education Ltd, Tinkerly partners with schools to provide a complete STEM solution that consists of a year-long curriculum that is aligned with NEP 2020.



End-To-End STEM Solution

Winner of Prestigious Awards

IIT & XLRI Alumni Team

Pan India Presence

Customer Centric

Hands on Learning

Backed By

100k+
Downloads500k+
Students800+
Schools

Preparing a new generation of FUTURE INNOVATORS!

Tinkerly is a leading edtech brand offering hands on **Robotics, Coding, IoT, AI and other STEM** programs for K-12 schools and students of Age 6+ years.

Backed by India's leading Education and Publishing group Navneet Education Ltd, Tinkerly partners with schools to provide following STEM solution,



500k+
Students



800+
Schools



100k+
Downloads



Tinkering Lab

a workplace where students will be exposed to new age technologies



Coding Curriculum

Introduce coding subject for your students

What is TINKERING LAB?



Tinkerly's
Tinkering
Lab

The objective of this lab is to foster curiosity, creativity, and imagination in young minds and inculcate skills such as design mindset, computational thinking, physical computing, rapid prototyping etc.

Young students will get a chance to work with tools and equipment to understand what, how, and why aspects of STEM.



Tinkering LAB



Space: 600-1500 sq feet



Design thinking- 3D Printer



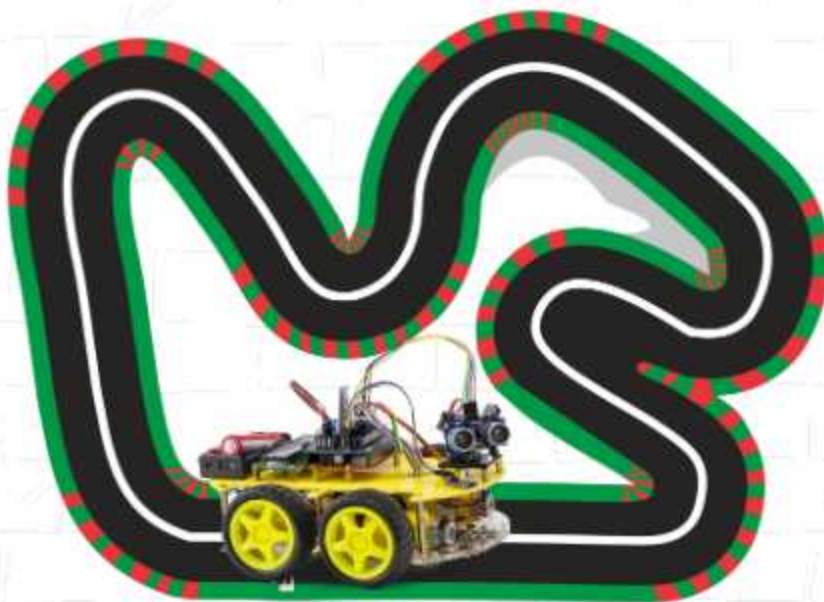
Advance robotics



Interactive STEM and
Tinkering Projects



Spark your ideas



Advance IoT Projects



Why TINKERING LAB?

A space or an area within the schools for young minds to...



The test of all knowledge is experiment. Experiment is the sole judge of scientific 'truth'

-Richard Feynman



Our CURRICULUM

Curriculum Aligned with CBSE/IB- As Per NEP 2020

It covers design thinking techniques for learning AI(Artificial Intelligence), Robotics, and IoT(Internet of Things) based skill subjects



Modular Content



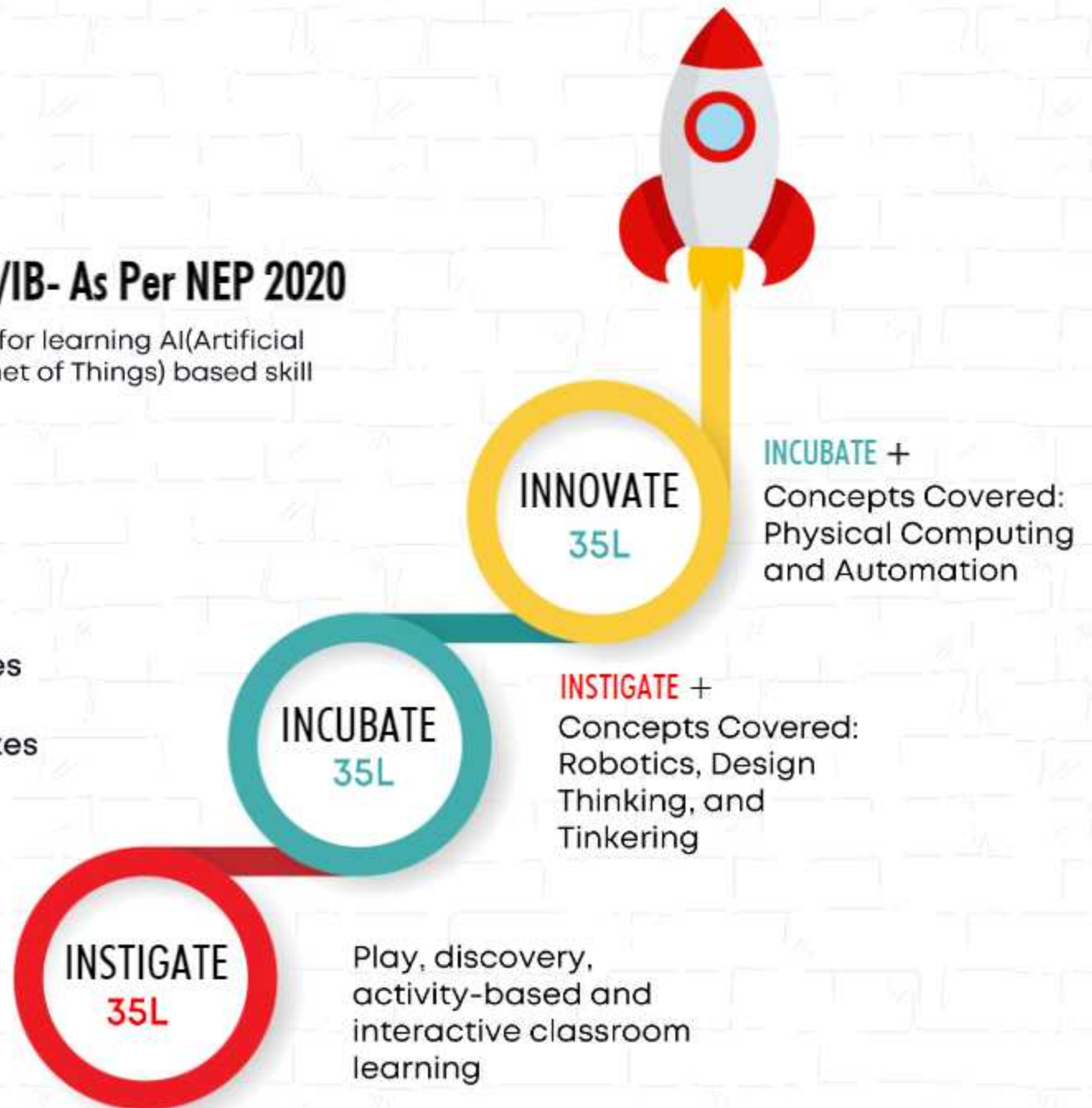
Hands-on Learning



Teaching Resources



Assignment & Quizzes



A year-long curriculum for classes 3-10 is divided into 3 stages. Each stage is divided into 35 lessons {35L = Ideation(4) + Experiential (23) + Demonstrative(4) +1 Capstone Challenge(4)}

Our OFFERINGS



Technology
Let's Tinker
mobile/web
app access



Training
Structured
Teachers
Training



Content
Challenge card
for students
Operational
manual for
teachers



**3D Printer
& Kits**
Tinkerly's
unique STEM
kits



Tools
Top quality
branded
tools for
safe usage

- Licensing of required softwares and online courses for all students of classes 3-10
- Special Days: Assistance in organizing TTL Launch Day and Annual Tinkering Day - TinkerShow of student innovations
- Online support to all types of technical queries.

Challenge CARD



Decomposition
Breaking down a complex problem into smaller parts



Pattern Recognition
Looking for similarities among and within problems



Abstraction
Focusing on the important information only



Algorithms
Solving problem by developing step-by-step rules to follow

Computational Thinking Approach

TLI0C008



AUTOMATIC HANDWASH

In the last few days, Jagadev realized that his younger brother didn't close the wash basin tap after washing his hands. To avoid wastage of water, Jagadev decided to make something that only dispenses water when someone is in front of it. Can you help Jagadev?

Challenge YOURSELF

tinlerly



1. Jagadev's brother forgets to close the tap.
2. Water should not be wasted.



1. Servo motors are used as a door opener.
2. The water pump is used to supply water.
3. IR and LDR sensors can detect obstacles in front of them.
4. Batteries are used to provide power to the system.



1. Need a system that recognizes the person in front of the tap day and night.
2. IR module does malfunction in sunlight.
3. Need some system for triggering water pump ON and OFF.
4. Need a switch to power it ON and OFF.
5. Arduino based is easy to program.



1. Place the IR sensor in front of the Tap.
2. Connect IR module with Arduino, water pump module, battery, and motor driver using connecting wires on the breadboard.
3. Program the Arduino and upload the sketch using the A to B USB Cable.
4. Test it by powering it on.

Networking R2

REQUIREMENTS



- Students will be a part of story.
- Real life problem with hints.
- Reduce the teachers/ instructors' effort in the classroom.
- Practicing Computational Thinking process in every class.

Let's TINKER



Cultivating Future Innovators



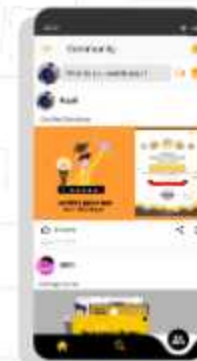
Learn everything you need to work in Tinkering Lab



1000s of Activities with solution & Quizzes.



User Guide for select kits, equipment and tools.



Global STEM community

Available on



Android



iPhone



Web

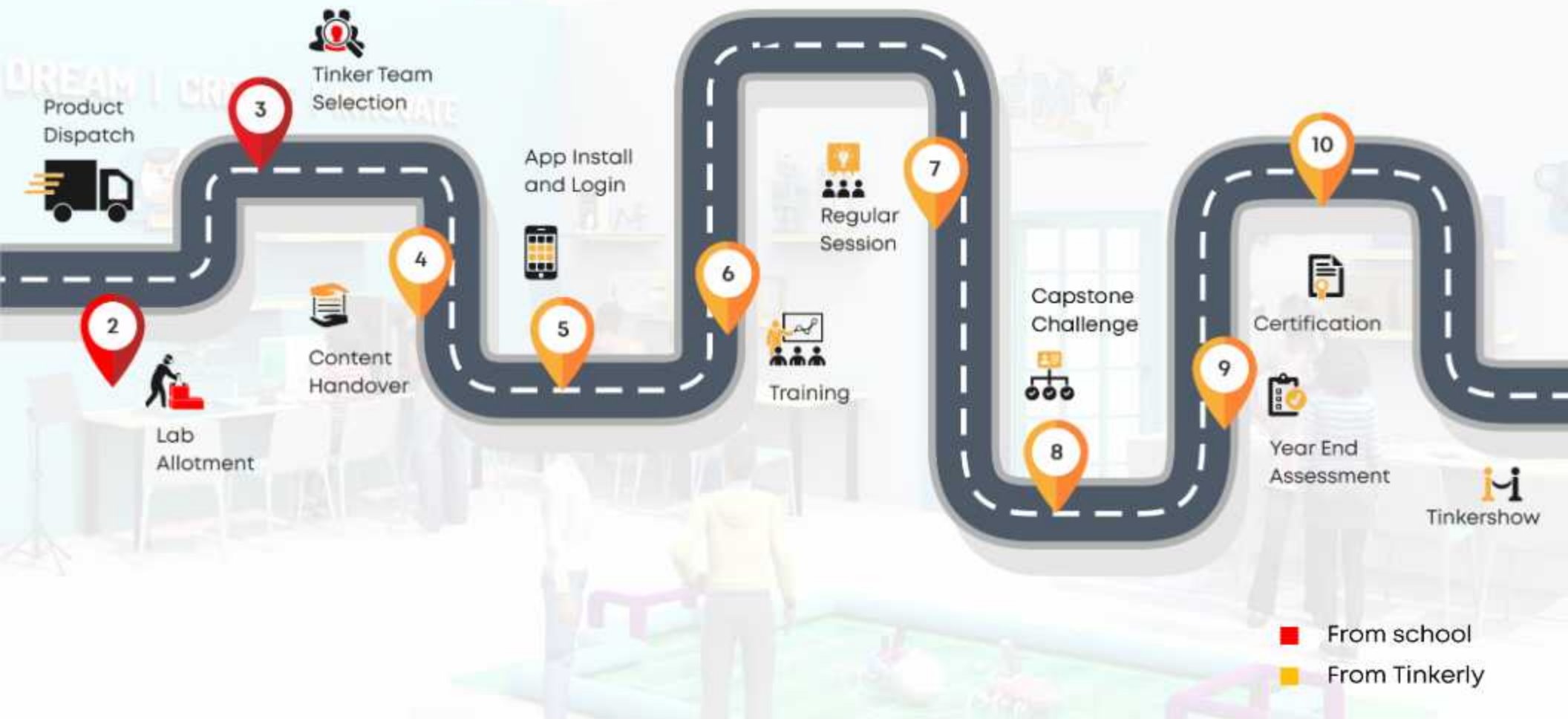


Quick chat support:
Very easy to raise your query.



Exhaustive Search and Filtering

Execution PROCESS



Teacher's training > Students are divided in groups > Challenge cards > Performance > Assignment & QUIZ

Making a Difference in the World-STEM careers are truly "helping" professions that build communities and transform nations.

Why TINKERLY?

Don't believe it because we say so, instead get in touch with our existing or past clients and then make up your mind.

- We emphasise on **outcome oriented process** to deliver high quality results from our courses
- The play-based course curriculum is designed and curated by a **team of IITians** and expert educators.
- Doubt-solving through experienced trainers and **strong technology** support with our Let's Tinker App.



What our CUSTOMERS SAY?

Subodh public
School, Jaipur



Jaypee public
School, Noida

Tinkerly is an innovative startup stressing upon learning by doing. Student get diverse experience throughout while using the SRJNA(now known asTinkerly) models. The professionals from IIT and XLRI are here to make it work Big!

Mrs. Prabha Bhagat

HOD, Maths, Modern School, Barakhamba Road, New Delhi

In the education field Tinkerly's contribution is exemplary. It's the best education platform. Teacher training sessions are very innovative and enough practical knowledge is delivered.

Ms. Manisha Kandhare

Subject Coordinator ICT department of DPS, Pune

Client LIST



Modern School
Barakhamba Rd,
New Delhi



MGD
School, Jaipur



DAV Model School
IIT Kharagpur



Nesco Foundation,
Gujrat



PYDS
Dehradun



Amity
International
Schools



Delhi Public
Schools



Mount Litra
Zee Schools



Christ Vidyanikethan,
Kerala



Seth MR Jaipuria
Schools



Govt of
Rajasthan



Govt of
Assam



Govt of
Maharashtra



Govt of
Jharkhand



Govt of
Uttar Pradesh

And many more...

Recognitions/AWARDS

Tinkerly won many awards for its great performance in the Edtech field.



Among Top Startups in Intel-DST Innovate for Digital India Challenge



'Best Solution in STEM Education' - by GESS Leadership Award 2019



NASSCOM®
Nasscom featured among
India's leading AI Startups 2020

Meet Our FOUNDERS

Tinkerly's co-founders, alumni of IIT Delhi and XLRI Jamshedpur, have proven their expertise and accumulated numerous awards for their contribution in the field of edtech over the years.



Vivek Pathak with Padma Shri Prof. H. C. Verma and Late Rani Vidya Devi of Jaipur



Sharad Bansal with Celebrity Author Chetan Bhagat for Forbes Series on 'Education Evangelist of India' aired in 2020



OP Godara

Vivek Pathek

Kapil Arya

Sharad Bansal

Founders of Tinkerly

Meet our FOUNDERS



Sharad Bansal with Smt. Vashundara Raje Scindia then Chief Minister of Rajasthan 2018



O.P. Godara with Mr. Anil Swarup, then Secretary, MHRD, Govt. of India 2018



Sharad Bansal speaking at Tata Centre IIT Bombay



Sharad Bansal with Raghu Gupta (Coursera), Bani Paintal Dhawan (Google Education) in Business Today Annual Conclave 2019

Tinkerly in PRESS

THE TIMES OF INDIA

THIS STORY IS FROM MAY 10, 2022

'Make coding fun for children, it can become hobbies and careers'

Most celebrities started it early, be it in sports, entertainment or any other field. It became their passion and hobby leading to their stardom status. Tinkerly co-founder Sharad Bansal and his batchmates realised this when they were at IIT-Delhi. In fact, Sharad had never heard the startup word before. In IIT, he came to know what he had mugged up has little relevance.

"Yes, that was the schooling background we came from and that's how we zeroed in on the idea of setting up a startup to make science teaching fun and relevant right from the primary schools. Students learn only 10% from textbooks. But with

The Statesman

Language should not be barrier to education

STATESMAN NEWS SERVICE
NEW DELHI, 15 JUNE

Language should not be a barrier when it comes to education, say education experts. Talking to the Statesman, Sharad Bansal, Co-Founder, Tinkerly, an edtech startup, said, "Studies say that only about 17 per cent of Indian students study in English medium schools, and the bitter reality is that most modern edtech products are out of reach for these non-English students."

Bansal said the time has come where edtech companies are following the footsteps of brick and mortar coaching institutes.

He said these institutes offer batches in vernacular content (Hindi/Tamil/Telugu, etc) to give equal opportunities to all the students irrespective of their medium of instruction or socio-economic background.

"A student feels more comfortable learning in his or her native language. The demand for vernacular content in education is at an all-time rise, and will only go upward from here," he said.

"The majority of this demand is coming from tier 2 (such as Aggra, Ajmer, Indore etc) & tier 3 (Gwalior, Vadodra, Nashik etc) cities, from where almost 90 per cent of total students are asking for vernacular (mixed with English) solutions," Bansal added.

Another education expert, Sandeep Bapna, MD, Khan Academy India, said, "The efficiency of studying in regional languages is the reason why Khan Academy India supports the concept."

He said priority number one for a learner of a regional language should be to establish a firm foundation from elementary school through middle school.

BusinessToday.In

News / Magazine / The Buzz / Hands-On Learning

Hands-On Learning



This Jaipur-based edtech company helps students become logical thinkers and problem-solvers.

..Bansal, Prakash and Arya, batchmates at IIT-Delhi, realised how practical sessions pepped up their engineering coursework and wanted to bring a similar approach to schools to make learning fun and get students interested in STEM programmes.

THE ECONOMIC TIMES | Industry

English Edition • | Apr 23, 2022, 11:56 AM IST

Why popularising STEM-based education must be a priority

It is no secret that India's STEM (Science, Technology Engineering, and Mathematics) ecosystem is the toast of the world. Historically, it has been home to some of the brightest scientific and technical minds recognized globally, from CV Raman, JC Bose, M. Visvesvaraya to Homi Jehangir Bhabha and APJ Abdul Kalam. In recent years, it has been a source of talent for the world's most developed economies. Today, India-educated professionals such as Sundar Pichai and Satya Nadella are leading top tec..

Jaipur-based edtech startup Tinkerly provides online coding courses blended with hands-on STEM toys for kids of grades 1-12. Now parents understand the need for more awareness towards learning beyond exams. They also understand that "In a career, the skills matter the most," says Sharad Bansal, co-founder, Tinkerly, in an exclusive interview with Bizz Buzz



CONCEPTUALIZE



IDEATE



THANK YOU

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