



Educational Initiatives | www.ei-india.com

About Us

A brief note on our Vision, Mission and Who we are

A world where children everywhere are learning with understanding

Who we are, and our Mission

We are Educational Initiatives (EI), a company founded by IIT-IIMA alumni. We created ASSET, India's leading diagnostic test that has been taken by over 450,000 students in India and abroad over the last 7 years. We work equally with the leading private English-medium schools and the government rural and municipal schools. Like ASSET for the private schools, we are engaged in independent measurement of student learning levels in rural schools in 13 states of the country.

In Andhra Pradesh, for example, we are working with over 50,000 students - this is the World Bank's largest assessment anywhere in the world. Many of our team members are serving on government committees, textbook boards, etc., to ensure that these learnings reach schools across the country. In 2006, we did a large scale study on the levels of learning in the top 140 schools from the 5 metros. As a part of this study, we benchmarked performance against other countries using the same questions that were used in international tests and found that students from these schools performed poorer than the global average. (This study appeared as the cover story of the India Today issue dated November 27, 2006 and a copy is available on our website at: <http://www.ei-india.com/whats-wrong-with-our-teaching/>).

The last 7 years of experience with assessments and assessment based research has left no doubt in our mind that we can make a difference and help to create a world where **children everywhere are learning with understanding**. Our mission is to develop and offer products and services based on research in assessment; offerings that will clearly pinpoint what students are learning, give insights into the learning process and provide concrete ways to improve learning.

People

Sridhar Rajagopalan, Managing Director



B.Tech (IIT Madras), PGDM (IIM Ahmedabad) Sridhar worked with Tata IBM for three years before he joined Eklavya Education Foundation. He was part of the team that was responsible in setting up Eklavya School and he was instrumental in the conceptualization, implementation and running of the Eklavya Institute of Teacher Education. Currently he is spearheading the efforts at Educational Initiatives looking mainly at the test development process, teacher training and curriculum services.

Venkat Krishnan N, Director



BSc, Grad ICWA (Bombay Univ), PGDM (IIM Ahmedabad) After his PGDM from IIM-A, Venkat worked with The Times of India Group, where he had stints in the Modernisation, Business, Corporate and Brand Management functions. He then joined the core team that set up SONY Entertainment Television in India, before co-founding Eklavya Education Foundation. Under the foundation, Venkat set up Eklavya School in Ahmedabad and ran it for 4 years. He then set up www.GiveIndia.org, India's first philanthropy exchange, that currently channels over Rs 15 crores p.a. (US\$4million) from over 50,000 individual donors and 100 corporations to over 150 NGOs all over India.

Sudhir Ghodke, Director



BE (Mech), PGDM (IIM Ahmedabad) Sudhir Ghodke was a part of the team that started Eklavya Education Foundation. He worked for a year with Tata Engineering in Jamshedpur and Kolkata as a Sales Engineer before his PGDM and with ITW-Signode, Hyderabad as Key Customers' Manager, handling the top 20 customers of the company after completing his PGDM. As a part of the core team of Eklavya, he focused on curriculum development, architectural design and facilities planning, parenting workshops and writing articles. At EI, he is focusing on setting up the network of people who will interact with schools all over India. He says, "EI has the potential to make a significant difference in the domain of primary school education and opens opportunity to like-minded people to join in this exciting and eventful effort."

Vyjayanthi Sankar, Vice President - Large Scale Assessment



M.Sc, B.Ed, (PG. Dip in Bioinformatics) Vyjayanthi, an M.Sc. from the University of Madras, has the eclectic experiences of straddling fields related to school, college, computer education, research and content development over the last 18 years. In her previous assignment she served as the DGM for the technical division of Lakhotia Computers for Gujarat, Rajasthan, Malaysia and Middle East, handling curriculum, testing, faculty training and network administration. She has many research papers in 'Life Sciences' and 'School Education' to her credit. She is VP of Large Scale Assessment division in EI and is based in Hyderabad.

Suchismita Srinivas, Vice President - Digital Adaptive Learning



B.Ed. from Delhi University and a Diploma in Child Guidance Suchismita, a Graduate in Maths, a B.Ed. from Delhi University and a Diploma Holder in Child Guidance from IGNOU, is passionate about Maths. She has taught Maths to 9 to 15-year olds in various schools, for over 14 years, with the mission of helping children develop a long term interest in the subject. At EI, she is working on Digital Adaptive Learning content development and is based in Mumbai.

Vishnuteerth Agnihotri, Vice President - Test Development



B.Tech (IIT Madras) Vishnu, a B.Tech from IIT Madras, has 14 years of experience in Consulting, Business Development, Project Management, and Performance Improvement. He was a Sr. Program Manager with i2 Technologies, a leading global provider of software solutions. At EI, he is mainly handling the Test Development department and is based in Bangalore

Urmila Thaker, Vice President - Training



M.A (English), M.Ed Urmila, an MA in English and an M.Ed, has worked as: the Academic Co-Ordinator for Amrit Jyoti School, the Principal of Hiramani and SGVP Schools in Ahmedabad, an Education Officer at Aga Khan Education Service Education Consultant to a group of schools of Prantij Kelavni Mandal, Prantij. With over 35 years of experience including 20 years of teaching and in other capacities in schools, Urmila is easily the most experienced person in the organization. At EI, as VP - Training, she coordinates the training activities and is also the key faculty for many of EI's training programmes.

Sandeep Saha, Vice President – Marketing & Alliances



B.Tech (IT-BHU), PGDM (IIM Calcutta) Sandeep has joined EI after a 18 year stint in the corporate world, where he worked for Microsoft and Oracle among others, in diverse roles of marketing, sales, alliances & channels, project management and IT consulting. At EI, he is concentrating on strengthening and building the brand value of EI products through customer and market feedback and research, user group activities, broadening of awareness of EI's work and strategic tie-ups. Sandeep feels the spread of quality education to school children is an imperative for the true growth of any society and EI would continue to play a pivotal role in

that pursuit.

Manoj Sopory, National Sales Manager



M.B.A (Marketing), PGSM, EGMP - (IIM Bangalore) Manoj has more than 13 years of diverse experience in the areas of Profit Centre Operations, Sales & Marketing, Strategic Planning and Business Development, through the leadership roles he has held in the companies he has worked with. He has handled two greenfield projects (in TVC and Archies) and build them as profitable verticals. In his last assignment as Business Head and Vice President in Wall Street Finance Ltd, one of his regions was chosen amongst the most successful in more than 80 countries. At EI, Manoj is taking care of National Sales and is concentrating on strategies to

increase the adoption by more schools and students. He has an ambitious target of reaching out to 1 million kids with EI offerings at an early date.

Can assessment really bring about change?

Some of you might be asking this question, and it is a good one. We are convinced that good diagnostic assessment is a very important element in bringing about a transformation in the education system. Not that assessment alone will be sufficient, or that it is the most important element to be addressed, but certainly we cannot go far if we don't have reasonably accurate means of assessing learning with understanding.

To share an example, some years back, we asked this question at the Class 4 level-

Question

The length of this pencil is about ____.



Options

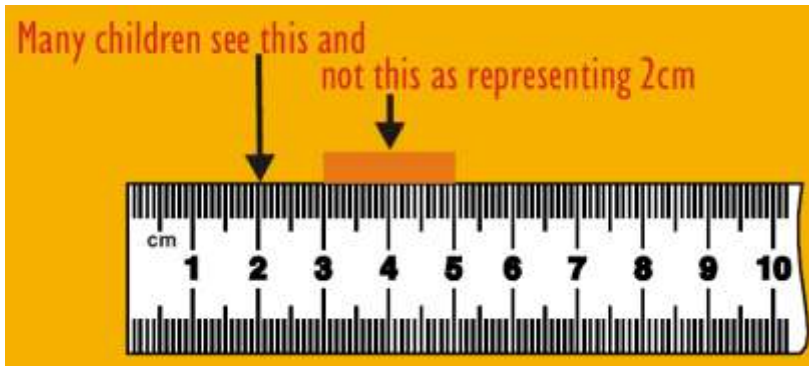
- A 4 cm
- B 5 cm
- C 6 cm
- D 7 cm

We found that only 11% of students answered this question correctly, and a whopping 79% of students answered C- 6 cm! Intrigued by this, we repeated the question in varied forms across different student populations, but did not find any significant difference in the way children were answering this question.

The "obvious" hypothesis we had was that children were just looking at the endpoint of the pencil at 6 cm, and therefore answering 6 cm. But as we dug deeper, doing interviews with students, video-graphing their responses and analyzing these

responses, we found there was more to this. Talks with students revealed that many of them do not completely understand what it means to represent a length with a number. When asked why the length of the given pencil is 6 cm, they explain that counting from 1 to 6, they have counted '6 cm'. In essence, they are counting POINTS instead of actual 1

cm spans. If a 7 cm pencil is placed between the 8 and 15 cm marks, they explain that there are 8 centimetres for the same reason! This misconception is common in class 4, but exists in class 6 also. When students are asked to 'show what is 2cm', they point out the 2cm mark - clearly, some students think that 2cm is the 2cm mark not appreciating that it represents a distance or gap!!



When these insights were shared with teachers through short films, many of them had "aha" moments, and were even able to suggest teaching strategies to address these learning gaps. Thus, we find that **if we can do assessment well, pinpoint the specific learning gap, and shed some light on how children are thinking, we have already covered a lot of ground towards the solution for this!**

The above is just one simple example of what assessment can do. There are many more ways in which we use assessment to help improve the learning levels in classrooms, schools, or school systems. Another example of insights about children's ideas about breathing, coming from assessment data is shared in the next page.

Children's ideas about breathing (based on ASSET results)

To investigate in detail whether students had a superficial or an in-depth understanding of respiration, we asked these two questions. The set of questions given below were administered to all the students from grades 5 to 9. (44,500 students appeared in ASSET - Aug 2007)

The first question aimed to test whether children were able to distinguish between respiration, photosynthesis and a process of combustion such as 'burning of dry leaves'.

Question 1

Which of the following are examples of respiration?

1. Humans use oxygen and release carbon dioxide.
2. Plants use carbon dioxide and release oxygen.
3. Burning dry leaves uses oxygen and releases carbon dioxide.

A. only 1 **B.** only 2 **C.** only 1 and 2 **D.** 1, 2 and 3

(Option A is the correct answer. But most students selected Option C which

Almost 22,000 students across classes believe that *plants using carbon dioxide and releasing oxygen is due to the process of respiration*. The question shows that they have a very superficial understanding of respiration – for them it is just a label for gas exchange. In fact, an increasing number of students in higher classes actually think that combustion and respiration are the same process!

The 2nd question aimed to test whether children understand that respiration is a vital process for plants just as it is for other living organisms, and is a continuous process.

The analysis from this question shows that this superficial understanding of respiration leads almost 40% of them to choose the wrong answer. The crucial point is that they do not realise that respiration has to be a continuous process in all organisms because energy demand is continuous.

Question 2

Which of the following statements about plants is true?

- A. Plants take in only oxygen during the day
- B. Plants take in oxygen only during the night
- C. Plants take in only carbon dioxide during the day
- D. Plants take in oxygen both during the day and night

(Option D is the correct answer, But most students selected Option C which probably shows a misconception. The table below shows the percentage of students who chose each option across Class 5 - 9.)

Class	A. Plants take in only oxygen during the day	B. Plants take in oxygen only during the night	C. Plants take in only carbon dioxide during the day	D. Plants take in oxygen both during the day and night
Class 5	9.9%	23.8%	43.5%	21.0%
Class 6	10.7%	25.7%	42.4%	19.7%
Class 7	8.0%	27.7%	45.8%	17.8%
Class 8	8.6%	30.5%	42.0%	18.4%
Class 9	8.9%	29.9%	39.5%	21.0%

Also, the fact that almost 12,000 students have chosen the option, '*Plants take in oxygen only during the night*', shows evidence to a clear cut misconception about the need for oxygen in plants. That most students do not have much clarity regarding the process of respiration is evident from the above analysis.