

# PROJECT BANK

# INNOVATIVE LEARNING ACTIVITIES AND PROJECTS

**AUGUST 2025** 

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#### Introduction

We are excited about your upcoming journey as your tinker with ideas and finalize projects for the Innovative Learning Activities and Projects (ILAP) competition!

Here is a brief about ILAP:



 ILAP is a competition for students with disabilities to showcase their knowledge and skills through projects.



• ILAP launched its first edition in 2025 with the aim of promoting project-based pedagogy to develop 21st-century skills – critical thinking, creativity, collaboration, and communication – among students with disabilities.



 A teacher mentors a team of two students identify an idea based on their interests and skills. Further, she facilitate multiple iterations to develop the project and present it to an audience.

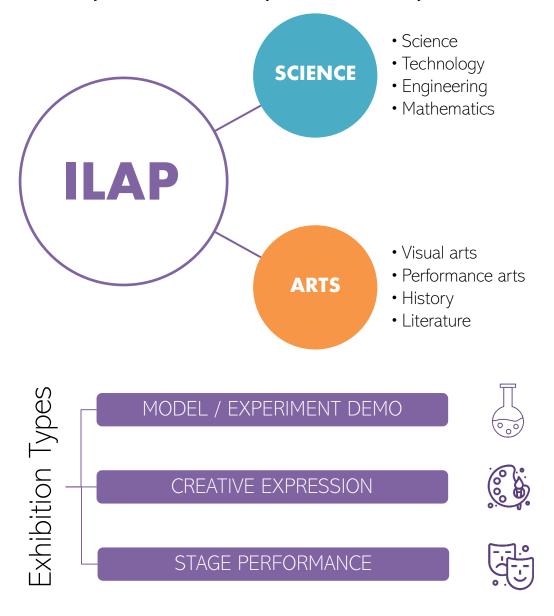
#### **Guidelines to use this resource**

This *Project Bank* showcases 22 projects created by students with disabilities during the 1st edition of ILAP. Some of these projects advanced to the State Finals, while others reached the National Finals.

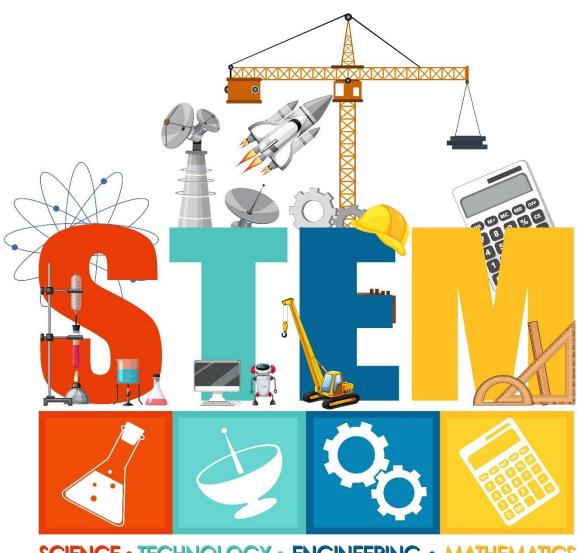
By presenting this collection, organized under **Science** and **Arts**, we hope to give both students and teachers a glimpse into the wide spectrum of possibilities.

This resource is meant to spark ideas and inspire you through the creativity of your peers. We invite you to refer to it but encourage you to go further – develop an idea that excites you, challenges you, and reflects your unique perspective. There are additional resources for your reference for further exploration.

Remember: you define the radius of your circle of creativity!



# Category: SCIENCE



# 1. Renewable Solar Energy Model using Solar Car



School	St. Clare Special School, Kerala
Group	HI Group
Student team	Students of grade XI
Project Description	The students wanted to showcase the application of renewable solar energy. They built a solar powered car by procuring the required materials.
Project Goals	Through this project, the students aimed to highlight the importance of using renewable sources of energy.
Highlights	Students were very passionate about the work and clearly articulated the pros and cons of the model. They were also able to contextualize their work to their local surroundings. The student also showed a rough sketch about how he would build the car during the ZOOM presentation. The student self-funded the materials like solar panel, motor, etc.  The students took 1 week to build the car.
Success factors shared by the Mentor Teacher	Identifying a project that is very relevant in today's times.

# 2. Electricity through Hydropower Model



School	Satya Special School, Tamil Nadu
Group	ID Group
Student team	Students of OBE Level II and NIOS
Project Description	The students built a model to demonstrate how water can be used to generate electricity.
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>Demonstrate the use of hydropower to generate electricity</li> <li>Use of hydropower will be a low-cost alternative to generate electricity</li> </ul>
Highlights	The working model of using hydro power to generate electricity to light an LED was demonstrated clearly by the students.  The students took turns explaining what was happening. Further, one of the students shared the real-life application of the same by the water from the Kaveri River through a dam to generate electricity.
Success factors shared by the Mentor Teacher	Identifying a project that helps the students better understand a concept keeps them engaged. Creating a scientific model empowered them and made them feel like 'inventors.' The entire process boosted the students' confidence levels and improved their communication skills.

#### 3. Rainwater Sensor Model



School	Dr. Mahadev Bhat Special School, Karnataka
Group	HI Group
Student team	Students of grade X
Project Description	The students presented a model with a house and rainwater sensors wherein when the sensor detects rainfall, there is a mechanism to pull the clothesline under a shelter so that the clothes remain dry.
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>Present a solution to a common problem faced in the real world</li> <li>Use cost-effective technology to solve a problem</li> </ul>
Highlights	In addition to the model, the students created a chart paper with the relevant information. Students were very happy and excited to present their project using Sign Language. Students were able to clearly explain how the model worked.
Success factors shared by the Mentor Teacher	Identifying a project with a real-world application and a familiar problem helped to build interest among the students.

#### 4. Water Purification Model

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	Shrishti Special Academy, Karnataka
Group	ID Group
Student team	Students in pre-vocational training
Project Description	The students designed an accessible Water Purification System that will help reduce harmful contaminants and improve the taste, smell and visual appearance of drinking water.
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>Develop a low-cost, accessible water purifier</li> <li>Reduce diseases caused by water pollution through a low-cost solution</li> </ul>
Highlights	They made a chart and book to explain the Water Purification Process.
Success factors shared by the Mentor Teacher	Involvement of parents in preparing children for the presentation. Students practiced the demo almost 10 times before the National Finals

# **5. Health Benefits of Sprouts**



School	RDT School (Center for Life Skill Education for Children with Intellectual Disability Girls), Andhra Pradesh
Group	ID Group
Student team	Students in Secondary and Pre-vocational Training
Project Description	The students demonstrated how to make sprouts using green gram, red kidney beans, peas, etc. and highlighted their health benefits.
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>❖ Highlight the nutritional and health benefits of including sprouts in one's diet</li> </ul>
Highlights	The presentation had clarity with flash cards etc. to support augmentative communication. Students linked making sprouts to livelihood opportunities.
Success factors shared by the Mentor Teacher	The project involved hands-on experience. The process of sprouting beans and peas helped students to observe visible difference over time. This helped students improve their observation skills.

# 6. Products using Recycled Materials



School	Prerana Special School, Telangana
Group	ID Group
Student team	Students in Pre-vocational training
Project Description	The students wanted to highlight the importance of recycling by showcasing products made of recyclable material.
	Through this project, the students aimed to
Project Goals	Showcase how products such as pen- stand and brush stand can be made using recyclable materials like newspapers and cardboard boxes.
Highlights	There was a chart done about refuse, reuse, and recycle.
Success factors shared by the Mentor Teacher	Parent involvement in helping students to make the products.

#### 7. Coding in Action

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	Sheila Kothavala Institute for the Deaf, Karnataka
Group	HI Group
Student team	Students aged 12 and 15 yrs
Project Description	Students demonstrated how they can use simple applications with drag and drop options from Google code.org.



# THINK ABOUT IT!

Using technology, how can you show your problem-solving skills?

### 8. Working Model of the Human Lungs

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	The Spastics Society of Tamil Nadu, Villivakkam
Group	ID Group
Student team	Students aged 15 and 19 yrs
Project Description	Students made a working model of the human lungs and demonstrated breathing activity in human respiratory system. The model is made to inflate (inhalation) and deflate (exhalation).



# THINK ABOUT IT!

Which organs of the human body can you explain with a model?

#### 9. Model of the Asian Elephant

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	Dr. MGR Home and Higher Secondary School for Speech and Hearing, Chennai
Group	HI Group
Student team	Students aged 11 yrs
Project Description	Students collected one time use plastic wastes from their school environment and made a model of the Asian elephant. The creativity was good by making use of waste materials and key learning of the project was reuse, reduce & recycle.



# THINK ABOUT IT!

HOW MANY EXTINCT ANIMALS CAN YOU BRING TO LIFE?

#### 10. Demonstration of Air Pressure

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	Chavara Special School, Ernakulam, North Parur
Group	ID Group
Student team	Students in pre-vocational training
Project Description	Students conducted a simple science experiment by using a balloon, glass bottle, match box and a piece of paper to prove that air always travels from an area of high pressure to an area of low pressure.



# THINK ABOUT IT!

WHAT ASPECTS OF THE CLIMATE CHANGE CAN YOU SHOW?

#### 11. Know about Food Adulteration

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	Mar Thoma High School for the Deaf, Kasaragodu, Cherkala
Group	HI Group
Student team	Students in high school
Project Description	Students showcased 8 ingredients and demonstrated comparison of adulterated and non-adulterated items. The idea for the project stemmed from their visit to the adulteration centre along with the mentor teacher.

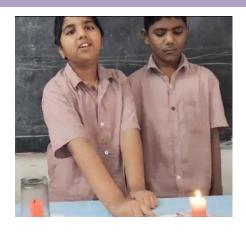


# THINK ABOUT IT!

WHAT TRIPS CAN YOU
TAKE NEAR YOUR SCHOOL
FOR INSPIRATION?

#### 12. How Combustion Works

#### EXHIBITION TYPE: MODEL / EXPERIMENT DEMO



School	RDT Centre for Life Skill Education (CLSE) for ID, Uravakonda, Anantpur
Group	ID Group
Student team	Students aged 14 yrs
Project Description	Students conducted a science experiment by using a burning candle and tumbler to demonstrate air is necessary for burning in combustion.



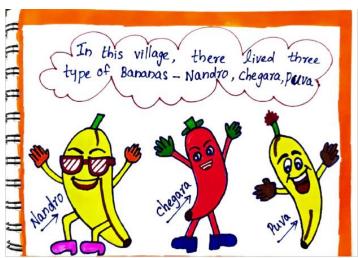
# THINK ABOUT IT!

PICK YOUR FAVOURITE TOPIC IN SCIENCE. HOW IS THAT CONCEPT USED IN THE REAL WORLD?

#### 13. 'Banana Story' Comic Book

#### EXHIBITION TYPE: CREATIVE EXPRESSION



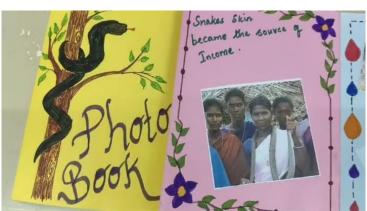


School	Karuna Special School, Kerala
Group	ID Group
Student team	Students in pre-vocational training
Project Description	Students wanted to create awareness about Banana varieties. With the support of the mentor teacher, they created a colourful comic book to highlight information about Bananas.
Project Goals	Through the comic book, the students aimed to showcase the different varieties of bananas
Highlights	The team's creativity in presenting the information in an engaging manner that kindled both interest and curiosity.
Success factors shared by the Mentor Teacher	Encouragement, handholding support from Manjula mam.

#### 14. Photobook – Visit to the Snake Park

#### EXHIBITION TYPE: CREATIVE EXPRESSION



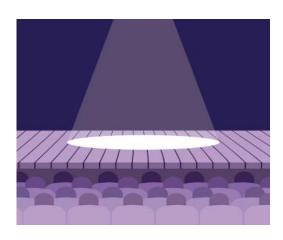


School	The Spastics Society of Tamil Nadu, Chennai	
Group	ID Group	
Student team	Students in Senior Secondary	
Project Description	The students presented interesting facts about snakes by making a photobook.	
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>Summarize their findings and learnings from their visit to a Snake Park</li> <li>Use Google to search for more information about snakes</li> </ul>	
Highlights	The students shared interesting facts such as how snakes were sold for a paltry amount, how there were laws created to protect the snakes and other wildlife. The students took about two weeks to make the photo book. The students were able to answer how snakes are useful to us by sharing that their venom is used to make medicines. The students shared that they learned how to use Google better.	
Success factors shared by the Mentor Teacher	An educational visit kindled an interest among the students to know more.  The photobook enabled them to present their findings in a visual way.	

# Category: ARTS



**VISUAL ARTS** 



**PERFORMANCE ARTS** 



**HISTORY** 



**LITERATURE** 

#### 15. Excavation of Historical Sites



School	Little Flower Convent, Tamil Nadu	
Group	HI Group	
Student team	Students of grade VI and VIII	
Project Description	Students wanted to showcase their learning about the excavation of Keeladi, and archeological site in Tamil Nadu. They demonstrated their understanding and findings of the excavation through demo, models and posters.	
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>Reflect on the benefits of excavating and understanding the past so that they can apply learning from the past to the present.</li> <li>Identify the type of artefacts unearthed and explore the stories they reveal about the past.</li> <li>Recognize the cultural heritage of our ancestors through the artefacts.</li> </ul>	
Highlights	The students started off with a demo of excavation by having sand in a box and using a toothbrush to carefully dig and find objects such as pottery, jewellery, etc.  Then, they showed objects that were excavated (these objects were made using clay by the students by taking reference from Google).	

	They also had posters to summarize the types of objects
	excavated in Tamil Nadu.
	One of the students after participating at the ILAP State
	level, visited the Keeladi excavation site in Tamil Nadu with
	her parents to understand the concept of excavation in
	depth. This visit made her to be more confident in
	contesting in the National Finals. Her parents had to arrange
	the family trip to Keeladi for fulfilling her daughter's wish.
	Paying attention to minute details and collection of raw
Success factors	materials which might create the same impression as the real
shared by the	one.
Mentor Teacher	A physical visit to the historical site gave wholesome
	knowledge and understanding to the students.

#### 16. History of Kakatiya Dynasty



School	Helen Keller Institute for Deaf, Telangana
Group	HI Group
Student team	Students of grade VIII
Project Description	The students showcased the information about Kakatiya dynasty through a model. They picked the key information after thorough research about the Kakatiya dynasty, their culture, origins and achievement of Rudramma Devi.
Project Goals	<ul> <li>Through this project, the students aimed to</li> <li>Highlight interesting facts about the rich history of Kakatiya dynasty, a source of Telugu pride.</li> <li>Highlight how Kakatiya Toranam has become part of the Telangana State emblem.</li> </ul>
Highlights	Presentation had clarity with the model.  Students explained their project using Sign Language with the support of an interpreter.  The students had researched the topic very thoroughly. They were passionate about the topic and clearly articulated why they picked this topic and why they wanted to share it with others.
Success factors shared by the Mentor Teacher	The students were inquisitive as the project that features the importance of our Telangana state.  Discussing with the students and teachers about presenting the findings for ILAP.

#### 17. Know about Deaflympics

#### EXHIBITION TYPE: CREATIVE EXPRESSION



School	Dr. MGR Home and Higher Secondary School for Speech and Hearing, Chennai
Group	HI Group
Student team	Students aged 7 and 11 yrs
Project Description	Students researched about Deaflympics and the Deaflympians from Tamil Nadu and made an attractive poster on Deaflympics by using their creativity and drawing skills. The purpose was to give an awareness for deaf population to participate in Deaflympics.



# THINK ABOUT IT!

WHAT SPORTS
COMPETITIONS ARE
CONDUCTED FOR PEOPLE
WITH DISABILITIES?

# 18. A Chronological Portrait of the States and Union Territories of India

#### EXHIBITION TYPE: CREATIVE EXPRESSION



School	St. Clarre Special School, Ernakulam, Mattoor
Group	HI Group
Student team	Students aged 7 and 11 yrs
Project Description	Students patiently labelled the chronological portrait of the States and Union Territories in Indian map as the facts were presented on the PPT slides were made by the mentor teacher.



# THINK ABOUT IT!

EXPLORE THE UNIQUE LANGUAGES, FOOD, FESTIVALS AND FASHION OF EACH STATE

#### 19. The Rich History of the Telangana Movement

#### EXHIBITION TYPE: CREATIVE EXPRESSION



School	Swayamkrushi, Secunderabad
Group	ID Group
Student team	Students in primary and middle school
Project Description	The students who presented are part of a group home. The teacher and students put in a lot of effort and practice to present the highlights of the Telangana movement by involving many students who came in with the relevant placard.
Troject Bescription	Students presented about the history of Telangana formation by pointing out the Telangana State in India map and then showing the picture flash cards of freedom fighters involved in the movement – 1st CM and present CM.



# THINK ABOUT IT!

WHAT EVENT IN HISTORY
THAT WE CAN CONNECT
WITH EMOTIONALLY?

# 20. Punyakoti Storytelling

# Exhibition Type: Performance Arts



School	B.D Tatti Institute for the Deaf, Karnataka
Group	HI Group
Student team	Students of grade VII
Project Description	The students narrated the story of 'Punya Koti' through Sign Language.
Project Goals	Through this performance, the students aimed to  ❖ Present a thought-provoking moral story through acting and Sign Language
Highlights	The students' presentation was very clear and creative. They were also able to come up with excellent ideas on how they can expand their project. A teacher with Hearing Impairment coached both students in role-playing the story of 'Punya Koti'. The students presented the story with the right expression, acting and props. Both students took turns to play the four characters in the story.
Success factors shared by the Mentor Teacher	The team chose a moral story. Finding solutions to enhance the presentation – the students found it difficult to hold the flashcards <i>and</i> use Sign Language. As a result, they decided to have a costume and use paint only for the face to enact the characters in the story.

# 21. Yakshagana Performance

# Exhibition Type: Performance Arts



School	Chaitanya Special School, Karnataka
Group	ID Group
Student team	Students from grades II
<b>Project Description</b>	The students performed Yakshagana.
	Through this performance, the students aimed to
Project Goals	Showcase their talents in Yakshagana
	Students with Down Syndrome performed Yakshagana after a lot of practice.
Highlights	The students also practiced many times with the heavy make-up and costume, so they got used to it while performing at the finals.
Success factors shared by the Mentor Teacher	The Yakshagana project for special needs children became a powerful way to promote inclusivity, confidence, and artistic expression.  We adapted Yakshagana's dance, expressions to be accessible to children with varying abilities. Simplified movements and sensory-friendly music helped them connect with the art form.  Yakshagana artists teamed up with special educators and therapists to create a structured learning approach.  Personalized training ensured each child's comfort and progress.

#### 22. Group Dance Performance

#### EXHIBITION TYPE: PERFORMANCE ARTS



School	Sadhana Society for the Mentally Handicapped, Hyderabad
Group	ID Group
Student team	Students aged 14 and 17 yrs
Project Description	Students picked a popular song and danced for the same. They presented their dance along with their friends.



# THINK ABOUT IT!

WHAT STORIES CAN WE TELL USING DANCE?

#### **Additional Resources**

- The Project Based Learning Method (video)
   https://www.youtube.com/watch?v=V2Oa4OkkTtw [3:46 min]
- 2. Project Based Learning for Students with Special Needs (*article*)

  <a href="https://www.21kschool.com/in/blog/project-based-learning-for-students-with-special-needs/">https://www.21kschool.com/in/blog/project-based-learning-for-students-with-special-needs/</a> [7 min read]
- 3. **Design for Change 1 week toolkit** *(poster)*<a href="https://dfcworld.org/file2015/oneweek\_challenge\_toolkit.pdf">https://dfcworld.org/file2015/oneweek\_challenge\_toolkit.pdf</a> [5 min read]
- 4. One hundred project-based learning ideas (*article*) <a href="https://www.unrulr.com/post/100-project-based-learning-ideas">https://www.unrulr.com/post/100-project-based-learning-ideas</a>
- 5. **20 Examples of Project Based Learning** (*article*)

  <a href="https://www.teachthought.com/education-posts/examples-of-project-based-learning/">https://www.teachthought.com/education-posts/examples-of-project-based-learning/</a>



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for more information.