



INSPIRE AWARDS

(Innovation in Science Pursuit for Inspired Research)

MANAK

(Million Minds Augmenting National Aspiration and Knowledge)



**How can you encourage your
students???**

1. Conduct an Idea Competition



1. Conduct an Idea Competition

To organize idea competitions, you may assemble them in a group and ask them to think about any or all of the following:

An idea of a machine or a gadget, **which is not available but the student desires** to have such a machine or a gadget.

An idea of **improvement in any existing/available machine or gadget**, so that it becomes multifunctional, efficient, reduces drudgery etc..

Any idea or an innovation that can **solve a local technological problem**, which a student may be seeing everyday around her/him

Then ask them to write down their ideas in a piece of paper and submit it to the teachers

These ideas can be further shortlisted by Principal/Headmaster of the school

2. Encourage observation skills

- Observe people from different background in different situations.
- Observe the problems faced.
- Encourage students to come up with complete solutions that addresses different dimensions of the problem.





3. Guide students with Tools and Methods to find a Solution

- **Capture every idea**
 - Carry a capture tool wherever you go to instantaneously note down the ideas to avoid losing the ideas you get.
- **Create a master list of problems**
 - Collect the problems at one place and classify them based on required criteria.
 - Classification will help in comparing the potential of problems.
- **Review your master list of problems**
 - Review your master list of problems every now and then
 - See all the opportunities you have.
 - Take one or two problems to work with.
 - The best problems to take are those which are both ***painful*** and ***solvable***.
- **Take action**
 - Take action based on the problem chosen to provide a solution.
 - Good observation will give a head start in coming up with a solution.

4. Idea Box





Few Examples !!!

Plastic (safety) cap opener of LPG cylinder

Sayen Akhtar Shaik | South Andaman, Andaman & Nicobar Islands



Problem: Difficulty to open the plastic cap, by pulling the nylon thread.

Idea: Developed an opener a “Plastic (safety) cap opener of LPG cylinder” to reduce the difficulties faced by women while opening the plastic safety cap attached with the nozzle of LPG cylinder. It can also be used to open tomato sauce bottle.



Modified Walker with Adjustable Legs Shalini Kumari | Patna, Bihar



- **Problem:** Difficulty to walk up or down stairs using conventional four leg walkers.
- **Idea:** Mechanically alter the height of the legs of the walker so that they can be adjusted as per the height of the stairs.

Hand Driven Waste Picking & Dumping Cart Sikanto Mandal | Mathura, Uttar Pradesh



- **Problem:** For the protection of the environment and the health of the population waste collection is an important task. But collecting it with bare hands is both difficult and unhygienic, exposing waste collector to deadly diseases.
- **Idea:** Manual easy to use cart with tools that enables contact-less waste collection.

Paddy Filling Machine Marripelli Abhishek | Rajanna, Telangana



- **Problem:** Filling of grains into bags (jute or woven plastic bags) is very hectic and time consuming job.
- **Idea:** Developed a device, which helps farmers in filling grains in an easy and rapid way. With the help of “Paddy Filling Machine”, one worker can do the work of four workers within 3-4 minutes.

Animal Carcass Picking Machine Tarunendra Tyagi | Rewa, Madhya Pradesh



- **Problem:** Decomposing carcass of dead animals lying on roads.
- **Idea:** He has ideated about a machine, which can easily pick up the carcass for appropriate disposal, thereby eliminating the risk of any infection.



Innovative and Low Cost Bed with Detachable Wheel Chair Arushi Tandon | Kolkata, West Bengal



- **Problem:** Difficulty to move the patient or bedridden person.
- **Idea:** Designed a modified bed where a wheelchair has been incorporated. With a few easy adjustments, this integrated wheelchair can be separated from the bed, thereby making it easy to move the patient or bed ridden person.

Crutch with Shock Absorber Archana Konwar | Dhemaji, Assam



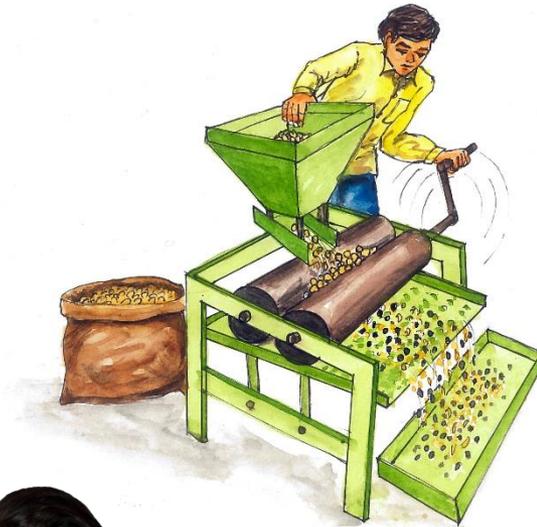
- **Problem:** Pain in the underarms due to extended use of crutches.
- **Idea:** Adding shock absorbers to reduce pain during usage, a bell to alert others to give way and a light for better visibility during the night.

Inclined Installation of Water Taps at Public Places Chhaya Thakor | Gandhinagar, Gujarat



- **Problem:** Taps fixed at certain height, making it difficult for children of different heights to drink water.
- **Idea:** Have taps fitted on an inclined pipe so that they are at different heights, enabling people to drink water easily from tap at appropriate height.

Low Cost Portable Chironji Decorticator Indrajeet Singh | West Singhbhum, Jharkhand



- **Problem:** Removing the seeds from Chironji nut is a time consuming and laborious work.
- **Idea:** He ideates about a portable low cost decorticator, which can be used by small farmers easily. This machine can be operated manually or by using solar power.

Travelling Bag with Folding Seat Nisha Chaube | Noida, Uttar Pradesh



- **Problem:** Lack of enough seating arrangements at railway stations, bus station and airports.
- **Idea:** A pull-out seat attached to a strolley bag that is handy for travellers waiting at public places

Fourth Light (blue) to Reduce Traffic Jams Adarsh Barnwal | Katihar, Bihar



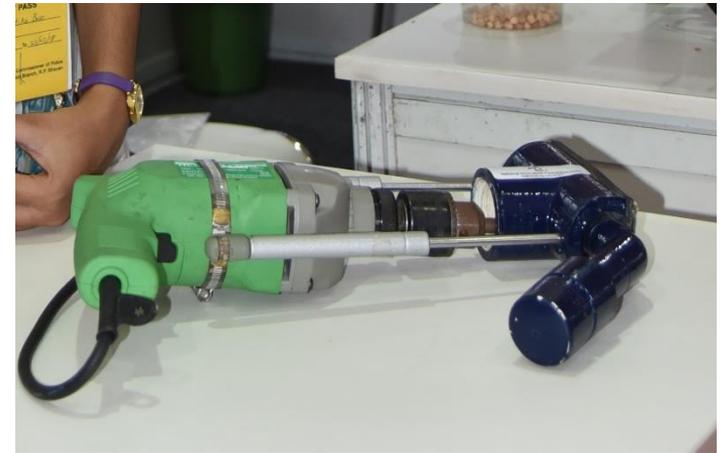
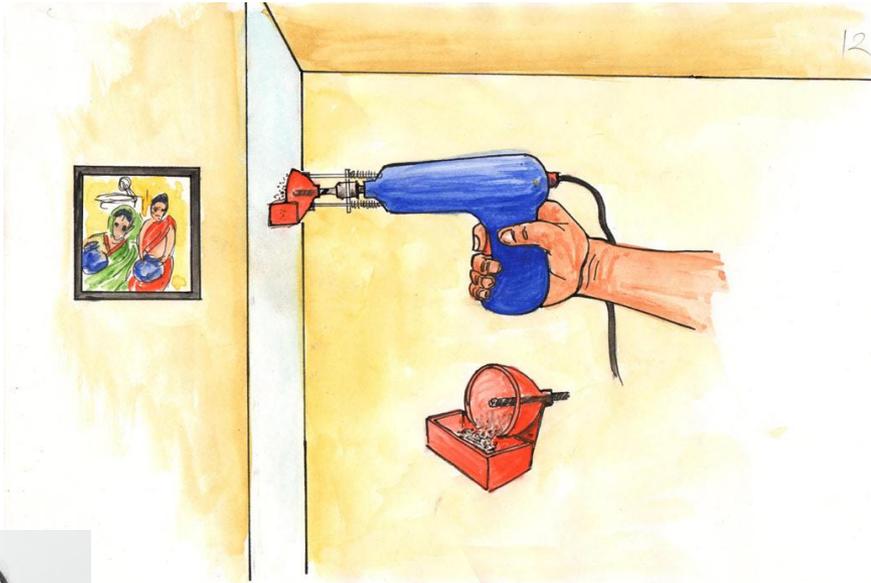
- **Problem:** No “On-road” information about traffic jams of the road ahead
- **Idea:** Provision of fourth signal in blue colour to indicate that the road ahead has a traffic jam, letting motorists to take an alternative route thereby avoiding further congestion.

User-friendly Pedal Rickshaw Mansi Priya | Ranchi, Jharkhand



- **Problem:** Old people face difficulty in climbing the rickshaws
- **Idea:** Small folding stair attached to the rickshaw

Dust Collecting Attachment for Drill Machine Digantika Bose | Burdwan, West Bengal



- **Problem:** Hand drills produce a lot of dust, which causes infection and allergies to mechanics using them.
- **Idea:** Developed an attachment for the drill machine, which can collect all the dust and debris.



Nail polish which indicates drugs/alcohol in drinks to prevent molestation Golakh Mohapatra, Siba Prasad Satapathy | Odisha



- **Problem:** Miscreants mix intoxicants in drinks and serve to ladies to molest them.
- **Idea:** Intoxicant indicator in a nail polish that changes colour when dipped in drug laced drinks.

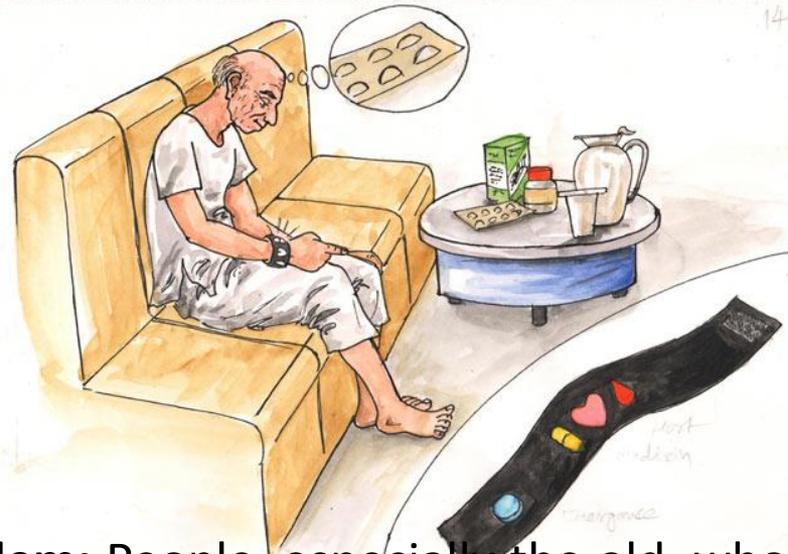
Alerting System for Bus Drivers Pradyumna Pal | Bhubaneswar, Orissa



- **Problem:** Accidents occur when a passenger puts his body part outside the bus window.
- **Idea:** An alerting system for the bus driver, which enables them to know which passenger has put his hand or head outside the bus window.

Smart Wrist Band for Elderly People

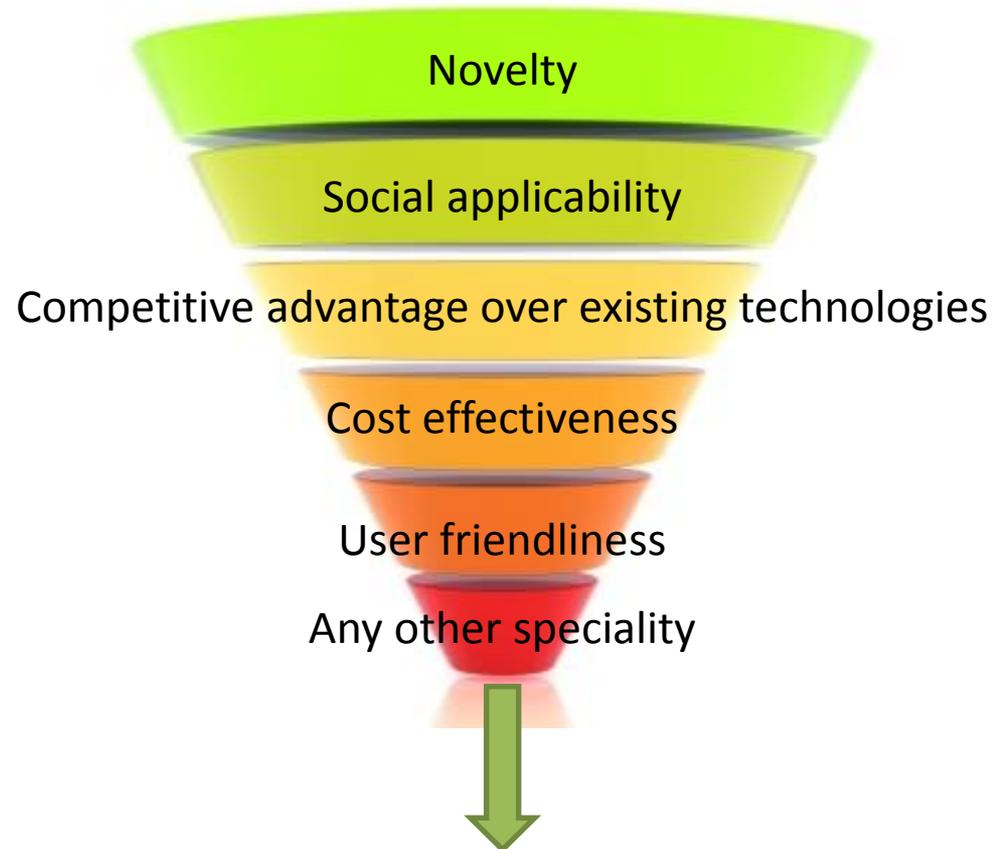
P K Raghul | Kanniyakumari, Tamil Nadu



- **Problem:** People, especially the old, who are prescribed medication, forget to take them on time.
- **Idea:** A watch, which can store medicine and alert user through beep sound, when it is the time to take medicines

Evaluation

..Entry..





Short-listing of Ideas/Innovations

Practical/Scientific

Should be based on current knowledge of science and should not be hypothetical; should be implementable.

Degree of novelty

Is there anything new in the idea? If yes, how much is it different and what advantage will it bring?

Solving existing problem

Does the project solve/address any common problem for which no solution is available or if available is it sub-optimal.

Social Applicability/Usefulness

How is the idea related to social, gender, environmental context - Does it address issues of under privileged/ physically challenged, reduces drudgery for women, mechanics, farmers, artisans, etc.; is it environment friendly?



Short-listing of Ideas/Innovations

Cost effectiveness

Does the project reduces cost of an operation time without any accuracy loss, health/ financial or environment concern.

Scope of diffusion

Social or Commercial - Whether the project can be put to practical use? scale may be large or small, does not matter.

User friendliness

Is the project user friendly or not? what will the use of a great idea, if it cannot be used by people intended for/ or implemented

Relevance in Current Govt. Schemes

Does the project align to any of the current Govt. schemes like Swatch Bharat, Start-up India, Digital India, etc.



What kind of submissions will not be encouraged?

(Examples include but are not limited to the following)

- Common ideas/concepts textbooks/others
- Hydel power projects
- Rain water harvesting
- Water level indicator
- alarms, burglar alarms etc.
- Using Electricity/energy genVermi compost/vermin wash
- Letter box farm, earthquake eration through turbines/waste batteries/dung/transport/wave etc.
- Turbines to generate energy

The teachers may also look up at the web link below, to check if the projects being developed by their students have been not recognised already.

<http://www.inspireawards-dst.gov.in/UserP/inspire-downloads.aspx>



राष्ट्रीय नवप्रवर्तन प्रतिष्ठान – भारत
National Innovation Foundation - India

For More Information about INSPIRE Awards-MANAK

Visit on

<http://www.inspireawards-dst.gov.in>

<http://nif.org.in/inspire-awards>

Contact us

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