



SCHOOL FORUM

A Ramanbhai Patel - AMA Centre for Excellence in Education Initiative

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Teacher

(Sharon Harper Sampson)

*I bet you've tied a million shoes
and dried a million tears
and given out a million hugs
as a teacher, through the years.
In my child's life, the role you've played
has been a priceless part
and you must know the special place
You hold in my child's heart*

Appreciating children – A motivating factor

- **Good Citizen of the Week:** Teachers nominate a student each week that demonstrate the values of citizenship in the classroom. Each Friday morning the Good Citizens for the Week
- **Writer of the Week:** Teacher nomination of a student who reads an exemplary writing sample over the morning announcements.
- **Artist of the Week:** Teacher nomination of an outstanding piece of artwork that goes on display in the main lobby for the week.
- **Good Sport of the Week:** Teacher nomination of a student who has displayed sportsmanship qualities throughout the week.
- **Value of the Month:** Throughout the school year, each month is designated as a "Value Month" Eg;
- **Friendship** (sharing special times with someone you trust and enjoy)
- **Responsibility** (proving you can be trusted with what is expected of you)
- **Generosity** (sharing your goodness)
- **Peace and Joy** (a state of mutual harmony and happiness)
- **Dependability and Punctuality** (the state of being reliable and prompt)
- **Tolerance** (having a fair and accepting attitude towards those who differ from you)
- **Perseverance** (steady persistence in spite of difficult circumstances)
- **Kindness** (showing others they are valuable by how you treat them)
- **Self Control** (control or restraint over one's actions and/or feelings)
- **Student of the week:** Each student from the class gets a turn. Children write some good quality of the student of the week and displays on the class notice board. Importance of each child is maintained.

Dear Readers,

As you know School Forum is a means of interaction among the education fraternity in Gujarat. To make it more effective and interactive, School Forum welcomes authentic articles with source from teachers and the education community. If you have compiled any article or you come across an article worth sharing, please feel free to forward it to us. We also welcome innovative teaching methods and best practices adopted by school teachers and principals.

Email: ama@amaindia.org Subject: School Forum article

Editorial Board: P.R. Joshi • Nilima Shah • Narendra Pandya • Seema Agarwal • Neeta Sood

Let's know How is the word 'baton' pronounced?

■ S. Upendran

If you are thinking of the stick that is passed from one runner to another in a race, there are two different ways of pronouncing the word. The British pronounce the first syllable like the word 'bat' and the second like the word 'on'. They pronounce the word 'BAT-on' with the stress on the first syllable.

The Americans, on the other hand, pronounce the 'a' like the 'a' in 'china' and the 'o' like the 'a' in 'father', 'path', and 'bath'. They pronounce the word 'be-TAAN' with the stress on the second syllable.

What is the meaning and origin of 'keep tabs on someone'?

When you keep tabs on someone, you monitor or keep track of what he is doing. You are constantly watching the individual, and as a result you know what he is up to. It is possible to use the expression with things as well.

*I keep telling my wife she needs to keep tabs on our bank balance.

*Raju feels that his wife is keeping tabs on his every move.

As for its origin, the only thing that people are certain about is that the expression was first used in America. According to some scholars, in the mid-19 {+t} {+h} century, bartenders started using a slate to write down the number of drinks each customer had consumed. Another name for the slate was 'tablet', and it is from the shortened form of this word that we get 'tab'. Since the bartender had to watch each customer carefully to keep track of the number of drinks he had consumed, the expression 'keep tabs on' began to mean 'to monitor'.

What is the meaning of 'dead letter'?

In the old days, when snail mail was the primary means of staying in touch with someone, it was important to write the address of the recipient correctly. Sometimes, the writer of the letter didn't do this. When the address was incorrect, it became more or less impossible to deliver the letter.

A letter that remained unclaimed or undelivered was called 'dead letter'. And where were such letters stored? In the 'Dead Letter Office', of course! People who use email are probably familiar with the term 'dead letter directory'.

Schools which are receiving this monthly may please verify the address and let us know its correctness. Also please let us know your phone/fax and mobile number.

Intellectual Disabilities in the Classroom

■ Anne Vize

Intellectual Disability Generally an intellectual disability is defined as occurring at an IQ score of less than 70. An IQ of 100 is seen as being average in the wider population. An intellectual disability is usually seen as occurring if the problem has existed during childhood, rather than happening later in life. This means that an adult who has a car accident and suffers an injury which affects their IQ and cognitive functioning will be categorized as having an acquired brain injury rather than an intellectual disability. People with an intellectual disability have difficulties in:

- Understanding complex information
- Using logical thinking to plan ideas and solve problems
- Following directions and instructions, particularly those which involve multiple steps or complex information
- Using judgement and abstract thought

As there is a wide range in IQ scores which can lead to a student being categorized as having an intellectual disability, it also follows that there is a wide range of learning materials and teaching and learning activities which will be needed to meet the needs of individual learners within your special needs classroom or in a mainstream setting. Often students with an intellectual disability will manage better if they receive teaching interventions which are individually planned and targeted at specific goals and learning needs.

Tips for Teachers working with Students With Intellectual Disabilities

Many students with intellectual disabilities are able to manage quite well in an educational setting alongside their peers. Some students may do better in a separate setting such as a special school for all or part of their education. Try these tips for working with students with an intellectual disability:

- Use concrete items and examples to explain new concepts and provide practice in existing skill areas
- Role model desired behaviour, and clearly identify what behaviour you expect in the classroom
- Plan ahead with your class activities
- Use appropriate communication methods
- Do not overwhelm a student with multiple or complex instructions
- Use strategies such as chunking, backward shaping and role modeling as helpful teaching approaches
- Be explicit about what it is you want a student to do
- Learn about the needs and characteristics of your student, but do not automatically assume they will behave the same way today as they did yesterday
- Ask for their input about how they feel they learn best, and help them to be as in control of their learning as possible; Put skills in context so there is a reason for learning tasks
- Involve families and significant others in learning activities, planning and special days

Activities for students

www.eslkidstuff.com

Bang!: Materials: Small pieces of paper and shoe box or coffee can. Write words on pieces of paper and fold them in half (sight words, vocabulary, blends etc.). Also add a few cards that say "BANG!". Students take turns picking cards and if they read the word correctly they get to keep the word. If they draw a BANG! card they yell BANG! and then return all their cards (except the BANG! card) to the can/box. Very simple but the kids love it and there are many variations for the game!

Blind Toss: Have Students sit down in a circle. Place a mat on the floor with numbers and a flashcard (target vocabulary) on each number. Taking turns, each student gets blindfolded and tosses a beanbag so as to hit a number. S/he must call out that word the same number of times as the number indicates. For example: 4-dogs, then "Dog, Dog, Dog, Dog!" and the Student gets the equal points (4). At the end, the student with the most points wins! Good for memorizing vocabulary since they are repeating words

Exercises: This one is great for over excited students who need to burn off a bit of energy. It's also good for classroom commands and numbers. Stand the students in a line and call out instructions: "Jump 10 times", "Turn around 4 times" etc. Other good ones to use are: run (on the spot), hop, hands up & down, touch your (body part), stand up & sit down and star jump.

Rhythmic Reading: This activity is fast-paced and lively, and improves their word recognition, speed, and confidence in reading. Choose a reading passage (one page if using a basic text, maybe one paragraph if using a more advanced one). Start a rhythm (clapping or tapping on your desk). Choose one student to start. Each student must read one sentence (or word, if you want), exactly on the beat and pronounced correctly. Immediately after the first student finishes, the next one starts with the next sentence, and so on. If someone misses a beat or stumbles over words, they lose a 'life' or they are 'out'. If you use the 'out' method, it isn't so bad, because the 'out' students help to keep the beat and follow along. In my experience, all students, whether 'out' or not, have focused intently on the reading - waiting like hawks to hear someone's mistake. Of course you can vary the tempo, making it much easier or much harder. This can also be played as a team game (which team can make it to the end of the passage, on beat, with no stumbles or mispronunciations?).

Story Pass: Put up a picture or a first sentence as a writing prompt. Divide students into small groups and have them create a story from that prompt. Each student takes a turn writing one sentence to add to the story and passes it on to the next student. Keep it going around in the group until they have finished it (it may be helpful to have a length limit or time limit so the



stories don't get too out of control!). Vote on the best story, based on creativity and flow.

Puppet Conversation: Hand puppets really liven up a classroom, especially for young learners who are shy when talking to the Teacher. You'll probably find that some students prefer talking to the puppet than to you! Fun puppet characters (such as Sesame Street's Cookie Monster) that talk to students can produce unexpected results. I always use Cookie Monster at the beginning of my young classes. Here's what I do:

1. Cookie Monster is sleeping in a bag. Each student has to shout "Wake up Cookie Monster!" into the bag. Cookie Monster only wakes up when the whole class shouts together into the bag.
2. Cookie Monster says hello to each student and asks them questions (their names, how they are, how old they are, etc.). Students reply and asks Cookie Monster the same questions.
3. Students and Cookie Monster sing the 'Hello Song' together.
4. Cookie Monster says goodbye to each student individually and then goes back to sleep in the bag. The actual lesson can now start

Preposition Treasure Hunt: For prepositions of location and yes/no question practice. You need something sticky, like 'Blue Tack' (used for sticking posters to the wall) that you can roll into a ball and stick on anything. Model first: give the Blue Tack to a student and indicate that he should put it in a difficult-to-find place. Leave the room and give him a few moments to hide the Blue Tack (e.g. on the underside of a desk, on the wall behind a curtain, etc.). Then come back in and ask yes/no questions to locate it (Is it on the desk? Is it near the desk? Is it in the front half of the classroom? Is it under the chair? etc.). When you finally find it have a student take the questioner's role. In a large class try having students play in pairs.

Category Writing Game: Divide the classroom into two or three groups. Each group chooses their "captain". The teacher writes on the board a word like "FRUIT" or "COLORS" or "ANIMALS", etc. Each group has to tell their captain to write down as many words as they can which belong to that category. They have 1 or 2 mins. Each group takes 1 point for each word. Correct Spelling is very important in this exercise!

Teaching Tips for Children and Adults with Autism

- Temple Grandin

Children with autism need to have a structured day, and teachers who know how to be firm but gentle.

1. Many people with autism are visual thinkers. To learn words like “up” or “down,” the teacher should demonstrate them to the child. For example, take a toy airplane and say “up” as you make the airplane takeoff from a desk. Some children will learn better if cards with the words “up” and “down” are attached to the toy airplane. The “up” card is attached when the plane takes off. The “down” card is attached when it lands.

2. Avoid long strings of verbal instructions. People with autism have problems with remembering the sequence. If the child can read, write the instructions down on a piece of paper. Directions with more than three steps have to be written down.

3. Many children with autism are good at drawing, art and computer programming. These talent areas should be encouraged.

4. Many autistic children get fixated on one subject such as trains or maps. The best way to deal with fixations is to use them to motivate school work. If the child likes trains, then use trains to teach reading and math. Read a book about a train and do math problems with trains. For example, calculate how long it takes for a train to go between Ahmedabad and Mumbai.

5. Use concrete visual methods to teach number concepts. To learn fractions my teacher had a wooden apple that was cut up into four pieces and a wooden pear that was cut in half. From this I learned the concept of quarters and halves.

6. Many autistic children have problems with motor control in their hands. Neat handwriting is sometimes very hard. This can totally frustrate the child. To reduce frustration and help the child to enjoy writing, let him type on the computer. Typing is often much easier.

7. Some autistic children will learn reading more easily with phonics, and others will learn best by memorizing whole words. I learned with phonics. My mother taught me the phonics rules and then had me sound out my words. Children with lots of echolalia will often learn best if flash cards and picture books are used so that the whole words are associated with pictures. It is important to have the picture and the printed word on the same side of the card. When teaching nouns the child must hear you speak the word and view the picture and printed word simultaneously. An example of teaching a verb would be to hold a card that says “jump,” and you would jump up and down while saying “jump.”

8. Children with autism need to be protected from sounds that hurt their ears. The sounds that will cause the most problems are school bells, PA systems, buzzers on the

score board in the gym, and the sound of chairs scraping on the floor.

9. Some autistic people are bothered by visual distractions and fluorescent lights. They can see the flicker of the 60-cycle electricity.

10. Some hyperactive autistic children who fidget all the time will often be calmer if they are given a padded weighted vest to wear.

11. Some individuals with autism will respond better and have improved eye contact and speech if the teacher interacts with them while they are swinging on a swing or rolled up in a mat. Sensory input from swinging or pressure from the mat sometimes helps to improve speech.

12. Some children and adults can sing better than they can speak. They may respond better if words and sentences are sung to them.

13. Some nonverbal children cannot process visual and auditory input at the same time. They are mono-channel. They cannot see and hear at the same time. They should not be asked to look and listen at the same time. They should be given either a visual task or an auditory task. Their immature nervous system is not able to process simultaneous visual and auditory input.

14. In older nonverbal children touch is often their most reliable sense. It is often easier for them to feel. Letters can be taught by letting them feel plastic letters. They can learn their daily schedule by feeling objects a few minutes before a scheduled activity. For example, fifteen minutes before lunch give the person a spoon to hold. Let them hold a toy car a few minutes before going in the car.

15. Some children and adults with autism will learn more easily if the computer key-board is placed close to the screen. This enables the individual to simultaneously see the keyboard and screen. Some individuals have difficulty remembering if they have to look up after they have hit a key on the keyboard.

16. Nonverbal children and adults will find it easier to associate words with pictures if they see the printed word and a picture on a flashcard. Some individuals do not understand line drawings, so it is recommended to work with real objects and photos first. The picture and the word must be on the same side of the card.

17. Some autistic individuals do not know that speech is used for communication. Language learning can be facilitated if language exercises promote communication. If the child asks for a cup, then give him a cup. If the child asks for a plate, when he wants a cup, give him a plate. The individual needs to learn that when he says words, concrete things happen. It is easier for an individual with autism to learn that their words are wrong if the incorrect word resulted in the incorrect object.



Teaching Children to Write

What Are Some Fun Ways to Teach Children to Write?

Writing is a great way for children to express themselves creatively and practice effective communication skills. To teach writing, it is important to create an environment that encourages reflection, self-expression and organization. The best way to get kids writing is to model it for them. When they see you writing, they are more likely to give it a try. Also, it is crucial to include the last step of the writing process: publishing. Whether you bind their stories, post them on a website or submit them to a real publisher, many writers need a purposeful goal for their efforts. Below is a list of great writing activities to get kids started at home or in the classroom:

- **Journal Jar Club:** Build creativity by creating a random journal jar. Have students or family members jot down interesting words or topics on small pieces of paper. Draw topics from a jar and write for ten minutes on the same topic. It can be a personal experience, fiction story or informational piece. Anything goes. If you allow members to share journal entries, you may be able to discover each child's natural writing style.
- **One Only Chain Game:** One person will start a story and the next will read it and add the next portion. For beginners, try one word increments. Intermediate or advanced players can take turns by sentence. The story's flow will also be a good indicator of comprehension ability.
- **A Visual Scene:** Reach visual learners with this detail-centered activity. Present your writers with a unique, detailed or curious photo. Busy scene photos with people in them work best. After giving the kids a chance to examine the photo, ask them to write a paragraph that answers the following question: What is the story behind this picture? Encourage students to create a story that describes who, what, where, when, why and how the scene came to be. Background information is not necessary but could be helpful to some students.

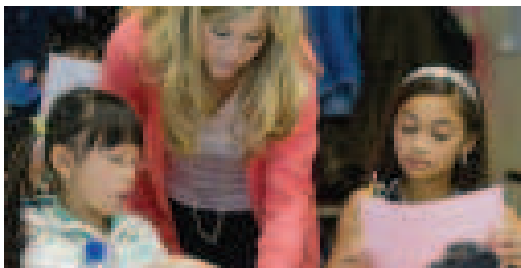
Tips for Teaching Kids How to Write

Writing is a skill that is used in all academic coursework as well as through a person's professional and personal life. Read on to learn how you can help teach your children how to write well.

Children learn about reading and writing by thinking about the sounds that words make and what those words look like when written out. When children are able to see that writing is another form of communication like talking, they want to explore it for themselves.

You can help your child learn writing by doing the following:

- Get them used to making the shapes of letters by connecting the dots or by using a pen to go over letters you have already written in pencil.
- In the beginning don't worry about messy writing. You don't want to criticize them because they need to have fun while learning.
- Don't worry if they cross out words when they practice writing. Many children will try out different spellings until the word looks right to them.
- Get your child to try writing out words on scratch paper, and then correct the words so they know how the word is spelled correctly.
- Write a story with your child so they can watch you and see the words and spellings to use. Watching you write is a great way for children to learn how to write.
- Help your child make their own labels, cards and books.



- If your child would like to write their own story, help brainstorm ideas they can write about, what will happen over the course of the story, and how it's going to end. Help them develop the characters in the story.
- Explain to them that they need different words for the past, present, and future.

Workshops for TEACHERS AND PARENTS

These programmes attempt to enhance your awareness and understanding on managing school children. Teachers and parents are equal partners for shaping young minds.

Date	Programme Name
Aug. 7	How children learn Mathematics?
Aug. 21	Innovative activities/methods for teaching English from KG to Class VIII
Aug. 22	Multiple Intelligences in the Classroom
Aug. 28	Story Telling in the Digital Age
Aug. 29	Teaching Thinking – Strategies that work with Students
Sept. 4	Emotionally Intelligent Parenting
Sept. 5	Evoking Questions from Children
Sept. 11	Developing Positive Attitude
Sept. 12	Integrating Life Skills in the Curriculum
Sept. 19	Tips & Techniques for Effective Parenting in 21 st Century
Sept. 25	Transactional Analysis for the Teachers and Parents

All these are half day programmes.

Fee Rs.350/- per programme.

For Registration, Please Contact:

Ahmedabad Management Association

Ph.: **079-26308601-06, 32512847**

Website: **www.amaindia.org**

Tips for Helping Children Prepare for Tests

Taking a test can be very stressful for any student. Helping students prepare may help to reduce some of their anxiety. Here are some studying strategies and tips to help children cope with test anxiety.

For most students, taking a test can be a stressful situation. If they receive a poor grade, students can easily become frustrated, especially when they feel like they've spent plenty of time preparing for the test. However, it is not the number of hours that a student puts in—it's the quality of the studying accomplished during those hours. If you'd like to help your student better prepare for a test, try developing studying strategies to make studying time more efficient and effective. Here are some ideas for developing a tailored study strategy.

Make Note Cards

When writing note cards, the student is actively reviewing the information. Preparing note cards at home allows students, especially those who participate in extracurricular activities, to prepare anywhere without having to carry a heavy notebook or textbook. Finally, as the student reviews their note cards, they can determine what material they have mastered and what material they need to further review.

When using note cards as a study technique, encourage your student to write a question or phrase on one side then write the corresponding answer or phrase on the other side. This format allows the student to quiz him or herself or have other students quiz him or her before the test. For visual learners, suggest using colored pens to color-coordinate related ideas or themes.

AMA Library Resources for Teachers

- **Higher Education- Issues and Challenges** - Kidwai A R
- **Scientific Humanism -Repositioning Indian Education** - Ahmed Feroz
- **Developing Teaching Competencies** - Bawa M S
- **Cool Calm Parent- How to not to lose it with your kids** - Smith Hollie
- **Happy Kids Happy You -Using NLP to bring out the best in Ourselves and the children we care for** - Beaver Sue
- **IQ Parenting Handbook** - Mishra Jaina
- **Great Ideas for Working Parents** - Chitty Antonia

Several reference materials, paper clippings, directories etc. available.

Use Practice Tests

Often, students become anxious during a test because the time they have to complete the test is limited. In order to help your student become comfortable when facing time pressure, try using practice tests. Some teachers will give students old tests or quizzes to use to study for an upcoming test. These materials are especially useful because they allow students to gain familiarity with the format of these tests. If the teacher doesn't provide an old test or quiz, your student could use a practice test in a textbook or the Internet.

The important part of this method is to time your student while he or she is working on the practice test. Timing your student allows him or her to get some idea of how long it will take to complete a test. With this practice, they can determine if they need to spend less time on difficult questions in order to leave enough time for completing the rest of the test. During this practice session, encourage your student to leave a few minutes at the end to check his or her answers.

Play Games

Some students find it monotonous to sit still at a desk and read over their notes. These students often don't use their studying time effectively because they become distracted by other things. For these students, turning studying into a game may help to keep their interest in what they're learning about.

One game to try is a jeopardy-style game. This game is easy to replicate with note cards or a white board. You could make note cards with the point value on one of the sides and the question on the other side. When a student chooses the card, he or she can flip it over to reveal the question and you can be prepared with the answer on another piece of paper. With a white board, you could write point values on the board and have both questions and answers on a sheet of paper. The student can erase the questions that he or she has already chosen.



Mr. Narendra Pandya conducted programme on "Origami for the Teachers and Parents"

Math Anxiety - How Practice and Worksheets Can Alleviate

Pre-generated or homemade practice problems and worksheets can help alleviate math anxiety. Read on to learn more.

Math anxiety is not a new phenomenon, nor is it a rare one. A number of students, even the most intelligent, just can't seem to pull it together come time for a math test, particularly when tests and quizzes are timed. Math is nothing to be afraid of. People use math everyday, counting money, cooking, even driving their cars! Think of math as a treasure hunt, where the treasure is an accurate solution.

If your child seems to do well when studying at home, but manages to learn low scores in the classroom, there's a good chance he or she is suffering from this anxiety. Rest assured, it's all in his or her head—and yes, that's a good thing! It means your child is able to learn and master math basics, he/she just isn't able to express this under pressure. Fortunately, you can help.

Preparation: Math anxiety's enemy is preparation. Preparation don't just mean completing homework. In order to overcome nervous-ness, students have to feel comfortable working through tough math problems under a number of different circumstances. The answer? Math practice problems and worksheets,

and lots of them. By encouraging your child to complete these worksheets regularly, he/she will become so well acquainted with the problems emphasized in the classroom that they no longer have to consider how to work through them. It will be second nature. By timing your child, as teachers often do during quizzes, he/she will learn to solve problems quickly and accurately when under pressure.

Practice Worksheets: There are a number of places you can find math practice problems and worksheets. Teachers, for instance, often have extras they're willing to photocopy or lend concerned parents. Math books also often contain extra problems not assigned in the classroom that can be put to good use at home. An outside tutor can be a good source for eliminating math anxiety. A tutor will have access to needed resources, like practice worksheets, that will help your child succeed. Consider making a few of your own worksheets as well. This not only allows you to become acquainted with your child's curriculum, it also allows you to truly participate in the learning process.

Elementary School Math Test Anxiety: Too much anxiety about tests can be debilitating and result in poor

performance. It can interfere with studying, cause difficulty with learning new material and even have a negative effect on a child's social interactions.

A little anxiety can go a long way. It can get your child moving when it comes getting his school work done. But too much anxiety about tests can be debilitating and can result in poor performance. It can interfere with studying, cause difficulty with learning new material and even have a negative effect on a child's social interactions. It's important to recognize when a student is suffering from test anxiety and what to do about it when he is to minimize any negative effects. Here's a list of symptoms that may indicate that your student is suffering from test anxiety:

- It's difficult for him to get started with studying
- She's easily distracted even when she does get started
- He feels he will not do well regardless of his very best efforts
- She has physical symptoms at or near test time, such as sweaty palms, upset stomach, headaches and tension



Ms. Nilima Shah conducted programme on "Use of Flash-cards"

- It's hard for him to concentrate, follow instructions or understand the questions at test time
- Her mind wanders even while taking the test
- He tends to do well on papers and projects but poorly on tests
- She often remembers material after the test is over that she forgot while taking the test

Parents need to be sensitive to the reality and struggle of test anxiety. Take time to talk with your student

about her experience with tests and preparing for them. Here are some suggestions to help your child cope with test anxiety:

- Help him develop good study habits long before test time so he can feel comfortable and confident about the material
- Encourage him with lots of positive reinforcement. Help him catch and correct his defeatism and replace it with positive thoughts
- Make sure she's rested and well fed at test time
- Help him develop a strategy for the test so he'll feel a sense of control
- Remind him to ignore the other students!
- Encourage him to shake off the test once he's finished it and turned it in. He needs a break!
- Help him learn from mistakes on the test and build on successes. Let him know you're behind him all the way.

If he feels under-prepared, take specific steps for alleviating that feeling. If he feels like there's too much to do to get ready, help him get a handle on it by organizing his time and hatching a plan.

(math-and-reading-help-for-kids.org)

Elementary School Science

Students should develop problem-solving skills that empower them to participate in an increasingly scientific and technological world.

- The elementary science program must provide opportunities for students to develop understandings and skills necessary to function productively as problem-solvers in a scientific and technological world.
- Elementary school students learn science best when— **1.** they are involved in first-hand exploration and investigation and inquiry/process skills are nurtured; **2.** instruction builds directly on the student's conceptual framework. **3.** content is organized on the basis of broad conceptual themes common to all science disciplines. **4.** mathematics and communication skills are an integral part of science instruction.
- The learning environment for elementary science must foster positive attitudes towards self and society, as well as science.
- Elementary school students value science best when— **1.** a variety of presentation modes are used to accommodate different learning styles, and students are given opportunities to interact and share ideas with their peers. **2.** the scientific contributions of individuals from all ethnic origins are recognized and valued. **3.** other subject areas are infused into science. **4.** inquiry skills and positive attitudes are modeled by the teacher and others involved in the education process.
- Teacher preparation and professional development must enable the teacher to implement science as a basic component of the elementary school curriculum.
- Teacher preparation and professional development must provide for— **1.** experiences that will enable teachers to use hands-on activities to promote skill development, selecting content and methods appropriate for their students, and for design of classroom environments that promote positive attitudes toward science and technology. **2.** continuing science inservice programs based on current educational research that encompass content, skills, techniques, and useful materials. **3.** participation in workshops, conferences, and meetings sponsored by local, state, and national agencies.
- The school administrators must be advocates for elementary science.
- Administrators must provide instructional leadership by— **1.** building consensus for an elementary science program that reflects state and national standards. **2.** implementing and monitoring the progress of the science program.
- Administrators must provide support systems by— **1.** supplying appropriate materials, equipment, and

space. **2.** recognizing exemplary elementary science teaching. **3.** encouraging special science events.

- The instructional implementation and support system for elementary school science must include the combined efforts of all aspects of the community: parents, educators, businesses, and other organizations.
- The community must be advocates for elementary school science by— **1.** participating in ongoing planning, assessment, and funding of elementary science programs. **2.** promoting informal science learning experiences.
- Assessment must be an essential component of an elementary science program.
- Assessment must be aligned with— **1.** what is of value, i.e., the problem-solving model of instruction: concept application, inquiry, and process skills. **2.** the curricular objectives and instructional mode. **3.** the purpose for which it was intended: grading, diagnosis, student and/or parent feedback, or program evaluation.
- Elementary school science instruction must reflect the application and implementation of educational research.
- Elementary school science programs are improved when— **1.** teachers keep abreast of appropriate science education research. **2.** educational research becomes the premise for change or innovation in elementary school science, and teachers participate in action research in elementary science



Shri Ramanbhai B. Patel

(August 19, 1925 – September 19, 2001)
Founder Chairman, Zydus Cadila
Founder, Zydus School for Excellence

The Ramanbhai Patel-AMA Centre for
Excellence in Education invites you to the

**Shri Ramanbhai Patel 9th Memorial Lecture on
The Emerging Institutional
Architecture for Excellence
in Higher Education**

by

Dr. Narendra Jadhav

Member, Planning Commission, Govt. of India
Member, National Advisory Council, Govt. of India

at 6.30 p.m. on Thursday, 19th August 2010
at H.T. Parekh Convention Centre, AMA Complex,
ATIRA, Ahmedabad 380 015

ALL ARE CORDIALLY INVITED