Ignited India: Children Uncaged

It is wonderful to read about the various creative ideas of children who are being recognised through the IGNITE 2013 awards. Let me just focus on the five winners who are studying in Class 8 or below. Shibajyoti Choudhury and Rajashree Choudhary of Jabalpur suggest developing a puncturing device at the bottom of a plastic water bottle, similar to the ones used to open a soft-drink can, to prevent re-use of the bottle. Kulsoom Rizavi and Tarun Anand from Uttar Pradesh suggest making a chair alarm that would go off if the sitter's posture were wrong. Masirabi Hanif Patel of Jalgaon dreams of a two-wheeler rider wearing a jacket which will be connected to a small air-conditioning unit operated by the two-wheeler's engine—riding in summer will certainly be a cool experience with such a jacket. Md. Usman Hanif Patel, Pavithra, Vidya Ramesh and Nidhi Kumari Gupta, have contributed ideas to the development of a hand cart steering mechanism. The cart puller has to lift the cart in order to turn it. With a steering mechanism attached to one of the rear wheels, the effort needed to turn the cart is minimised. Soumya Ranjan Behera of Jagatshinghpur in Odisha wants an alarm that would indicate the onset of convulsions or seizures. There are award-winning ideas of older children, and

> "Why do we see more of the large black ants attracted to jaggery (gur) and the small red ants to white sugar?"

even examples of prototypes that have been built by children, that are presented in this issue. We hope you enjoy reading about them.

Inspiring as these examples are, they are from a small, miniscule fraction that has overcome our society's attempts to discourage creativity and to make children conform to an image of what they should do and become as they grow up. Such ideas have emerged in the absence of a supportive ecosystem. They have thrived in spite of the barriers posed by the conformist system of education that we have created for ourselves. If our educational system was to encourage creativity and create an ecosystem that embraces experimentation, we would see a much larger pool of ideas for solving societal problems eventually leading to a better human life. That is why it is important to learn from these children and consider how formal education, which is today all pervasive can be reformed.

Let me begin with a story narrated by a primary school teacher. Many years ago, a class one student asked her a simple, but what for her turned out to be, significant question: "Why do we see more of the large black ants attracted to jaggery (gur) and the small red ants to white sugar?" She reflected on her own experiences and realised that her observations matched those of the boy. But she did not know the answer to the question! Inspired by this story, we started collecting "tough" questions that children in government primary schools had asked their teachers. "Do animals feel they have brothers and sisters?" "I see many flies around, but do not see the same number of corpses of flies. Why?" "Why is that most birds do not have big ears?" "Plants make their own food. What will it take for humans to do something similar?" "Do fish feel the cold?" "When coconut grows in saline land and water, how does it produce sweet water?" "If both potatoes and brinjals are kept in the open, brinjals lose their colour faster. Why?" "Why is the sky above my head and the earth below me?" "Why is the axis of rotation of the earth angular?" "Why do humans die?"

Tough questions indeed! But what is more important is that these questions were asked. Children, very young children, were not afraid to ask these questions. That they were not afraid meant that they did not worry about looking silly or making a mistake. What happens to this lack of fear as they grow older? We make a good job, through our schools, introducing in children the fear of making mistakes. Our system values the "right answer" so highly, and punishes the "wrong answer" so severely, that we create a culture of silence. Why would anyone take a risk if there is a strong threat of ridicule and punishment? By encouraging this culture of silence, we are killing creativity. It is a wonder that in spite of the way we educate, so many children manage to remain creative.

A second feature of these questions is that they indicate a strong streak of curiosity. Perhaps one can scientifically explain what kind of cold a fish feels. But the fact that a child can relate her ability to feel the cold and wonder whether cold water makes the fish feel similarly indicates more than just an ability to relate similar events. There is a base of curiosity and wondering behind that question. What happens to this curiosity as one grows older? Is it killed by encouraging a focus on certain things that are valued. That is, along with educating into fear, we educate our children out of curiosity. Not that math, science and language are not important, but not valuing other aspects which provoke curiosity, does a disservice to creative expression. How well do our schools in forest areas draw on the curiosity about and the knowledge of plants and

herbs that children possess? Unfortunately, that kind of curiosity is not valorised. The "curriculum" does not permit it.

In addition, the message given to the child about a conflict between utility and expressiveness is flawed—the "valued subjects" are those which have a lot of utility. You have to attend secondary school and college to then get a "good" job. Expressiveness? That is not going to help you get into higher education. Maybe we can tolerate it in some schools, but really it is not part of our focus. Thus, runs the logic. But discouraging expressiveness means killing creativity. It is not that our policies do not realise the importance of all-round development. The Right to Education Act does recognise the importance of non-cognitive competencies—that is, non-numeracy and non-literacy aspects that one needs to acquire. But in practice, the curriculum, societal expectations, and teachers' priorities are structured to discourage expressiveness. So, you may still have music and dance in your school, but surely those are not going to help you get jobs. Why bother?

In short, educating children into fear of being wrong, lack of curiosity and disregard for expression hinder the development of what every child is born with—creativity. Creativity is something natural; killing it is akin to depriving ourselves of a resource for the future. Especially an uncertain and unsettled future that calls for an abundance of this particular resource in order to solve our most pressing socio-economic problems, whether these are related to depleting natural resources, the need for greater efficiencies in delivery of services to a growing population, or the demands made by an increasingly networked and decentralised society. Let us learn from the IGNITE children, children who have dared to guess and take a chance. Maybe the alarm to correct your posture may not work. It does not matter. That Rizavi and Anand have dared to dream about this idea is a good enough start. That four children, with their ideas, can contribute to making the life of a hand-cart puller a little easier, is for us, an indication of their curiosity about the society around us and a desire to do make it better. As we salute these children, let us also accept that our formal education system can do much more to allow the creative potential that exists in every child to blossom unhampered, free of the millstones we have hung around the necks of our children.

Prof Vijaya Sherry Chand
Guest Editor

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Take home library in a box: An idea that must move

There are a lot of people who may have studied in the village schools and reached a better station in life. If each one of them contributes one library or one tablet, the learning environment can really be transformed. How many primary schools have a library, which is easily accessible to the children? Even the private schools may ration the number of books to one or two that are issued to students per week. A government primary school in Kalol has created a new model of a 'take home library' for children.

Pritiben and Yogeshbhai conceived this idea and undertook a campaign called "Books Give Me Wings". They found donors, like IFFCO and some other individuals for funding. The initiative had four parts:

1. Vanchan Parab: Children of classes 3 to 5 can sit around a banyan tree and read books relevant to their age.
2. Samaydan Vanchan Project: A parent, Alpa Kothari, agreed to donate two hours every day for reading to children and helping them develop reading abilities.
3. Khushi Reading Garden: A corner of the school was converted into an "open library." The walls were painted, a hexagonal raised platform built and four kota-stone benches put up. Plastic chairs and books were bought through the money collected from public donations.
4. "My little library, at my home": Fifty tin boxes were bought and a set of 20 to 25 books (of interest to children, like children's stories, tales of expeditions, biographies) was placed. The set also contains books that are of interest to the elders at home. Children were given a library to take home for a month. Testing of the reading abilities of the children was done by asking the children to read during school hours.

Children get opportunity to read at least 120 books in a year and their families too can access the library. When the king of Gondal tried to popularize libraries 100 years ago he would not have imagined that there will be a school in 2013 which will provide take home library to every child. It is possible that such an educational innovation takes many more decades before every school in 6.5 lakh villages of the country will have similar take home library for every student. A generation which will grow reading books and reflecting on ideas will be a generation of thinkers, doers and imbued with the spirit of sharing.

We hope at least some of the readers would take this step of donating at least one small box with 15 books to any school they want. There is no better gift.

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