Issue No.VII September, 2009

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Pakistan's Pioneer Publication on Early Childhood Development

# Children and Their Environment

Every day, children of all ages are exposed to a harsh world, with few or no protections from environmental hazards, ill health and injuries. This issue of the magazine talks about key threats to the health and safety of young children and provides valuable information for providing a healthy and secure environment for their growth and development.

**ECD Resources for Parents & Teachers** 



#### Write to us:



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#### Write for us:

We invite you to send us your stories, anecdotes and experiences related to children's growth and development at the above address.

For more information on ECD practices, issues, programs and tools log on to www.ecdpak.com

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# Editorial

Dear Readers,

I am delighted to present another issue of Nurture. The theme of this issue is *Children and Their Environment*. Not much has been written locally on this critical subject although the significance of environment in shaping a child's personality has often been highlighted in various studies and research articles. This issue of Nurture assumes a greater importance since it is perhaps for the first time that a whole edition is dedicated to this theme.

What motivated us to choose this subject? In many discussions and debates about children and development, environment and its role springs up as a key factor that influences a child's behavior, interaction, attitude and personality as a whole. To take a deeper look and understand what this relationship entails, we decided to devote our upcoming edition to this theme. We have carefully chosen articles for this issue with the objective to cover as many facets and sub-themes as we could. The idea is to give you all a holistic view of environment and its role in the life of a child.

A key feature of this issue is an interview we conducted with two distinguished experts – renowned architect Mr. Arif Hasan whose name is synonymous with urban planning and Mr. Azhar Abbas who is also a notable architect with rich experience in institutional architecture.

The articles revolve around a variety of environment-related themes. One writer has focused on the importance of a nurturing environment discussing how critical it is to ensure healthy surroundings for children. Another contribution has focused on special children and the need to have an environment that is accessible and friendly to their special needs. It would be pertinent to mention here that special children and their needs may form the central theme of an upcoming issue of Nurture. This article sets the tone of this theme and provides an interesting reading. A key expert and regular contributor to Nurture has discussed environmental hazards in schools and the role of school communities. Her article is relevant to all stakeholders and provides useful information for parents and teachers alike.

Safety is a burning subject linked closely to the central theme of this issue. Safety forms the subject of two articles. While one focuses on safe environment within schools giving necessary tips on how to maintain safe surroundings, the other focuses on safe homes and provides parents useful tips on keeping their homes safe for children. Safety is discussed in another article albeit in an entirely different context. This article discusses safety of an unborn child – environmental hazards that may affect women during pregnancy posing danger to the child she is carrying in her womb. Women undergoing pregnancy would find this article informative and interesting. We have also profiled an Early Childhood Education centre operating in Karachi where principles of safety and healthy environment are practiced.

We understand that within the limited space that we have it is not possible to cover all subjects in ample detail. Ours is an effort geared towards invoking debate and discussion as well as creating an awareness of the importance that safe and healthy environment has in the upbringing of children and development of their personality. Have we succeeded in our attempt? You are going to judge this. As the editor of this publication, I feel if our team has managed to ignite some interest and sensitivity within our readers towards this subject, we have been successful!

I wish you all happy reading.



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Road Safety Education www.sef.org.pk/rsep/rsep.asp

Chemicals in your Child's Environment – Hidden Dangers http://pediatrics.about.com/od/hiddendangers/a/0108\_env\_chmcls.htm

Safe, Healthy Environments http://www.phac-aspc.gc.ca/dca-dea/allchildren\_touslesenfants/she\_main-eng.php

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You can read the articles in this issue plus those that were featured previously in Nurture on **www.ecdpak.com** 



N urture is Pakistan's pioneer magazine on Early Childhood Development. The magazine is published biannually and captures different themes on Early Childhood Development.

If you have a message, suggestion or any comment contact us directly by sending an e-mail at: nurture@ecdpak.com

# Letters to the

# EDITOR

# ជជជជជជជ

Honestly speaking, Nurture magazine is very helpful in educating the rural parents about the health and behavioral issues of children. It also helps in providing information to teachers about the children. We have implemented the lessons learnt from the magazine for the benefit of rural parents and teachers and are most delighted with the results. I find the Resources for Teachers section most useful which details how the issues at hand can be dealt with in an ECD classroom.

Mr. Paul Amido - Teacher and Proposal Writer

# ជជជជជជជ

I appreciate the efforts of SEF in bringing out such a publication. I have frequently applied guidelines provided with regards to health care. It is also commendable that the magazine has a fair focus on rural children as well. I would like to suggest that the a future magazine issue deals with guidelines on teacher-parent partnership since most of the children in government schools have parents who are either illiterate or do not have the time to help their kids with home work. Identifying methodologies for dealing with majority of such parents will help us in overcoming barriers in educating the young.

Ms. Tabinda Tahir - Government School Teacher (Islamabad)



Nurture is a commendable effort put out by SEF. I have enjoyed reading the previous issues because the information is very useful and presented in an interesting manner. Some of the tips in the issue on 'Self-esteem in Children' were very helpful because I have two children and the intersibling strife is a common occurrence in the house. I would like to highlight one aspect which I feel the magazine should concentrate on and that is the role of fathers in upbringing of their children. The past magazines have concentrated a great deal on the role of the mother and I feel that it is equally important to emphasize the part fathers should play in ensuring a balanced nurturing environment for children.

Mrs. Nusrat Tariq - Housewife (Karachi)



I am an avid reader of your magazine and find it very helpful, especially the activities that it contains. I have implemented the guidelines to some extent from the activities and quotations regarding daily life. I would like to read more about issues affecting different stages of childhood for example when starting school, moving to a new class, etc. In the transitory period many problems are faced by the teachers and parents in getting children adjusted to a new environment and friends and your well researched articles will surely be helpful for us.

Ms. Shagufta Habib - School Teacher (Karachi)



I like Nurture for the fact that it deals with early childhood development issues which are often ignored. Never have I come across a magazine that is so informative and yet so appealing to the readers. One of the best issues of Nurture that have come out includes the most recent one. I have always felt that self-esteem in children have been a neglected area. I would particularly highlight the article "The Arguments against Saying Good Job" written by Samreen Ahsan. Many parents unknowingly damage a child's self esteem by setting unrealistic goals for the child or by scolding harshly and before they know it, the damage gets done. I'd like to read more on such important issues and on how the children of today can be encouraged to become confident and independent individuals when they grow up.

Mrs. Amber Riaz - Mother (Lahore)



Child abuse is a glaring, yet an ignored matter in our society. Upon reading the article "Understanding Child Abuse" in your most recent issue of Nurture, I came to know of the harsh fact that its occurrence in our society is alarmingly increasing and it is a problem that has to be bought to light so that awareness is created among the masses. I appreciate your efforts of bringing attention to a tabooed topic and for giving useful suggestions and helpline numbers.

Mr. Kamal Khan - Social Worker (Peshawar)

What could be more detrimental to a child's growth than denying him/her the opportunity to experience the wonder and joy of the natural world?

# Characteristics of a Healthy Environment

By Saima Khalid



A healthy environment is not just one with excellent medical care: in fact it is one that encourages physical activity and social contact and provides healthy air and landscapes.



A broad vision of the health and well-being of children depends on the safety and quality of the environment available to them. The term "environment" has been modified from the traditional definition of a mere physical infrastructure to include all

the components that could contribute in the holistic development of the child. These include Physical/Natural Environments, Built Environments and Social Environments – at home, school and in the community. Thus a healthy environment is not just one with excellent medical care: in fact it is one that encourages physical activity and social contact and provides healthy air and landscapes. This is because the environment has a direct bearing on the various developmental domains of the child i.e. his or her physical, mental and social health.

The development of a healthy environment needs to begin since the time of conception. It should include the provision of nutrition as well as a good stimulating and interactive environment (Mustard and Young, 2006). This is because a child's rapid cognitive development begins from the earliest ages i.e. from conception and continues into young adulthood. The child's first interaction with their immediate family members exposes him/ her to different learning processes in a natural way. Unfavourable circumstances from the time of conception, during pregnancy and in the early years can cause high risk for coronary heart disease, hypertension, type II diabetes, mental health problems, and other conditions in adult life, such as disorders of the immune system and behavioural disorders such as 'Attention Deficit Hyperactivity Disorder' (ADHD). Parents and caregivers

have to be particularly mindful of their own relationships with each other and other family members. Negative or severed relationships between elders are emotionally draining for a child and can have serious impact on health. Detrimental community/ societal or personal practices such as discrimination and physical abuse can have serious damaging effects on the health of children.

Young (2002) has stated that the provision of basic health care, nutrition and stimulation in a caring environment foster the child's development and will result in developing good Human Resource for the future. As mentioned by Ramey and Remey (1998, p.5), "When the basic needs are met children can gain improved critical thinking skills, self confidence, problem solving ability and capacity to cooperate with others." It has been further elucidated in Neurosciences that "the effects of early experience on the wiring and sculpting of the brain's billions of neurons last a lifetime" (McCain and Mustard 1999). Since brain development is a continuous process, therefore the experiences provided to the brain at an early age are highly influential in this process of wiring and sculpting the brain. Negative, as well as positive, experiences in early life affect the development of neural circuits that mediate cognitive, linguistic, emotional, and social capacities (Ellis, Jackson, and Boyce 2006).

Children have the right to live and develop to their full potential (CRC, 1992). It is important to realize that child development does not take place in isolation and for the children to develop to their full potential, it is crucial that all their cognitive, physical, emotional, psychological, social, spiritual and health needs should be taken care of together. This would avoid or moderate developmental problems and will bring positive long-term results to individuals and society.



healthy a environment needs veru strong social and emotional relationship not only with family the but also outside the family such as in school, community centres and neighbourhood.

Adapted from 'Small is Healthy'

# The development of a healthy environment needs to begin from the time of conception.

<b>Developmental Domains &amp; Healthy Environment Provisions</b>			
Physical development	<ul> <li>Availability of Basic Health Care         <ul> <li>Prenatal and postnatal care for mother</li> <li>Nutrition for both mother and child</li> <li>Immunization</li> <li>Safe shelter</li> <li>Clean water, good sanitation and hygiene</li> </ul> </li> <li>Opportunities to develop gross and fine motor skills</li> <li>Protection from abuse</li> </ul>		
Cognitive development	<ul> <li>Availability of Educational Institutes/Day Care Centre         <ul> <li>Trained staff</li> <li>Safe and secure surroundings</li> <li>Child friendly environment</li> </ul> </li> <li>Exposure to activities and stories for exploration</li> <li>Encouragement for creativity and critical thinking</li> </ul>		
Social development	<ul> <li>Opportunities to:         <ul> <li>Interact with different people</li> <li>Understand and develop relationships</li> <li>Contribute to the society &amp; develop an understanding about one's own identity and the society</li> </ul> </li> <li>Protection from abuse</li> </ul>		
Moral and emotional development	<ul> <li>Opportunities to create an awareness about:         <ul> <li>Rights and property of others</li> <li>Having stable relationships, love and affection</li> <li>Developing positive self image</li> <li>Developing a sense of security</li> <li>Belief system of family and society</li> <li>What is wise and what is not wise</li> </ul> </li> </ul>		

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# Safe & Healthy Homes

By Sanober Nadeem, Anjum Sharif & Seema Lasi

Children have the right to be protected against the ill-health effects of environmental pollution. They have the right to be provided with clean drinking water, and a clean and safe environment in which to grow and play (Article 24. CRC)



What place can be safer for a child more than his or her own home? However research has shown that children are often injured and some times die as a result of hazards in their home environment. A recent survey undertaken in 2007 by Aga Khan University – Human Development Programme, found that more than 60 percent child injuries in Pakistan happened inside homes. The various events that caused these were falls, cuts, burns and scalds, electric shocks, drowning, poisoning and choking. The accidents had happened around the kitchen, stairs, balcony, bedroom and courtyard, leading to the conclusion that any place inside the house can be a potential risk unless parents/caregivers keep the child supervised all the time and ensure that the child is in a risk free environment. Besides being risky, unhealthy environments are detrimental for children's development and growth.

In Pakistan unintentional injury continues to be the greatest cause of mortality, morbidity and disability for children. Razzak J.A (2004) in a hospital based research study in Karachi found that the common cause of injuries for younger children were falls while other causes were burns, drowning, falling objects, explosions, poisoning, contact with electric current and bite/ sting. It is estimated that 15% of the children died as a result of serious injuries, many of which could have been prevented if parents and caregivers had awareness on how to make their environment safer for children. Injuries usually happen when:

- Parents/ caregivers are not paying attention. Small children, especially under 3 years, need to be watched all the time.
- Children are learning to do something new. Children are always learning and growing (for example: rolling over, climbing, and crawling). If parents are not ready, these new exploration skills can lead to injuries.
- They are somewhere new. Injuries are more likely to happen when children are in a place they are not familiar with.
- They are hungry or tired. Before they eat and before bedtime, children may be less likely to pay attention to what they're doing.

### Children Need a Healthy and Hygienic Environment

The good health and well-being of young children depends on a safe and healthy environment. Inadequate sanitation and drainage, lack of clean water and uncollected waste and pollution, all contribute to unacceptable levels of child mortality and morbidity. The main cause of serious illnesses in young children is poor and unhygienic environmental conditions. Children are more seriously affected from these living conditions because they have a more vulnerable immune system as compared to an adult.

Young children tend to be more heavily exposed to viruses; babies, especially those learning to crawl and walk, spend time close to the ground and they have a tendency to put everything into their mouths. Children in unsanitary environments often have repeated diarrhea, worm infestations, scabies, rashes, open sores and eye infections. Malnutrition in children is not just a matter of getting too little to eat. Unsanitary living conditions pose a constant challenge to children's immune systems. Clean drinking water or boiled water, adequate provision for sanitation, as well as drainage and waste removal, are essential to the prevention of these ailments.

Another challenge for children's health is environmental toxins and air pollution. The single most serious source of pollution is open fires or poorly vented stoves in the homes. Exposure to biological pathogens can result in respiratory illness, skin and eye problems, birth defects, various cancers and damage to the immune system, the central nervous system, the internal organs and the cardiovascular system. This is a common practice that while caregiver, usually a mother, is cooking she keeps the child inside and closed; this is detrimental for toddlers' health and can create serious respiratory problems. Children residing in smoked filled homes or kitchens develop serious respiratory infections.

#### Children Need a Safe and Secure Environment

Children need a safe and secure home environment that does not put them at risk of unintentional injuries such as burns, fall, poisoning, cuts and electric shock. In early childhood children are at their most vulnerable age for such injuries due to several reasons; this is the age which makes them curious about everything, they love to explore objects by using all their senses especially the sense of



#### What is dangerous depends on a child's age and abilities. Know your child and look at your home from your child's point of view.

taste and they just cannot resist from any type of adventure.

Young children especially from birth to three years olds are curious by nature and have a drive to explore and investigate their world. However they lack the capacity to understand or respond appropriately to danger. Children's drive to play and explore new things is fundamental and has significant implications for their development. We cannot restrict the child's instinct of exploration because unnecessary restrictions will hamper his/ her development. By making slight modifications in the physical environment we can create an environment that is risk-free and conducive to the developmental needs of the child. It is common, overburdened caregivers are more likely to cut corners in the many procedures necessary to ensure their children's health but they need to think alternatives of provisions.

#### **Child Proofing**

A majority of the injuries can be prevented by adopting simple measures at household level. The standard terminology used is 'Child Proofing' which makes a household free from hazards. Here are some things parents and caregivers can do to help prevent injuries:

- Look at your home from a child's point of view. Get down on the floor and look up. Are there drawers that small children could open? Things within reach that they could choke on? Things they could pull down on top of themselves?
- Think ahead to what your child will be learning next. For instance, put child-proof locks on cupboards and drawers before children are old enough to open them. Put gates at the top and bottom of the stairs before children are able to crawl.



Are you prepared for an emergency?
Emergencies can happen so be prepared! The following is a list of tips to help keep your family safe in the case of an emergency.
<ul> <li>Store emergency supplies in a safe place.</li> <li>Teach children to find an adult when there is an emergency.</li> <li>Only use lights, heaters or stoves that are approved for indoor use and in good working order, in a well-ventilated area.</li> <li>Store fuels in approved, labelled containers away from heat and children.</li> <li>Remember, children need to be watched at all times.</li> <li>Prepare a Home Emergency Kit that includes: <ul> <li>First-aid supplies (polyfax, bandages, thermometer, cotton buds, bandages, adhesive tape, small scissors and safety pins)</li> <li>Towel</li> <li>Torch with batteries</li> <li>Candles, matches and/or lighter</li> <li>Whistle</li> <li>Blankets</li> <li>Pieces of clothes</li> </ul> </li> </ul>
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Ms. Seema Lasi is currently working with Human Development Programme of Aga Khan University as a Senior Instructor. Her area of interest is Early Childhood Development with special focus on Injuries, Disabilities and Growth Monitoring and Promotion.

## Checklist for Home Safety

			Durante
Hazards / Health Risk Burns	Causes Burns are caused by contact with	Effect Burns often cause serious injury	Prevention Keep young children away from fires, matches
	fire, a hot surface, a hot liquid or steam. Burns from fires, stoves, ovens, and cooking pots. Hot foods, boiling water, steam, hot fats and paraffin.	and permanent scarring, and some are fatal.	and cigarettes. Keep stoves on a flat, raised surface out of the reach of children. If an open cooking fire is used, it should be made on a raised mound of clay, not directly on the ground.
			Turn handles of all cooking pots away from the reach of children.
			Keep petrol, paraffin, lamps, matches, candles, lighters, hot irons and electric cords out of the reach of young children.
			Keeps away boiling water, hot food and irons.
			Put down a cup of hot liquid before picking up your child.
Falls	Unguarded stairs, balconies, roofs, windows and play areas Falls from cots, baby walkers windows, tables and stairs	Falls are a common cause of bruises, broken bones, heavy bleeding and serious head injuries.	Never leave children un attended and don't leave alone at height either changing table or bed.
			Do not leave child unattended when in a baby walker.
			Discourage children from climbing onto unsafe places.
			Use railings to guard stairs, windows or balconies.
Electric Shock	Lamps, irons and electrical appliances	Electrocution can cause tissue damage and can even be fatal.	Power sockets should be covered to prevent access.
	Electrical shock from touching broken electrical appliances Naked wires, or poking sticks or knives into electric outlets.		Electric wires should be kept out of children's reach. Bare electric wires are particularly dangerous.
Cuts	Knives, scissors, sharp or pointed objects, broken glass and axes can cause serious injuries. Sharp metal objects, machinery and rusty cans can cause badly infected wounds.	Broken glass can cause serious cuts, loss of blood and infected wounds.	Always check toys for broken or sharp edges that can be harmful for children. Knives, razors and scissors should be kept out of the reach of young children. Older children should be trained to handle them safely. Glass bottles should be kept out of the reach of young children, and the house and play area should be kept free of broken glass and other sharp metal objects Household material including broken bottles and old cans should be disposed of safely.
Drowning	Well, tubs and buckets of water		Never leave your child alone in and near water.
	Pool, bathtub	Children can drown in less than two minutes and in a very small amount of water as little as 4 cm (1 <sup>1</sup> / <sub>2</sub> inches).	Wells, tubs and buckets of water should be covered.
			Children should be taught to swim when they are young as they will then be less likely to drown.
			Children should be taught never to swim in fast- flowing streams and never to swim alone.
,			

			Sale & Healthy homes
Hazards / Health Risk	Causes	Effect	Prevention
Poisoning	Poisons, medicines, bleach, acid, and liquid fuels such as paraffin (kerosene).	Poisoning is a serious danger to small children. Bleach, insect and rat poison, paraffin (kerosene) and bauschold datargents can kill or	Do not put poisons in soft drink or juice bottles, jars or cups, children may drink them by mistake.
	Insecticide, bleach and detergents.	household detergents can kill or permanently injure a child. Many poisons do not need to be	All medicines, chemicals and poisons should be stored in their original containers, tightly sealed and labeled.
	Overuse or misuse of medicinal drugs.	swallowed to be dangerous. They can kill, cause brain damage, blind or permanently injure if they:	Detergents, bleaches, chemicals and medicines should never be left where children can reach them.
	Poison can enter the body one of four ways: Inhalation Ingestion Injection	<ul> <li>are inhaled</li> <li>get onto the child's skin or into the eyes</li> <li>get onto the child's clothes.</li> </ul>	Medicine should only be given to a child if it was prescribed for that child and never be given to a child if it was prescribed for an adult or some other child.
	Absorption	Excessive use of antibiotics can cause deafness in small children. Aspirin is a common cause of accidental poisoning.	Medication should be kept out of the reach and sight of children.
Choking and Suffocation	Young children like to put things in their mouths especially small objects.	Coughing, gagging and high- pitched, noisy breathing or the inability to make any sound at all indicate breathing difficulty and	Do not give groundnuts (peanuts), hard sweets, or food with small bones or seeds to very young children
	Choking on small objects such as coins, buttons or nuts, betel nuts.	possible choking.	Always supervise young children during meals. Cut or tear children's food into small pieces.
		Choking is a life threatening emergency. Caregivers should suspect an infant is choking when he or she suddenly has trouble	Play and sleeping areas should be kept free of small objects such as buttons, beads, coins, seeds and nuts.
		breathing, even if no one has seen the child put something into the mouth.	Keep cribs and beds away from windows and blind cords and cut up, tie up or use a loop fastener to safely secure any hanging blind cord loops.
			Keep things like stuffed toys and pillows out of a baby's crib.
Road Accident	Children under five years old are particularly at risk on the roads.	Children are at high risk of serious injury if they travel in the front seat of a car or unsupervised on	Children should not play near the road, particularly if they are playing with balls.
	Young children do not think before they run onto the road. Bicycle accidents are a frequent	the bed of a truck.	Children should be taught to walk on the side of the road, facing traffic. They should always have someone with them.
	cause of injury and death among older children.		<ul> <li>When crossing the road, young children should be taught to:</li> <li>stop at the side of the road</li> <li>look both ways</li> <li>listen for cars or other vehicles before</li> </ul>
			<ul><li>crossing</li><li>hold the hand of another person</li><li>Walk, not run.</li></ul>
			Older children should be encouraged to look after younger children and to set a good example.
			Families can prevent bicycle accidents if they make sure that children with bicycles are trained in road safety. Children should wear helmets or protective headgear when biking.
Contaminated Water	Unhygienic and contaminated water.	Contaminated water lead to diarrhea, eye infections (including trachoma), skin diseases, scabies,	Hygienic water storage, including covered containers and tanks, regularly cleaned.
		lice, fleas Typhoid, hepatitis, dysenteries, cholera etc.	Drinking water should always be boiled before drinking.
Inadequate disposal of human wastes	Pathogens from excreta that can contaminate food, water or hands.	Contaminations can lead to faecal-oral diseases or intestinal worms (eg hookworm, roundworm, tapeworm, schistosomiasis)	Maintain WC or latrine which eliminates possibility of contact with excreta, and which is suitable for the use of small children. Proper hand washing with soap after using toilet.
Indoor air pollution	Open fires , smokes of fuel.	Open fires or poorly designed stoves and smoky fuels. These cause or exacerbate respiratory illnesses, especially in women and children.	Make proper ventilation for fire and smoke.
	1		

# Accessible Built Control of the second state of the second state

Many children around the world suffer from poverty, homelessness, abuse, neglect, preventable diseases, and unequal access to education and justice systems that do not recognize their special needs. These are problems that occur in both industrialized and developing countries. Children with Disabilities become more vulnerable in this scenario because inaccessible built environment poses one of the main causes of discrimination against people and children with disabilities.

#### **Accessibility:**

Several definitions of accessibility refer directly to accessbased individual rights laws and regulations. Products or services designed to meet these regulations are often termed Access or Accessible. Accessibility is not to be confused with usability which is used to describe the extent to which a product (e.g., device, service, environment) can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. Accessibility is strongly related to universal design when the approach involves "direct access." This is about making things accessible to all people (whether they have a disability or not). However, products marketed as having benefited from a Universal Design process are often actually the same devices customized specifically for use by people with disabilities. An alternative is to provide "indirect access" by having the entity support the use of a person's assistive technology to achieve access (e.g., screen reader).

Accessibility of the built and external environment is a key factor in people with disabilities achieving autonomy, inclusion and participation. However, many people with disabilities face barriers in respect of their equal participation in society.

#### **Universal Accessibility:**

Universal accessibility is a key concept that states that all environments should be accessible by everyone, regardless of ability (University of Ulster, 2003). Everybody is different and there is no 'average' person. As a result universal accessibility will benefit all, because people with disabilities, people of small or tall stature, parents with buggies, delivery persons, children and so forth will have greater access to the built and external environments. To ensure that the accessibility of the built environment is of the highest standard, there are a number of essential criteria that need to be met. Some of these are highlighted below:

- Management
- Transport
- External Environment
- Vertical and Horizontal Circulation
- Facilities
- Interior Design
- Evacuation
- Communication Facilities

- Access and safety, responsibilities and commitment
- Getting to the building, location, seating areas
- Car / bike parking, routes, ramps, steps and doors
  - Stairs, lifts, corridors and internal doors
    - Reception, toilets, seating areas, changing rooms, restaurants and refreshments
    - Carpeting, lighting, color and contrast, fixtures
    - Emergency equipment, alarms, signage, evacuation equipment, evacuation plans
    - Signage, telephones, tactile features, acoustics

#### **Universal design:**

Universal Design is a relatively new paradigm that emerged from "barrier-free" or "accessible design" and "assistive technology." Universal design strives to be a broad-spectrum solution that produces buildings, products and environments that are usable and effective for everyone, not just people with disabilities. Examples include cabinets with pull-out shelves, kitchen counters at several heights t o accommodate different tasks and postures, low-floor buses and buildings that are equipped with ramps rather than lifts.

Universally designed structures accommodate all users, are easy to understand, and able to retain their integrity in case of emergencies or disasters by working at a reduced level rather than failing completely. Some examples of such structures include:

- Ramps
- Smooth ground surfaces of entranceways, without stairs
- Wide interior doors and hallways
- Lever handles for opening doors rather than twisting knobs
- Light switches with large flat panels rather than small toggle switches
- Bright and appropriate lighting
- Use of meaningful icons as well as text labels
- Choice of language on speech output
- Closed captioning on television networks

Making your s u r r o u n d i n g s more accessible:

To make your home and school more accessible, you can:

- Avoid steps, especially at entrances. Have as many open spaces as possible - hallways,
- Have as many open spaces as possible hallways, especially narrow corridors, can be hard to navigate.
- Install lighting strategically good lighting enhances security and makes homes and paths more visible.
- Install a separate shower with level entry in a bathroom including commode with grips and lower edges of bathing tub or a cemented platform with grips.
- Avoid sharp edges on the design of bench or chair tops and cupboards.
- Use contrasting colors to assist children with impaired vision.
- Line up light switches with door handles to help people find the switch.
- Ensure door and cupboard handles allow for easy access.
- Height of the cupboards, ranks, sinks, black or white boards, switches reachable to all including wheelchair users.



Universally designed structures accommodate all users, are easy to understand, and able to retain their integrity in case of emergencies or disasters by working at a reduced level rather than failing completely.

Most of homes, schools and other places are already built so here is a tip of portable ramps, commodes, showers and platforms. In Pakistan we can use wooden ramps in rural areas and aluminum ramps in cities. Same practice can be applied for showers, wooden platforms and chair commodes.



#### **Conclusion:**

Accessible Built Environment with safety features can reduce the risk of abuse and neglect for all children including children with disabilities. The case for making our society more accessible is a compelling one on many fronts. It is not only an issue of justice but it makes good education, business and social sense. In addition to contributing to the development of a more inclusive and equal society, an accessible built environment offers the following advantages:

- Provides opportunity for students with disabilities to participate in mainstream education;
- Increases the pool of potential new workers that an employer can tap into. It also helps organizations retain existing employees who may acquire a disability;
- Enables more people and children with disabilities to enter the premises and/or use the services;
- Improves overall safety of buildings, which has a direct impact on the number of accidents taking place and therefore the cost of insurance premiums.

#### **About the Writer:**

Ghulam Nabi Nizamani was born, raised and educated in Sanghar, a small town in Sindh. As a child he suffered from polio and has used a wheelchair since then. With a Masters in Sociology and Economics, he is presently the CEO of the Pakistan Disabled Peoples' Organization, a network of Disabled Peoples' Organizations of Pakistan. He is associated with a number of organizations and forums in various capacities from coordinator to facilitator and expert. These include the Community Based Rehabilitation Asia Pacific Network, Disabled Peoples' Forum Asia, Disabled Peoples' International Asia and Pacific, Disabled Peoples' International (DPI) South Asia, and the Disability with United Nations Economic and Social Commission Asia and the Pacific.







# Environmental Hazards in School Structures & Role of School Communities



Environmental Hazards in School Structures & Role of School Communities

#### Introduction

Children are specially vulnerable and susceptible to environmental threats or hazards at early developmental stage of life. Reports have shown that children in developing countries are thirteen times more likely to die before they reach their fifth birthday than their counterparts in developed countries. While there are many biological and environmental factors associated with this high toll, lack of clean water and sanitation, as well as environmental-related diseases such as malaria, dengue fever and toxin swallowing are the most



common. The danger of plastic bags suffocation, lead and asbestos poisoning, eating molded food, flies infestation, skin diseases, and poor quality of building material and furniture used in schools, burning rubbish near school places which emit carbon mono-oxide fumes are a few that need mentioning as hazardous to children's life.

#### Role of Environment in Early Years Development



In many developing countries particularly in the rural environment, collecting water,

gathering firewood, tending crops, looking after young siblings, cooking meals and taking care of the household chores take up large amounts of time and energy. Children are affected by media such as water, air, food, objects or soil in their daily activities or circumstances, including eating, drinking, working and playing.

Children require a great deal of care, love and stimulation from parents, families, care givers and school as well as the best and safest of environments to survive and develop to their full potential simply because they are young. We as adults have the moral responsibility to protect them from any danger whether at home or at the school. It is the environment that we create which will influence children at all stages of their lives, before birth in their homes, and later in schools and communities. Therefore, it becomes pertinent to understand that as children develop and grow, they interact with and explore a world

that can offer either an array of lifeenhancing discoveries and opportunities or a series of perils that can cause diseases and suffering. Medical and educational research has shown that the development of intelligence, personality and social behavior occurs most rapidly in humans during their first three to four years. It is estimated that half of all intellectual development potential is established by age four. According to recent research, brain development is much more vulnerable to environmental influence than was previously suspected, and the influence of early environmental quality on brain development is long lasting. Psychosocial and cognitive development begins at birth and parents are the children's earliest teachers. Therefore, strengthening the ability of the mother and all family members to care for and stimulate their children and encourage them to learn can set the stage for adult success. However, the ability to care for children is greatly



influenced by the physical environment such as the school and its teachers.



Children are curious and learn by exploring their world. They are, therefore, in close contact

with their environment. Infants tend to explore their world by putting their hands and objects in their mouths and are at risk from bacteria or virus and pollutants on these surfaces. Moreover, young children are small; they play; slip, slide and crawl close to the ground, where they can easily be exposed to dust and chemical particles that accumulate on floors and soil. Children are especially vulnerable to environmental hazards. They eat more food, drink more liquids, and breathe more air than adults. Children are in a critical period of development when toxic exposures can have profound negative effects, and their exploratory behavior often places them in direct contact with materials that adults would avoid.

More than 1.4 billion children from age 5 to 14 years – approximately 87 per cent of all children – live in developing countries, where many of the biggest environmental challenges exist. Several potential environmental risks are particularly associated with children in this age period. Many school going children walk to school hence, injuries (usually crossing roads, falling and drowning in man-made pools and canals) are now the number one killer of children aged five to 14 years in developing countries. Other environmental factors such as exposed cooking set-ups, dangerous tools and equipment, protruding rusted iron nails and bars that lead to Tetanus, a child killer, besides, open sewers, heavy traffic, dangerous construction or electrical sites and hazardous chemicals pose threats. Many children multi-task i.e. attend school as well as on some days are required to do other tasks depending on the contextual need of the family. Extreme poverty often forces children to work to help their families to survive. Hence, a child's health and growth may also be affected when he or she engages in wage-earning work or domestic chores unsuitable for his or her age and ability, such as working long hours in a field, carrying heavy loads, and walking long distances for fuel wood or water. To exacerbate the situation further, with the limited budget allocated for education, schools are not purpose built as per universal standards, and are congested, dusty, inadequately ventilated and lighted and in some instances located near a garbage dump or open sewerage.

#### Children in Need of Protection

Every day, children of all ages are exposed to a harsh world, with few or no protections from environmental hazards, ill health and injuries. It has been estimated that during 1997-98, some 250 million children five to 14 years old were toiling in economic activities in developing countries and almost 70 per cent of them work in dangerous environments with threats to their health, safety and cultural values. For close to half of them, this work was carried out on a full-time basis, while for the remaining half it was combined with schooling or other non-economic activities. This figure has alarmingly grown over the years.

#### **Environmental Hazards Affecting Children in Schools**



Environmental hazards in our schools are increasingly becoming a concern. In developing

countries like Pakistan usually schools are surrounded by places where there is not a proper system of disposing waste which is breeding place for germs. Some of the schools have been constructed in the industrial zones, factories, mills and contaminated lands. Others are located in severely cold places where biome fuels, including wood, animal dengue or crop residues that give out carbon, carbon monoxide and where other indoor pollutants are burnt causing Tuberculosis. Human Hazards Environment hazards are also human executed. Harsh



punishments rendered on young children and older students; whipping, fatal injuries causing punctures, broken or complete loss of body parts, burns, eye and hearing impairment, respiratory and gastrointestinal illnesses, fever and headaches from excessive heat in the schools, can all be fatal for children. Such hazards may lead to physical and mental disabilities, and without the access to basic health, and other social services, a denial of their rights increases their vulnerability to environmental risks and hazards.

#### **Deterrent Plastic Bags**

Plastic bags have become an indispensable part of our life because of their lightweight, flexibility and low cost. They are used for packing the food, shopping, delivering food and garbage packing etc. About 10 million plastic bags are thrown away every day as waste. Because of the slow process of degeneration these bags turn into pieces of plastic chunks or dust which is not biogradable as their molecular structure is too large for microorganisms to swallow. This

characteristic of plastic causes s e r i o u s environmental and health problems. Since the plastic bags



are picked up from the garbage and recycled, they tend to retain a lot of bacteria which are difficult to destroy, which in turn contaminates the food it will hold which children carry to school in or buy, causing ill health. Besides, burning of plastic in temperatures less than 800 degrees Celsius in an open space creates noxious fumes such as hydrogen cyanide and other poisonous gases which cause air pollution resulting in skin, and respiratory problems and also certain kinds of cancer.



#### Unhygienic food

In suburban and rural areas and quite often in big cities, food infested with

flies, stale or cooked in low quality oils is sold outside schools. Such foods can be potentially life threatening if eaten on a regular basis. Some school canteens in urban areas offer junk food for children instead of encouraging children to eat well nourished foods prepared at home. It is important to teach children the importance of washing hands before eating food or after using the toilet and also the adverse effects of consuming unhealthy and unhygienic foods.



Unsafe drinking water Unsafe drinking water remains a m a j o r environmental concern at

school. Children drinking water from earthen matkas, often unwashed, results in harmful poisonous bacteria growing inside. Moreover, it becomes a breeding ground for mosquitoes, who lay their larvae in cool and still water. One is familiar with the Dengue fever that became rampant in the past and is yet a cause of concern. Tap water carries pollutants and can cause high risk diseases such as Cholera and Typhoid. In certain areas the water table is so low that sewerage containing human and animal waste seeps into the water contaminating it thereby causing epidemics and other stomach related diseases.



throat irritation. Investigations have

shown that the problem is not

traceable to a single source or single

contaminant but rather to multiple

problems in the design, construction,

operation or maintenance of the

school building. Unfortunately

Pakistan does not have any safety

checking measure for educational

setting and therefore this danger,

that looms large in children's lives,

**Air Pollution** 

Children in

school are

especially

susceptible to

air pollution.

s a m e

The

concentration of pollution will result

in a higher body burden for children

than adults because children breathe

a greater volume of air relative to

their body weight. For this and other

reasons air quality in schools is of

particular concern. Indoor air is being

polluted in our schools due to the

usage of chemicals, sources of

contaminants, failure of quality

ventilation system, air brought in to

the building which is contaminated

from outdoor sources, and usage of

microbial contaminants which

proliferate in humid and wet

environments.

goes unattended.

H a r m f u l Asbestos Use Many local and national schools in Pakistan have asbestos roofs and pipes. The United States

unclear, certain toxic substances in Environmental Protection Agency the air and radiation in the estimates that there are asbestos environment are believed to be containing materials in most nations; factors in the cell changes that lead approximately 107,000 primary and to cancer. Among the environmental secondary schools. It confirms that factors that may play a role are lead asbestos is commonly used in school smoke from vehicles, dust, radon, buildings as insulations and in asbestos, ultraviolet light radiation, building material, ceiling tiles, floor, hazardous waste, chemical poisoning and cement pipe. Asbestos fibers can and some pesticides. Therefore, it is cause serious health problems crucial that parental and school care especially in occupational settings. If and supervision be given for the safe inhaled these materials disturb the and healthy development of young normal functioning of lungs, can children. cause lung cancer, cancer of chest and abdominal lining. Some of the Soil Pollutants Many schools especially in the rural schools in the west have been declared as "building sickness" where areas have kutcha (unpaved or not occupants usually complain of headache, nausea and eye, nose and

cemented) grounds. Children are often found playing bare-foot in soils, which have intestinal worms, or eating raw vegetables from farmlands sprayed with pesticides. These are common health hazards faced by school age children in developing countries. Such children commonly carry up to 1,000 hookworms, roundworms and whipworms at a time, which can cause anemia and other debilitating conditions. These illnesses can result in impaired learning, poor school performance and absenteeism from school.

In developed countries asthma and

childhood cancers are now major

concerns. Acute leukemia is the most

common type of cancer found in

children, and its incidence appears

to be rising in some developed

countries. While the causes remain



#### Role of Teachers & School Heads

Children are the most precious natural resource we have. Taking action on environmental threats to children's health needs should become more of a priority for policy makers, school community and for all of us. These threats are very real and we must recognize them. The number of children diagnosed with cognitive disabilities is increasing and science has demonstrated that exposure to environmental toxins at critical stages of brain development may play a vital role in their mortality.

Besides, the school setting is a complex interaction of the physical structure (the building and grounds), occupants (staff, students, parents, visitors), furnishings (equipment and room materials), and activities (eating, physical activity, laboratory, cleaning, health care, cooking, art classes, industrial shop, canteen, etc.). The variety of specialty space types, human activities, and age range in a school is extensive. The school environment must be used and maintained in a way that promotes the health of all its inhabitants, especially growing children who have increased and unique vulnerabilities.

It is an ethical imperative to develop a framework to protect children from environmental hazards. Such a framework must include the government's writ and responsibility to regulate and to test new chemicals and other potential hazards before they are marketed. Stronger regulatory mechanisms to eliminate human exposures to recognized or suspected toxicants must be disseminated to the public as an awareness campaign.

Reputable educational institutions must invest and strategize to conduct research necessary to protect children from persistent hazards that are widely dispersed in their environment. Guidelines about the ethical conduct of research and the role of experimental trials that test the efficacy and safety of interventions to prevent or ameliorate children's exposure to persistent toxicants or hazards that are widely dispersed in their environment must be shared through reports and findings.

Schools are second only to home among the primary places that children spend their time and thus are one of the significant places where children may be exposed to potentially harmful conditions. Additionally, the school environment is part of a larger community, a national environment and a global environment. Thus, the environmental quality of the community, nation, and world, especially relative to water, air, and selected hazards, impact the school environment and its human occupants. This must be carefully understood.

Moreover, each stakeholder must take the ownership to provide a safe school for its vulnerable children population. Orientation programmes for groups of parents, parentsteacher-student working group on healthy life styles may be established. Curriculum must include topics on health hazards and benefits, maintaining a balance in ecology and environment; food and nutrition; water and soil borne diseases; safe and clean water; use of plastic bags and so on. The role of the teacher must be redefined as ethical practitioners who must organize and work with children on small projects related to health and environment. Designing games, puzzles, short stories and narratives based on daily life experiences are found to be very helpful in bringing a change in children's life.

Furthermore, different environmental agencies should assist school officials, school employees and parents in understanding and managing the environmental related problems. Schools need to participate in educating children about plastic hazards, dangers of asbestos and garbage crises etc. to promote a healthy physical environment. Schools also need to initiate programmes for collective learning to help the students respect the environment and develop positive attitudes and behaviors. Engaging children in activities such as recycling or cleanliness campaigns will possibly assure a healthy school setting that fosters full physical and academic potential in children. To ensure an environment free from hazards is a major task, yet small steps by many people will change the world and protect the environment.

#### Conclusion

Environmental hazards have become a growing concern the world over. Several reasons are to blame for this growing menace; such as rapid industrialization; rampant use of pesticides inhaled and eaten in food and water; industrial waste emissions into the sea, air and land; burning rubbish; increased use of non-biodegradable (e.g. plastic bags) materials; lack of sanitation and hygiene facilities; high lead and asbestos use in building materials etc. Children, who are most vulnerable, are not free from these threats and hazards of environment in the school. According to the 'Charter of Human Rights' it is the children's right to learn and grow in clean and safe environments. It is imperative that all school personnel; policy makers, principals, teachers, parents, administrators, parents and community members extend all possible efforts in ensuring and creating awareness for healthy and safe living. Establishing safety rules, healthy eating habits, provisions for clean water and toilets and conducting awareness campaigns through small projects are doable. To initiate change intrinsic motivation, readiness and willingness are important. Change, if brought about with a meaningful action plan, can happen if there is a political will and spirit to minimize the dangerous effects of environmental threats to our children. If taken at a war footing these major environmental hazards can be overcome and defeated only if each of us pledges and strives to ensure a cleaner and healthier environment for our children.

#### **About the Writer:**

Dr Nilofar Vazir joined AKU-IED in 1994 as an Academic Consultant. She has served the Institution as Coordinator of Certificate in Education (Cert.Ed) and Masters in Education (M.Ed) Programs at IED. Currently she is an Assistant Professor and Coordinator of the Early Childhood Education and Development (ECED) Programs at the Institute.





# **Resources for Parents & Caregivers**

- Safety of an Unborn Child
- Making our Homes Safe for Children

# Safety of an Unborn Child

By Anjum Sharif & Sanober Nadeem

In every child who is born...under no matter what circumstances, and no matter what parents...not only the potentiality of the human race is born again but also in him/her and of each of us, our terrific responsibility toward human life. -James Agee

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Human development from conception to birth is a highly critical period of child growth. This period determines the later life of the child; either the child will survive or thrive. Research shows that everyday many babies are born prematurely with birth defects and with low birth weight (LBW) across the world. These are the leading causes of death in newborns. Environmental hazards such as smoking, drugs and other toxins also cause physical defects in the developing embryo or fetus and can result in birth defects. Some toxins in the environment can cause birth defects in newborns as well. While exposure to many chemicals will not lead to abortion and birth defects, some chemicals or other toxins can lead to serious consequences such as abortion, fatal birth defects, fetal growth, retardation, prenatal death, low birth weight and developmental delays in infant.

Inhalation, ingestion, or skin absorption are the three ways by which a pregnant woman can be exposed to teratogenic chemicals. Depending on the stage of pregnancy at which contamination occurs, the effects of exposure can be very serious, for both the mother and the baby. In developed countries, smoking is the leading cause of LBW, followed by low maternal weight gain during pregnancy.

In Pakistan, the prevalence of smoking in women is reported to be low (3.5%) (Nasir and Rehan 2001); use of inhaled (huqqa) and chewing tobacco, however, is not uncommon in rural areas (Khan and Siddiqui 2002). Also up to 70% of households in the country use wood, biomass, and/or crop residues as cooking fuel, whereas 53% of households use wood alone as cooking fuel. Maternal exposure to wood fuel smoke may lead to impaired fetal growth from smoke constituents such as carbon monoxide and particulate matter. (Rehfuess et al. 2006; WHO 2005)

#### **Common Environmental Hazards**

Pregnant women need to avoid potentially harmful substances and conditions both at home and at work. Some of the common potential hazards that pregnant mothers need to avoid during pregnancy are described here.

#### Lead

Exposure to high levels of lead during pregnancy can cause miscarriage, pre-term delivery, low birth weight and/ or developmental delays in the infant. Lead toxicity in children is characterized by behavioral and learning problems and anemia.



Women who live in old homes may be exposed to higher levels of lead due to deteriorating lead-based paint. A pregnant woman is exposed to significant amounts of lead in her drinking water if her home has lead pipes, lead solder on copper pipes or brass faucets. It is recommended that running water for 30 seconds before using it for drinking or cooking helps reduce lead levels. A pregnant woman should use water from the cold water pipe for cooking, drinking and later for preparing baby formula since it contains less lead than hot water. Many home filters do not remove lead, so a pregnant woman should read the label on her filter carefully and change the filter as recommended.

Unexpected sources of lead in the home may include the wicks of scented candles (which release lead particles into the air when burned) and the plastic (polyvinyl chloride) grips on some hand tools. Even some arts and crafts materials (e.g., oil paints, ceramic glazes and stained glass materials) contain lead. A woman should try to stick

with lead-free alternatives (such as acrylic or watercolor paints) during pregnancy and breastfeeding.

If anyone is exposed to lead on the job (such as painters and those working in smelters, auto repair shops, battery manufacturing plants or certain types of construction), they should change their clothing and shower at work to avoid bringing lead into the home. They should wash contaminated clothing at work, if possible, or wash it at home separately from the rest of the family's clothing.

#### Mercury

Mercury is another metal that is present naturally in the environment. Mercury enters the environment from natural and man-made sources (such as coal-burning or other industrial pollution). It is converted by bacteria to a more dangerous form (methyl mercury) that accumulates in the fatty tissues of fish. While trace amounts of mercury are present in many types of fish, mercury is most concentrated in large fish that eat other fish. Methyl mercury is found in some fish and seafood and can adversely affect the fetus. It is therefore advisable to limit fresh/frozen tuna fish and lake trout to one meal/month.



It's less certain whether exposure to elemental mercury, which is used in thermometers, dental fillings and batteries, poses a risk in pregnancy. Some studies have found an increased risk of miscarriage in women working in dental offices. Women who work with mercury should take all recommended precautions to reduce their exposure.

#### Arsenic

Arsenic and cadmium are two other metals that are suspected of posing pregnancy risks. These metals enter the environment through natural (weathering of rock and forest fires) and man-made (mining and burning of fossil fuels and waste) forces. Women working at or living near metal smelters may be at increased risk of miscarriage and stillbirth.



Research shows that chronic Arsenic Toxicity may have varied presentations from non cancerous to malignancy of skin and different organs, dermal lesions and other skin disease. Ground water of some areas of Sindh and Punjab are highly contaminated by Arsenic (Ahsan T. 2009; Kazi TG. 2009). A study conducted in Bangladesh found that drinking tube well water with more than 50 microg arsenic per liter during pregnancy increased the risk of fetal loss and infant death.(Rehman A 2007). Women of reproductive age should be prioritized for mitigation where drinking water is contaminated by arsenic.

#### Pesticides

Pregnant women should avoid pesticides, whenever possible. There is no proof that exposure to pest-control products at levels commonly used at home pose a risk to the fetus. However, all insecticides are to some extent poisonous and some studies have suggested that high levels of exposure to pesticides may contribute to miscarriage, preterm delivery and birth defects.

#### **Organic solvents**

Organic solvents are chemicals that dissolve other substances. Common organic solvents include alcohols, degreasers, paint thinners and varnish removers. Lacquers, silk-screening inks and paints also contain these chemicals.



Pregnant women, who work with solvents, including women who do arts and crafts at home, should minimize their exposure by making sure their workplace is well ventilated and by wearing appropriate protective equipment, including gloves and a face mask. They should never eat or drink in their work area.

#### **Household cleaning products**

While some household cleansers contain solvents, there are many safe alternatives. Pregnant women should read labels carefully and avoid products (such as some oven cleaners) whose labels indicate they're toxic. Products that contain ammonia or chlorine are unlikely to harm an unborn baby, though their odors may trigger nausea in an expectant mother. A pregnant woman should open windows and doors wear rubber gloves when using these products. She should never mix ammonia and chlorine products because the combination produces fumes that are especially dangerous for the child. A pregnant woman who is worried about commercial cleansers can use alternatives. For example baking soda can be used as a powdered cleanser to scrub greasy areas, pots and pans, sinks, tubs and ovens. A solution of vinegar and water can effectively clean many surfaces such as countertops.

#### **Exposure to Infectious Diseases**

During pregnancy, there are a number of medical tests that will be ordered by health care provider. These tests are looking for medical conditions, birth defects or genetic problems, or infections that can be passed onto the baby. Pregnant women need to be ruled out against these diseases and should be vaccinated.

Tests for most Sexually Transmitted Infections (STI's) are done as indicated and health care provider will decide a course of treatment. Treatment for most STI's during pregnancy is possible. Similarly HIV screening is recommended for all women. Transmission of HIV from mother to child can occur during pregnancy, or delivery. There have been instances where a mother did not know she was HIV positive until tested during pregnancy. If the condition is diagnosed early, treatment can improve conditions for the baby.



#### Chicken Pox:

If a pregnant woman is exposed to chicken pox and has never had the disease, she should talk to her doctor/midwife as soon as possible. Immunization against chicken pox is not recommended during pregnancy; however, an injection of immune globulin can be given soon after exposure to the disease. This may prevent her from getting chicken pox.

#### Rubella (German Measles):

A blood test for immunity to rubella is usually done at first prenatal appointment. Rubella is a serious concern for pregnant women, especially early in the pregnancy since the virus can cause defects in the developing fetus. Mother should notify her health care provider immediately if she has been exposed.

#### Fifth Disease (Parvovirus B 19):

If exposed, the mother needs to talk with her doctor/midwife as soon as possible. A blood test will determine if she is immune or not, and a course of action will be decided upon depending on the results.

#### Safety in Lifestyle



#### X-Ray and Computer Monitors:

Pregnant women need to avoid having an x- ray during pregnancy especially during the early months. To enhance health during pregnancy, it is suggested that working

women take 5-minute breaks every hour to get away from the computer screen and away from a static sitting position at the computer.

#### Importance of Wearing Seatbelts:

Everyone, including pregnant women, should wear seatbelts for every journey in a vehicle. The lap belt must be worn low and fit snugly across the hips, not directly over the abdomen. The shoulder belt must also be worn properly over the woman's shoulder and across the chest (never tucked behind the back). Wearing seat belt protects the mother and the fetus. It will also lead to prevent abortions, premature delivery and birth injury and defects.

#### Hobbies:

Some hobbies can expose to potentially harmful substances such as lacquer, paint thinners, paint and varnish removers, cleaning solvents, lead, plastics, and

adhesives. Although it's not known for sure whether the mother's exposure to these substances can harm the fetus, it is wise to avoid them whenever possible before and during pregnancy. Reduce risk by wearing rubber gloves and working in a well-ventilated area.

#### **Beauty Products:**

Chemicals used in salons are very dangerous. They let off fumes that can be very toxic, and women should avoid them while pregnant. If they cannot be avoided, make sure there is an open window or door for fresh air. To be on the safe side, an expecting mother should not use artificial fingernails. Hair products such as dyes, permanents, and straightness are safe to use during pregnancy. Pregnant women will get a very small amount of the chemical into body from the scalp, but there are no reports that this exposure is harmful to the mother or the baby.

#### **Drugs during Pregnancy – What's NOT Safe?**

## Prevent the use of following drugs during pregnancy that are known to cause birth defects:

**Antibiotics:** While penicillins, cephalosporins, and erythromycins are generally considered safe, tetracyclines, sulfa drugs, ciprofloxacin, and other antibiotics can cause birth defects when taken by a pregnant woman.

**Benzodiazepines:** Tranquilizers, sleeping pills, and anti-anxiety drugs can cause problems in newborns including breathing, temperature regulation, and muscle problems.

**Accutane and related dermatological drugs:** Accutane poses an extremely serious risk of birth defects or death. This drug should never be used by a pregnant woman under any circumstances. Soriatane is also a dermatological drug that is extremely harmful to a developing fetus, and should not be used by any woman for three years prior to conception.

**NSAIDS:** Aspirin and other drugs in the same family (salicylates) can cause birth complications and birth defects when used late in pregnancy.

#### **Antidepressants:**

*Paxil:* In 2005, the FDA warned that Paxil can double the risk of heart birth defects when used during the first trimester of pregnancy.

*Prozac:* In 2006, a major study found that Prozac also double the risk of delivering a child with the birth defect PPHN (Primary Pulmonary Hypertension).

**Anti-cancer drugs:** Teratogens such as Bulsulfan, Chlorambucil, Cyclophosphamide, Mercaptopurine, and Methotrexate can cause serious birth defects including cleft palate, underdevelopment, other physical defects and mental retardation.

Anti-seizure medications: Anticonvulsants such as Toprimate and Valproate can cause serious birth defects including spina bifida, organ deformities, cleft palate, and facial defects.

Certain thyroid medications; Sex hormones; Blood pressure drugs; Asthma medications; Live Vaccines; Lithium and Thalidomide are also known to be harmful for fetus.

#### **About the Writers:**

Author: Ms. Sanober Nadeem is a psychologist by training and is currently employed as an Instructor at AKU-HDP. She teaches on various aspects of child development and has experience in working with children and families in different urban and rural communities.

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By Sadiya Azeem

Our adult-friendly world has many potential hazards for a child. Keeping your child safe is easier and a lot more fun if you provide a safe and stimulating environment for children to explore as they grow and develop.



Baby- proofing and child- proofing conjure up the idea of an environment where a baby and child can never be hurt. That is wishful thinking! The reality is, that even in the safest of environments, children can still have tumbles or falls and get hurt. Children can be safest if we accept that child- proofing is always a work in progress. As a child grows and learns to walk & climb and look for materials to manipulate, new unexpected hazards can suddenly be within reach.

Along with all of our other responsibilities, as parents and caretakers of young children, we tend to worry about children's safety. However, the key to a 'safe' house is supervision, as well as maintaining a safe environment. To begin with, it is important to understand that a young child passes from different stages of growth and development & subsequently have different needs and urges. In order to design a safe environment for children of a broad age spectrum, it is important for caregivers to understand the needs and growth patterns of children in 3 separate age groups; Babies (birth to 1 year olds); Toddlers (1 to 3 year olds); and Pre- schoolers (3 to 6 year olds).

Here a few 'things to remember' while dealing with the safety of young children.

**Babies:** As babies become more mobile, keeping your home safe becomes a fulltime job for a while. Small babies can be surprisingly quick, especially once they start moving about. They are not ready to learn about the dangers yet, so you will need to keep them out of harm's way. Eventually, you will be able to tell your baby which things are off limits and help her/ him learn a safe way around. If you decide to baby-proof your house, change the environment in such a way that your house still remains a creative place to play and explore. Remember, if babies have a creative place to play and explore, with lots of interesting things to do and look at, they are less likely to seek their own stimulation by exploring areas that you might not want them to investigate.

**Toddlers:** Toddlers are full of energy and curiosity and prone to experimenting with whatever they find. Making your toddler's environment safe for exploration also means not having to say "no" to everything because toddlers have a built in urge to do things for themselves. Toddlers get into places that you would least expect to find them in. Until they are five or six, most don't understand dangers and because they are still finding their feet, they seem to be constantly bumping, tripping and falling down. Supervision is the only reliable prevention! Plus, by removing the obvious sources of danger, you can give your toddler the freedom s(he) needs to explore & grow. 8 month- old Maha crawls towards the hot iron and burns her leg. 3 year-old Hasan excitedly jumps on the bed and hits his head on the wooden frame. 6 year- old Sonia, full of energy, runs around the house and crashes into the glass door.

A few helpful tips to remember in keeping your toddler safe:



 When your toddler is out of your sight for a couple of minutes, you may want to check whether or not she's discovered something intriguing but dangerous.

- Curtain tie-backs and window blind cords can strangle a curious toddler. Remove them or hook them well out of reach.
- · Keep chairs away from windows and balconies.
- When you make a well-deserved cup of tea, keep it away from those little fingers!

**Pre-Schoolers:** For a young pre-schooler, a whole new world has opened up, most of it, outside the safe confines of your home. Your preschooler needs to be kept safe while she experiments with her boundless new abilities. It is very important to remember that pre-schoolers are spring-loaded with energy. At this age, they love to run around outdoors, climb things, crawl under things, ride on things and play with water. Providing a safe environment for your child to explore and keeping a close eye on her/ him, are important at this age. The good news is that you can also teach the kid more about safety than when s(he) was younger. You can reinforce existing safety messages and teach about new areas such as road safety and what to do in an emergency. Remember that:

- Your preschooler's coordination and physical abilities are developing quickly. At this age, children continue to expand and test their abilities.
- Playing outdoors is an important part of your preschooler's development. She needs space to run, jump and climb, and she will love playgrounds that challenge different skills.
- Install safety locks across entries to balconies, and always supervise children on balconies even if you have grills or related safety measures. Lock windows or keep them netted so small children can't fall out. Move chairs and potted plants away from the windows.

Now that we are more aware of the general characteristics of children across different age-groups, let's look further into how we can make the "home" environment safer for them.

- Do not leave a young child alone in the house. Children under about 12 years should probably not be left alone at home, and they certainly cannot be expected to keep younger children safe.
- · Low-power night-lights and an efficient torch (in case

of power failure) make looking after your baby at night safer. A hall light left on at night makes it easier for older children to get to the toilet without tripping.

- Keep the ironing area at a higher place where it is out of reach for children. Never leave the hot iron on the ground (even for a very short while) as burns can take place in less than a few seconds.
- Get a basic first-aid kit for any mishaps that do occur.
- Pin up emergency numbers and other useful safety contacts near the phone. Below are some suggestions for numbers to include:

#### **Emergency services**

- Poisons / Burn injury information centre
- Ambulance
- Fire department
- Children's hospitals within your locality
- Family doctor
- Neighbour/s
- Reliable Relatives
- All-night chemist





#### A few helpful tips to remember in keeping your baby safe:

- Babies love to pull themselves up and climb so make sure your furniture and heavy objects are stable, especially TV, bookcases and cabinets. If furniture is wobbly, remove it from the house or fix it to the wall.
- Teaching your baby to go downstairs backwards, over and over again, will help her protect herself. If possible, install a safety gate at the top and bottom of the stairs and make sure the doors are always securely closed with baby proof latches.
- It's normal for babies to put things in their mouths be it food, medicine, toys or ammi's favourite earrings. Regularly scan the house for small objects that may be choking hazards.

#### General tips around the house

#### In the kitchen

- Turn saucepan handles towards the back of the stove when cooking.
- Replace tablecloths with place mats they're harder to pull off the table.
- Put sharp things, including knives, scissors and graters, in a drawer with a child-proof lock or out of reach.
- Store food processors and blenders out of reach when not in use. If they must stay on the counter, unplug them or turn off the main switch.

#### In the bathroom

- Do not leave a young child unattended in the bathroom!
- Mark hot and cold taps accurately and clearly. Close taps tightly so young children can't turn them on.
- Keep soaps out of reach of younger children. The texture and feel of soap is stimulating for children but can be harmful at the same time.
- Install a cabinet for cleaning products, medicines, aerosols, hair products, razors and chemicals. If you can't, use a child-safety latch on the door, then try to store things out of reach.
- Keep an anti-skid plastic mat on the floor and tub to avoid the child from slipping during baths.
- Lower the temperature of your hot-water system.

#### Living area and Bedroom

- Keep bookcases and closets close to the walls.
- Use lower shelves to store children's things so children can reach them easily.
- Talk with children about the risks of climbing shelves, explain why and give gentle reminders if necessary.
  A child-resistant lock or handle on the door of the child's room prevents small children from making unsupervised
- visits.
  If the floor is not carpeted, lay anti-skid mats under rugs.
- If the noor is not carpeted, lay anti-skid mats under ru
- Install safety gates at the top and bottom of stairs.
- Use plastic socket covers on empty electrical sockets or just cover them securely with transparent electric tape.
- Move furniture with sharp corners -tables, chairs, TV units out of hallways, and away from doorways and other places where children run about. Pad corners with foam or cushioning.
- Slippery floors and shiny surfaces are dangerous, especially if you are carrying your child, so avoid loose floor coverings.
- Wipe up spills on the floor immediately.

#### Glass

- Give children drinks in plastic cups or shatterproof glasses. Both are available in local markets.
- Put stickers across big clear glass- doors at the child's level so that s(he) doesn't walk or run through the glass.
  Install safety glass, particularly in floor-to-ceiling windows in family rooms and extensions or cover glass with
- sticky plastic film so it doesn't shatter when broken.
  Keep furniture with glass in childfree areas until s(he) is old enough to follow safety rules. Alternatively, avoid using furniture with glass.
- Carefully sweep up broken glass immediately. If glass breaks near your child when s(he) is not wearing shoes, lift her/him out of the area.

Home is a special place where children are growing up. It's a place to explore, to have adventures and to play. Since children spend most of their time at home, the home is also the most common place for young children to be injured. Once again remember that keeping your child safe and away from danger is an on going task and requires constant supervision. Of course, no one can protect their child from everything or foresee all the dangers they may face, but with a little child safety planning and a lot of love we can protect children from many potential dangers and possible injuries.

#### Sources:

- http://www.cyh.com/HealthTopics/HealthTopicDetails
- http://www.mychildsafety.net/

#### **About the Writer:**

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# **Resources for ECD Practitioners**

Knowing and Teaching Safety

The Classroom Environment as "Another Teacher"

# Knowing and Teaching Safety




According to the United Nations Convention on the Rights of the Child, 'it is the right of every child to be kept safe and secure'. When children are sent to school they become the responsibility of the school. This new home where the child will spend 3-4 hours of his/her day in the company of no less then 15-20 other children, has to be equally safe as the child's home. The reason why schools need to give greater emphasis on safety is, firstly the basic fact that they have a larger number of children to deal with, and greater the number, more the chances of accident or injury. Secondly they have to live up to the expectations of the parents who believe that their child is now in the safe company of people who know everything there is to know about child's development, education and safety.

With the exception of a few, most schools in both the public and private sectors, have neglected important aspects including appropriate indoor and outdoor spaces, location of the school, importance of caring for the environment, and teaching and practicing safety, health and hygiene. There is a perception that making an environment safe is a cost intensive endeavour. However when compared to the loss, both human and financial, due to unsafe structures and lack of skills, the cost for ensuring safety through secure environment and creating safety awareness is much less.

This article will discuss what safety means, how schools can ensure safety and also ways to teach young children how to be safe. Safety simply put means "to provide for and to contribute to the wellbeing of the child's evolving physical, mental and emotional needs."

To ensure a safe environment, the schools should look at a more

## **Major Components of a Safety Policy**

- 1. Knowledge/Information:
  - a. What is safety?
  - b. What are the effects of safe environments on young children?
  - c. What are the different hazards, dangers and risks at school?
  - d. How to design safe indoor and outdoor environments?
  - e. What are safe equipments and materials?
- 2. Creating Awareness:
  - a. Amongst Decision and Policy makers
  - b. School Head and Coordinators
  - c. Teachers
  - d. Support Staff
  - e. Parents
  - f. Children
- 3. Procedures:
  - a. What to do in case of minor accident/injury?
  - b. What to do in case of major accident/injury?
  - c. What to do in case of sickness?
  - d. Emergency Evacuation Drills (Earthquake, Fire and/or Bomb threat)
  - e. Field visits, etc.
- 4. Activity/Tasks/Materials: (these need to be in place to achieve procedures)
  - a. First Aid Box
  - b. Contact list of Children's Parents/Guardians
  - c. Contact list of Doctors and Emergency Services
  - d. Fire Extinguisher, etc.

holistic programme that:

- helps create awareness about safety and safety measures amongst all of its stakeholders;
- looks at consistent maintenance/repair of all facilities and equipment;
- allows for appropriate and safe designing of all environments; and
- has the teaching of safety incorporated into their curriculum.

These factors can be considered when setting the guidelines for the School Safety Policy. Major components of the Policy are mentioned in the article to give you an idea as to how safety can be practised at the whole school level.

In order for your school to work towards becoming as safe as possible, it will take a concentrated effort by concerned people including parents, heads, administrators, coordinators, teachers and other school staff. This group will have to work together to identify problem areas and to develop solutions that will work in your school. In order for all of these people to be of any help, they also need to know what safety is. Workshops and lectures and provision of literature on safety can be helpful in creating safety awareness.

Let us now look at simple safety measures that a teacher can take within her/ his classroom and in the outdoor play area.

#### Inside the Classroom

Make sure:

- all potentially dangerous materials are safely out of reach (cleaning supplies, sharp scissors/knives, matches, electrical cords, etc.);
- all electrical outlets are covered;
- there are no sharp edges on tables or ledges that children could run into;
- to check for splintered edges on tables, chairs and cabinets/shelves;
- to check for anything that can fall on a child such as a piece of furniture that may be unsteady, or items from an overloaded shelf;
- there is nothing on the floor to cause tripping/slipping;

- all the toys are clean and in good repair and safe for the developmental age of the group;
- there are no dirty fabric hats, scarves, or other headgear in the dramatic play area (check regularly to help cut down on the risk of head lice);
- room dividers are low enough that you can see all children all the time;
- the lighting arrangements in the classroom are adequate.
- exits are plainly visible and labelled;
- exits and ways of travel are free of obstructions;
- the classroom and associated areas are kept clean and orderly;
- toys and materials are properly stacked, racked, blocked, or otherwise secured to prevent sliding, falling, or collapse;
- that the children's name and emergency contact list is up to date and placed near the exit;



• classroom norms are clearly placed and have visual cues for children so that they can easily understand.

#### **Outdoor Play Area**

Make sure:

- the playground is securely fenced off with safety locks on the gate;
- the playground is clear of debris and stones;
- there are railings and walk spaces on the top of slides to prevent falls;
- · all swinging ropes are in good condition;
- there is sand or other absorbent material under climbing equipment;
- that the sand in play areas is regularly maintained;

#### **School Safety Online**

http://atschool.eduweb.co.uk/wickham/policies/hlthsfty.html http://education.qld.gov.au/health/safety/hazards.html http://www.ncef.org/pubs/mitigating\_hazards.pdf

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- all play structures are free of splinters, wide cracks, rusted areas, or loose screws/bolts;
- all play structures are anchored well into the ground;
- metal surfaces are in the shade so as to prevent skin burns;
- the playground surface is smooth without holes or protruding objects.
- the playground is free of fire ant mounds;
- outdoor play area norms are clearly placed and have visual cues for children so that they can be easily understood.

These two lists of safety measures are neither exhaustive nor prescriptive. They are just meant to give the teachers an idea as to how they can translate safety into their everyday practice, whereby ensuring a safe working environment for their children and themselves. However children being children are vulnerable to injuries or accidents even in the safest of environments. As adults we need to be prepared for when an injury or accident happens. The most common injuries/accidents that young children run into include:

- Choking and/or Suffocating
- Cuts, Bruises and Scratches
- Splinters
- Strains and Sprains
- Insect bites and Bee stings

In all the cases these general steps should be followed: a. Stay calm.

b. Calm the other children down and take the injured child to a safe spot or the sick room if available in your school. (Make sure the other children have an

adult with them when you leave)

- c. Apply first aid:
  - i. In case of choking and or suffocation a certified/registered person or nurse/doctor can perform Cardiopulmonary Resuscitation commonly referred to as CPR. (If certified person not available go to step d.)
  - ii. In case of minor cuts, bruises and scratches wash the wound under running tap water. Then apply polyfax or some gentle ointment that doesn't cause irritation or pain. Leave the injury open; don't cover with a gauze or cotton. (If bleeding doesn't stop, go to step d.)
  - iii. For splinters apply some cold cream to the affected area, after a few minutes if splinter is visible remove it with a set of tweezers.
  - iv. For strains and sprains keep the affected area elevated (above the heart so as to slow down circulation), apply a cold compress and contact the doctor.
  - v. For insect bites and bee stings go to step d. directly.
- d. Call on a registered nurse or doctor close to your school for assistance. Or take the child to a clinic or hospital. (Arrangements with the nurse/doctor/clinic/hospital should be made prior with the consent/recommendation of parents)
- e. Inform the parents/guardians.

Teachers should encourage children to practice by making a weekly game of safety tips. Make sure that the children understand when and where to use safety skills. These skills can include knowing:

where to walk slowly;

- not to jump inside the classroom;
- not to run inside the classroom;
- how to take turns while using the slide in outside time;
- not to push while climbing stairs;
- to keep their classroom clean;
- to tidy up after they finish work and to put everything in its place;
- how to use scissors;
- how to pass pointed objects like a sharpened pencil;
- what to do when you or your friend get hurt.

All of these different skills and others can be brought into a child's life using anyone or a combination of the following tools that are at a teacher's disposal: a. Role-modelling

#### Sources:

- http://www.yourdictionary.com
- http://www.preschoolbystormie.com/healthsafetychklist.html
- http://dbs.idaho.gov/school/pdf\_files/classroom.pdf
- Ilm o Amal, July-December 2007, TRC

#### **About the Writer:**

Ghazanfar Shahzad has a Montessori Diploma from the Montessori Teachers' Training Centre, Karachi and an ECE Diploma from Sheridan College, Canada. He has been associated with the field of Early Years Education for the past 8 years. During this period he has taught young children and also trained pre-primary schoolteachers at the Teachers Resource Centre (TRC) and is presently serving as a faculty member at the TRC – Institute of Early Childhood Education.

### Safety at School and at Play

Here are some tips that will help keep children and teens safe when they are away from home.

- Encourage them to stick with their friends rather than walking or playing alone.
- Teach them how to spot dangerous places, like vacant buildings, alleys, deteriorated playgrounds and parks.
- Explain how taunting, teasing and arguing damage friendships and to settle disagreements through talking not fighting.
- Walk routes to school, stores and friends' houses so you can make sure they are safe and point out where they can get help in an emergency.
- Teach your children and teens to be conscious of criminal or suspicious behavior in your neighborhood and to tell an adult when they see such activities.
- Make sure your school has a policy of calling the parents when a child is absent from school.
- If you use daycare or after-school programs, check their credentials carefully, including certifications, staff qualifications, policies regarding field trips and parental visits, and reputation in the community.

Source: http://www.adt.com/for\_your\_home/learning\_center/safety\_tips

- b. Role-plays
- c. Labels
- d. Symbols
- e. Songs / Rhymes
- f. Displays / Posters
- g. Story Books

Young children learn by doing. These tools can be effectively used to teach simple skills like the ones mentioned above and also can be employed for more complex set of activities such as a fire drill.

In conclusion, remember that safety and risk education for children particularly in early years would be most effective if it were an identifiable aspect of the curriculum, delivered by teachers, as part of a whole school approach.



## The Classroom Environment as "Another Teacher"



By Ellen Mays



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Creating an environment that encourages child initiation, participation and appropriate social interaction should be the goal of every early childhood educator. The physical classroom environment plays a great part in either creating or preventing situations that cause challenging behavior. Creating engaging, productive, nurturing, inspiring, childcentered, successful classrooms begin with the room's physical layout — the arrangement of desks and working space, the attractiveness and appeal of bulletin boards, the storage and easy access of materials and supplies, and the flow and organization of "workshops" and learning centers.

In the Reggio Emilia approach to education, classrooms feature displays of children's work, collections of "found" objects, ample space for supplies (all aesthetically arranged), and clearly designated spaces for large- and small-group activities. Reggio Emilia educators stress the need for a classroom environment that informs and engages the child. They consider the physical environment to be "another teacher." And in the sense that it can motivate children, enhance learning, and reduce behavior problems, environment really is an extra teacher.

#### Designating Space for Learning Centers and Activity Areas



Child-centered environments are planned around certain physical features. In the Early Childhood classroom creating effective space for learning centers is essential. Many teachers prefer to create different areas within the classroom. While young children need sufficient space, large open spaces are not conducive to organized classrooms. Smaller, well defined areas help children focus on specific activities and help them understand behaviors that are expected in those areas. Many teachers prefer to create different areas or learning centers within the classroom. The versatility of learning centers allows children to interact with center material at their own developmental level. For example, a classroom might feature a quiet reading corner, a music area where students can play soft music while completing work, a discussion/conversation center, a large table for cooperative projects, spaces for wet or messy projects, multimedia spaces, and individual work areas. Several learning centers that are commonly found in early childhood classrooms are: art, block, dramatic, sand and water, listening, math, music, science, library, and reading and writing centers.

Consideration of certain variables within the arrangement of the classroom can contribute to the prevention of challenging behaviors. Look at your interest areas and consider these questions:

- Do the areas or centers have visual boundaries (shelves, tables, carpets, or even lines on the floor)? Centers should be clearly defined. Shelves, tables, carpets, or even lines on the floors can be used to define areas.
- Do the areas have names that are understandable to children?

37 Nurture - Pakistan's Pioneer Publication on Early Childhood Development

Centers should have clearly labeled names along with a picture of the activity in order to meet the learning needs of early emergent readers.

• Is there adequate space for multiple children to play in the same area?

Centers should be able to accommodate more than one child in order to encourage and promote constructive play among each other.

 Are the various centers organized according to noise and activity level?
 Nosier centers, such as dramatic and block area, chould be grouped away from quieter centers, such

should be grouped away from quieter centers, such as reading and writing.

 Has traffic flow areas within and between areas been considered?
 Pathways between centers should promote smooth

movement of children from center to center. Too much space leads to running in the classroom. Relatively narrow passageways are acceptable for most children.

- Are the areas able to accommodate many types of play?
  - Dramatic/Role Play
  - Solitary Play
  - Parallel Play

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- Constructive Play
- Exploratory Play and Cooperative Play
- Are the areas or centers adjusted throughout the year based on child observations?
- Are their clear rules and expectations posted on how children should enter and leave each center? Rules for getting in and out of centers (taking turns and the number of people allowed in the center) should be clearly posted and discussed.

#### Displaying Children's Work



Encouraging students to make the classroom space their own, fosters a sense of ownership over their learning space. Welcome their contributions to its decoration, and urge them to take responsibility for its maintenance. Interesting and attractive visual aids, such as bulletin boards and posters, are key components of an effective classroom. Wall decorations should be colorful, appealing and relevant to current class work and thematic units. They should be changed and refreshed frequently in order to foster student's motivation for learning.

- Be sure to think about the diversity of your students when dressing the walls.
- Set aside a section of the bulletin board to be your designated "Student Work Museum" and post children's drawings, written work and other projects there.
- Make sure that each student's work is displayed often.
  It is also beneficial to display name plates next to

each child's work.

 Post daily schedules in a place where students can read them easily. This accessibility of the classroom schedule can help students grow comfortable with class and school routines. For younger students, make a daily schedule that includes pictures or icons.

#### **Choice of Materials**



Observation is the key to choosing materials that reflect the interests of the children in a preschool classroom. By observing the types and content of children's play, teachers can choose items that support a variety of developmental levels. As children engage in play, they do so based on their level of thinking/reasoning, language and social skills. Therefore it is important to provide materials that support children on their individual developmental level. How do we do that? By providing materials that can be used in a variety of ways, often called "open-ended"! Many of these types of items are 'collected' and 'real life' materials, such as boxes, egg cartons, paper tubes, cell phones (non-functioning), telephone books, kitchen utensils, and pieces of fabric. Other typical items such as string, glue, tape, play dough, carpet scraps, blocks and paper are also materials that should be available to children everyday. As children construct knowledge based on their experiences, their thinking, language and social skills grow. By choosing the appropriate materials, teachers can support this growth and help children feel successful regardless of their level of development.

#### Access and Organization of Learning Materials



Easily accessible materials and supplies can eliminate delays, disruptions, and confusion as students engage in and prepare for activities. In poorly arranged classrooms, students spend a lot of time waiting — waiting in line, waiting for help, waiting to begin. This element of waiting can cause frustration and lead to a decrease in enthusiasm and desire to engage in a learning activity. In order to eliminate some waiting, store frequently used items such as scissors, glue/paste, markers, crayons, pencils, in various areas around the classroom so that students can independently access those items rather than waiting for a teacher to give those to them. In addition, labeling

The Classroom Environment as "Another Teacher"



shelves and containers with "pictures" of the items will simplify clean up and allow children to practice many cognitive skills such as matching, classifying, and counting. Labels allow children to be successful at cleanup time. The labels can be from photos, catalogs, original containers or handmade. Providing matching labels on containers as well as shelves help cleanup for adults and children easy especially when materials are used across interest areas. By allowing materials to be accessible to children on a consistent basis, teachers will see an increase in the level of play in individual children. By providing a consistent location for all the materials, teachers can provide a way that all children can be involved in this part of the routine and avoid many of the struggles of cleanup time.

#### A Place to Begin: Take a New Look at Your Classroom

If you want to create a beautiful, caring, nurturing, and developmentally appropriate environment for your young learners, take this simple survey of your classroom. Get down on the children's level and discover what they see. Take photographs to "really see" the space.

- 1. When a child enters the classroom, do they see an attractive space?
- 2. Will the child find this place to be warm and homelike?
- 3. Are the children's materials grouped together based on how they are used?
- 4. What are the sounds of the classroom?
- 5. Can each child recognize who lives and works in this space?

- 6. Is children's work displayed in an attractive manner that can be appreciated by children, parents, and teachers?
- 7. Are a variety of areas available: quiet, active, messy, etc. for large or small group?
- 8. Is there a place to pause and reflect?
- 9. Is there a beautiful area or display that can be enjoyed?
- 10. Is there a teacher who wants to create a wonderful space for children?

Designing Classroom Spaces: The Sky's the Limit The sky's the limit when it comes to designing classroom space. The strength lies in a teacher's creativity and dedication to ones students. Young children respond differently, based on the design of the environment in which they learn. An effectively designed classroom has the potential for positively influencing all areas of children's development: physical, social /emotional, and cognitive. Language and learning are nurtured in an environment that values and plans appropriate opportunities. The environment can support the development of behaviors that are valued in our society, such as cooperation and persistence. An aesthetically pleasing space can develop a child's appreciation for the beautiful world around them. Most importantly, quality environment can provide a home like setting that "feels" like a good place to be and a safe place to learn, grow, and be nurtured.

#### **About the Writer:**

Ellen Mays is a peace educationist who has experience in the field of early years teaching. She designs and undertakes projects with children on themes of peace, global citizenship, and moral responsibility for humanity that aim to ultimately empower children to find and value their own voice and role in creating a more peaceful world.



Teachers' Tips on Decorating Classrooms & Hallways

No matter how many times people are told "not to judge a book by it's cover" the way something looks is often the first impression that people get. Having a cluttered, bare classroom can often lead parents and students to believe that the teacher doesn't really care. This can leave the children feeling unmotivated to learn and the parents already doubting your teaching ability. To avoid these feelings, it's important for teachers to properly decorate their hallways and classrooms.

#### 1. Change Decorations throughout the Year

Change classroom and hallway decorations to correspond with the current season or upcoming holiday. Basing decorations around a theme (like Eid or Back to School) will help give teachers some direction in how they want to decorate their classroom and hallway. Be sure to keep decorations current. Having *Back to School* decorations up in November or *Independence Day* decorations up in March looks unprofessional.

#### 2. Let the Students Help Out

Use students' artwork or assignments as classroom or hallway decorations. For younger children, have them create crafts that fit in with your theme. For older children, display projects such as posters or book reports in the hallway for students, teachers and parents to see. Using the students own work will create a sense of pride and excitement for the students in the classroom.

#### 3. Develop a Classroom Bulletin Board

Every classroom should have a bulletin board that displays what's going on in the classroom and what's coming up. Teachers should choose exceptional work to display on the board; doing so will encourage other children to do well so that their work can be displayed on the board as well. Like hallway and classroom decorations, the bulletin board should reflect a certain theme. Many teacher supply stores sell bulletin board books with step by step instructions for creating bulletin boards for any holiday or season.

#### 4. Display Educational and Motivational Posters

Posters are one of the main staples in a classroom. Instead of choosing posters of animals or flowers, choose posters that have relevance to the students in the classroom. Educational posters that help children with topics that they work on every day can be very helpful. For younger students, display the alphabet and a number line. This can be helpful for students who are learning to count or learning their letters or handwriting. For older children, display world maps, or grammar and punctuation posters. Use your own curriculum to decide what posters work best. If you're teaching multiplication, multiplication posters are helpful. If you're teaching U.S. Geography, find poster maps of the United States. Motivational posters should also be displayed, encouraging children to learn, be kind to each other, and always try their best.

Source: www.ehow.com

# Interviewed by: SJZ





Mr. Arif Hasan, a Pakistani architect and planner, teacher, social researcher, and writer, studied architecture at the Oxford Polytechnic, England. His initial experience involved work in various architects' offices in Paris, Madrid and Italy before he returned to Pakistan in 1968 and established a practice. There was quite a big practice of conventional architecture in Pakistan at that time. Slowly he moved on to dealing with built environment issues and social issues related to the built environment and this led him to work with the appropriate technology development organizations. His experience with the Orangi Pilot Project and the Urban Resource Center and later on with the Asian Coalition of Housing Rights involved work on housing policies, land issues and social issues related to physical development. He was awarded the Hilal-I-Imtiaz for public services, which is the Government of Pakistan's highest civil award for a living person. Mr. Hasan has been a Member of the very prestigious Jury of the Aga Khan Award for Architecture and is on the Governing Board of numerous local, national and international civic and public affairs institutions, including the International Institute for Environment and Development in the UK, and the Asian Coalition of Housing Rights in Bangkok.

Mr. Azhar Abbas completed an undergraduate Architecture Degree from National College of Arts Lahore in 1989 followed by a Masters Degree in Architecture Design from UNSW Australia in 1993. He started his professional career as an architect in Sydney, Australia and worked there for almost three years before coming back to Pakistan. After returning to his hometown in Quetta, Mr. Abbas started practicing architecture with his elder brother who is also an architect and got considerable exposure in working on institutional projects. From there onwards he opted to specialize in institutional architecture (Education, Health) because of its wider coverage of the various social aspects of human life. Developing Building Projects and Design Documentation for institutional buildings are areas of key interest to him. He has been associated with the Aga Khan Development Network and has worked in development and designing of schools all over Pakistan. Mr. Abbas has also undertaken consultancy projects with the World Bank and the Asian Development Bank in Baluchistan. *Currently he is associated with the Habib University* Foundation where his prime responsibilities include project management as well as developing infrastructural programs for the University and other educational projects. Mr. Abbas also serves as the executive committee member of the Institute of Architects Pakistan (Karachi Chapter).



Q What would you have been had you not been an architect?

Q What led you to specialize in the low-cost / safe structures?

Q Who (or what) were the biggest inspirations for the choice of your profession? **Arif H.:** I know that had I not been an architect I would've been a Film Director. Cinema at one stage of my life interested me very much and I seriously thought of giving up my architectural studies for studying cinema but that never happened. That was when I was working in Paris.

**Azhar A.:** If not an architect I can't say what else. Why I selected the field of architecture is because as a profession it gives us real understanding of how physical form affect human life, and how spaces can celebrate life. Architecture is about people, culture, climate and context. To understand human behavior in a space is a very complex phenomenon, therefore it is necessary to have deeper understanding of all factors.

**Arif H.:** I don't really specialize in low-cost structures. But I have done a lot of work of the developments, upbringing and policy related issues of low-income housing structures across many countries including Vietnam, Cambodia, South Africa, Central Asia and Pakistan. This experience has led me to teach at both national and international universities as well on subjects of urban development and built environment issues.

**Azhar A.:** Low-cost is no specialization, it is the term architects use during design and it basically gives us information about the specification of the building material, typology, building system and techniques. As a professional it is our prime responsibility to make sure that structure is safe and designed as per engineering codes requirement.

**Arif H.:** I remember when my father was Secretary of the Pakistan Institute of International Affairs, their office building was under construction. I was young at that time and the experience of seeing the architects discuss their projects and work was what got me interested in architecture at first. Luckily there was support from my father to study architecture so I got a chance to pursue my interest. My real teacher was Ghulam Kibria with whom I worked for many years while he was Head of the Appropriate Technology Development Organization. Much of the work I did with Kibria Sahib and the knowledge I gained through working with him was what I took to the Orangi Pilot Project when Akhtar Hameed Khan called me to work with him. Akhtar Sahib is again someone from whom I learnt a lot. He taught me to look at history from the eyes of ethics rather than through the various theories of history that I had been exposed to. The other thing that I learnt from him was how the work that I had been doing before I met him could be seen in the larger development context of Pakistan.

**Azhar A.:** Built environment has most influence on a human being; it addresses your comfort, aesthetics, lifestyles and most importantly human behavior. Considering the importance of built environment, I selected to become an architect. The work of Nayyar Ali Dada, who has been my teacher since my undergraduate program in NCA (Lahore), is a great inspiration.

Q in what way does architecture contribute to society?

Q How does design affect human behavior? **Arif H.:** Well, architecture is of various types. You have architect built architecture, contractor built architecture and you have people built architecture. Whatever architecture is built it has relationship to climate, light, ventilation, hygiene, recreation, entertainment, etc. Social relations and the world of architecture are closely related to each other and that is why it is important that architects do not do anything or work on any project that promotes poverty, environmental degradation or ecological damage.

**Azhar A.:** I think it depends on what you interpret as art & architecture. Is it the exhibits in the Tate modern or the Louver? Or is it the design and culture that we see every day? From a bin to the magnificent architecture of buildings like Opera House, society is shaped by the ideas and thoughts of everyone in it. I think art is someone's ideas shaped into the language of our mind and put on a page, wall, sculpture or building. This could explain why there are so many ways to interpret a piece of art. Architecture undoubtedly has its impact on the shape of society, culture and history.

**Arif H.:** If architecture is well designed, climatically compatible, energy efficient, if places of work are near the places of residence, and if transport infrastructure is convenient for people, then you have a better and happier society, naturally. If you have well-lit schools, good classrooms, pleasant colors, you have a better environment and a happier world. So it is really important that irrespective of who builds and for what purpose, the built environment should not damage ecological systems. Unfortunately today architects are responsible for many such projects that harm the natural environment. For instance, in the case of Karachi's beach development, there should be no reclamation from the sea or from mudflats on which flora and fauna are dependant. Natural drainage systems are continuously polluted and architects are responsible for projects that do all this. I think that here the architectural profession has to take a stand. Azhar A.: Architects have long intuited that the places we inhabit can affect our thoughts, feelings and behaviors. But now, behavioral scientists are giving these hunches an empirical basis. They are unearthing tantalizing clues about how to design spaces that promote creativity, keep students focused and alert, and lead to relaxation and social intimacy. Institutions such as the Academy of Neuroscience for Architecture in San Diego are encouraging interdisciplinary research into how a planned environment influences man.

Q What projects rank among your favorites? Why do they stand out?

Arif H.: My favorite project is undoubtedly the Orangi Pilot Project on which I have worked for many years for upgrading informal settlements. Helping people to build better houses; acquire sanitation systems as well as construct their own sanitation systems and providing them the necessary technical support for striking the more equitable relationship between themselves and the estate agencies, have all been very rewarding. Talking about architect built projects I would say that I am a great admirer of Nayyar Ali Dada's work in Lahore especially the Al-Hamra Arts Complex, Al-Hamra Open Air Theatre and the Gaddafi Stadium which are exceptional pieces of architecture and a unique blend of modern building with traditional materials. Azhar A.: I rank Sydney Opera House amongst my favorites. The building's organic shape and lack of surface decoration have made it both timeless and ageless. Moreover, it demonstrates how buildings can add to environmental experience rather than detract from it something of spiritual value. The synergy between the setting and the building make it appear that the scheme actually involved flooding the harbour valley to set the building off to best advantage.



Q The history of public housing in this country has been dismal. Why are government/ public schemes always uniform?

Q What is right and wrong with today's architecture? What are some of the top challenges facing the architecture field over the next decade?

Q What have been the rewards for you of practicing architecture? **Arif H.:** There is almost no public housing in this country. There were few projects, such as the Landhi and Korangi Housing estates, at the time of independence but they were far too small to make an impact on a wider scale. Mostly housing in this country has been market driven and therefore the poorer sections of the population have not had access to proper housing. As a result 70% of Pakistan's population lives in some form of informal settlements; either in 'kachi abbadis' or through informal subdivision of agricultural land. So, this is one of the biggest problems that we face.

**Azhar A.:** It is obvious that art and architecture cannot flourish in a controlled environment; it needs necessary breathing space to nurture and develop. This unfortunately is nonexistent in public sector. That is why you don't see any creative projects in public housing domain.

Arif H.: I think nothing is right or wrong with architecture as such. What is right or wrong is with architects. Architecture is the product of that. I think one of the big challenges we face is producing energy efficient architecture or climatically suitable architecture. The reason why we have not been able to do that is that architects normally try and copy western structures, big blocks of art which are not suitable to our climate. If we look at schools for example, the way they are built all over the country, some are so hot that students study under the tree shades in the summers. In winters the buildings become very cold and the children study outside in the sun while the school building remains empty for many months. Since the government schools have not been able to meet the demands of the public, there is a growing private sector. Many private schools are running in small premises which are neither properly lit nor ventilated. The government has to meet the demand by providing land, schools, or otherwise private schools will naturally operate wherever they find space. So I think the top challenges really are producing climatically suitable, socially appropriate, energy efficient and rational architecture. Azhar A.: There is nothing wrong or right about architecture. If architecture is contextual, harmonizes with nature, blends with climate, is functional and aesthetically appealing, it is right and if it does not then it is wrong. The field of architecture is facing serious environmental challenges and architects have to reposition their practices towards environment friendly designs.

**Arif H.:** There have been several! One is personal satisfaction. Other is recognition of the work I've done. And the third is teaching. I think all these three are huge rewards.

**Azhar A.:** A good design stays for ages. It's like frozen music. My greatest reward is the schools I designed in different parts of Pakistan.

If architecture is well designed, climatically compatible, energy efficient, if places of work are near the places of residence, and if transport infrastructure is convenient for people, then you



have a better and happier society, naturally. If you have well-lit schools, good classrooms, pleasant colors, you have a better environment and a happier world. (Arif H.)

Arif H.: You see, it's not only about understanding clients. You have to have affection and love for the user. Unless you know the user, their needs and requirements and you respect them, you cannot really produce good architecture. And, this understanding, through love and affection, can only be possible if you look beyond the end product. One of the major problems architects have is that they start with a vision or an idea which isn't looking at how the building is going to be maintained; how it's going to operate; how it's going to be used; who is going to use it? Also modesty and humility have to be a part of daily use architecture. And that is not something architects are taught these days. 'Megalomania' is closely associated with architects whereby they are over stressed for being 'original'. One has to be a genius to be original and all people are not geniuses. So if you are trying to be original and you are not a genius, you produce bad architecture. I think the teaching of architecture has a lot to do with this as well. There is no harm in having something similar (and not original) if it works and functions. One can have iconic buildings that are planned and exclusively designed but daily use architecture is something else.

**Azhar A.:** School design or architecture for learning is a very specialized area. One has to be fully equipped with standard design practices and pedagogic needs of sensitive environment. The designer should be sensitive to nature, and human learning needs especially those of young children.

Arif H.: I would not separate schools, classrooms and the learning environment. I think the three go together. A learning environment is something where a student can move around and experience things. For example, if you have a school, why can't you have solar energy panels so that the student is able to understand the concept of solar energy? Or why can't you affix a windmill which is used for energy as well as teaching children basic concepts. If you plant trees of certain varieties, why can't children be taught their names? Along with the toilets you can have a septic tank or a small treatment plant and children can learn the concepts of waste disposal for example. So a student can learn in and through the environment. Also the learning spaces have to be such where interaction is easy and where recreation is possible.

**Azhar A.:** The word school gives us the picture of row of classes fronted with never ending corridors, whereas the term 'learning environment' indicates a creative space equipped with learning technologies which allows for collaborative learning.

Q Architects always have to understand their clients, but those hired to design and build schools must be especially sensitive to unique client needs. What are your views on

When you hear the words "school" and classrooms, what immediately comes to mind? in contrast, when you hear the phrase "learning environments", what changes for you? Q What in your view are the elements of a healthy physical environment (both educational and home) for children?

Q Fear of the outdoors goes far beyond urban neighborhoods. What's your reaction to the diminishing outdoor spaces for children?

Q With more and more exploration in space, are your professional bodies making plans for such an event as living on the moon? School design or architecture for learning is a very specialized area. The designer should be sensitive to nature, and human learning needs especially those of young children.



(Azhar A.)

Arif H.: A healthy physical environment is where you have ventilation, light, hygiene especially in the areas where water is used, where waste is not exposed and you have greenery. It can even be in a small space. So, these are the essentials of the healthy environment. And naturally, enough water to wash and clean. Then you need spaces in neighborhoods where people can spread out. For younger children, such spaces should be just near the home where they can be supervised. For the older children, these spaces can be at a distance and bigger suitable for their activities. Water elements (such as lakes; pools; etc.) in localities are also important because they bring relief in the summer. But water elements are difficult to maintain. And if they are not maintained, they create a considerable amount of pollution. Azhar A.: Built structures and their design, are very important in facilitating how learning takes place within them. Children's changing learning habits, emerging technologies, and new active learning pedagogies have transformed the concept of a learning space from being confined to a singular physical space or a singular type of structure to diversity of spaces and their use. Now spaces are designed to create healthy environment to nurture creative human brains. It is important to realize that good space is not a luxury but a key determinant of a healthy learning environment. This is true for both home and educational space.

**Arif H.:** This can be attributed to the planning of the built environment as well as to the general law and order situation. First is the security factor. Even where spaces do exist, parents are not comfortable with allowing children to stay out in places far away from home. This reduces the option of outdoor recreation for many children and is also psychologically damaging for their growth. Secondly, if we look at Karachi for instance, there is a need to re-densify overcrowded localities (Layari, Kimari, etc.) and undertake densification of less populated areas (e.g. Defence, Nazimabad, PECHS, etc.). This can be done through modifying by-laws so that in low-density areas more construction can be done vertically without touching existing open spaces. In my estimation, we can cater to another two million people in Karachi through densification.

**Azhar A.:** I am very sad and concerned about shrinking outdoor spaces especially for children. And this is already causing damage to the physical growth of our young generation.

**Arif H.:** Architects are not making any plans for catering to the expanding population of Pakistan; forget about going to the moon! On a serious note though, it is actually the patrons who decide on the nature of the built environment and not the architects themselves. Patrons are the developers; they are part of the government schemes and the corporate sector. So let's see when the patrons take a fancy to putting humans on moon, mars and beyond.

*Azhar A.:* May be the next generation of architects would think about putting footprint on the moon.









Fatimiyah School of Early Childhood Education

> Transforming the Learning Environment in Early Years Education

By: Minhas Tejani

#### Fatimiyah School of Early Childhood Education

At Fatimiyah School of Early Childhood Education we work towards the holistic development of the child. Every day is planned with activities integrating work and play. We nurture positive self image in children through setting clear, reasonable rules and expectation of appropriate behavior. We believe in giving freedom to children to enjoy, to explore, to be creative and to laugh. We provide a stimulating learning environment where children feel secure and freely express themselves. A central element of the day is the "plan-do-review sequence," in which children make a plan, carry it out, and then reflect on the results.

The learning environment at Fatimiyah School of Early Childhood Education is indicative of a holistic development approach for the children. Key features of both the external and the internal environment are described for the readers.

#### The Learning Environment – Outside the Classroom



The outdoor environment is safe, clean, attractive, and spacious. The school structure is carefully built with grills along the walls, big verandas on each floor, clear pathways, stairs with small steps and well-organized activity areas. Some of the specific areas outside the class include the following:

Sand and water area: A dedicated sand and water area is provided to the students where they learn about the concepts of space, texture, volume, color, etc. as well as enhance their gross and fine motor skills. The area provides children opportunities for social interaction as well as vocabulary development e.g. sink, float, pour, dry, wet, damp etc.

Play area: The children at a young age are always energetic and want to use their energies. The campus has a dedicated play area for the students and physical education is integrated with the academic programme. The students are encouraged to play various sports such as cricket, basket ball, football, etc.

Library: Modern and well stocked library is available to inculcate reading habit amongst the children. For very small children (ECE I and II) a library corner is provided in the classroom.

Learning Technology: Computers are freely accessible to small children in the classrooms so that use of technology is integrated in the child's regular daily routine. For older children a fully equipped computer lab has been set-up.

Art and Creativity: Art materials are available for children in abundance to use freely in all classrooms. Many of the small-group experiences planned by teachers involve art to develop aesthetic sense.

#### The Learning Environment – Inside the classroom:



A conducive learning environment is provided inside the classroom for the students keeping in view their developmental needs. Safety of the children has been a key consideration while planning the indoor learning space.

Classrooms space: The indoor space for small children is arranged to facilitate a variety of small group and/or individual activities, including block building, art, math, and language building. The spacious and purpose built classrooms are well-lit and ventilated and age-appropriate materials of sufficient quantity, variety, and durability are readily accessible to children and arranged on low, open shelves to promote independent use by children.

Classroom Furniture: The furniture in each class is developed according to the age group and need of the students. The table-chair arrangements as well as floor rugs are provided for various types of activities. The furniture is wooden and very light so that it is easily movable according to the type of activity.

Individual spaces for children to store their belongings: Each student is assigned a drawer to put his/her belongings particularly books and copies. For easy identification the photograph of each child is placed on the drawer.

Thus the Fatimiyah School of Early Childhood Education provides an appropriate physical environment that aims to foster optimal growth and development of children through extending opportunities for exploration and learning.

## Recommended Readings by Riffat Rashid



**Children and their Environments: Learning, Using and Designing spaces\*** *By: Christopher Spencer and Mark Blades, University of Sheffield* This fascinating book examines theories of children's perceptions of real world spaces that children live in, explore and learn from. These include classrooms, playgrounds, homes and yards, towns, communities, countryside, natural environments, and the wider world. An international team of authors have compared the experiences of children from different cultures and backgrounds. This book will appeal to environmental and developmental psychologists and geographers, and also to planners by linking research on children's understandings and on their daily lives to recommendations for practice.



## Children's Participation: The Theory and Practice of Involving Young Citizens in Community Development and Environmental Care\*

The book emphasizes that all children can play a central and lasting role in sustainable development if their genuine participation is taken seriously and if communities recognize their developing competencies and unique strengths. Using detailed case studies from urban and rural, poor and middle-class communities in both the developed and developing worlds, and including photos, figures, tables and boxes, this guide introduces the organizing principles, successful models, practical techniques and resources for involving children in environmental projects. It is recommended reading for environmental NGOs, policy makers, teachers, youth workers and community leaders who work with children.

#### Saaf Saaf Duniya

Educating people about the environment is indeed vital, especially in this time and age. The series of Urdu books titled "Saaf Saaf Duniya" (Clean Earth) do just that and are aimed at a younger audience that is, for students of grades 1 to 5. The series consists of 5 books which further feature different stories that revolve around various themes intersecting at the central idea of keeping the environment clean and green. The different stories in the series are meant to entertain and educate the children at the same time. More specifically, the stories cover such topics as cleanliness, respecting the national flag, recycling, the importance of trees, environmental life cycle and so on, making the series guite a valuable asset for young learners.



#### **The Elementary Safety Book for Children\***

This book should be read with children between the ages of 6 and 10 years and is set up as an adult/child activity book with puzzles, games and stories to teach children all the safety basics while they're having fun. It covers a wide range of practical safety tips including what to do if you're at home alone, what to do in case of emergency, safety at home and outside, fire and water safety, poison, electrical, farm and city safety.

\*Note: All books mentioned above can be ordered online from www.amazon.com

## **Online Resources**



## Road Safety Education www.sef.org.pk/rsep/rsep.asp

The first website on road safety education in Pakistan, safetywise aspires to making educational resources readily available to students, teachers, parents and general public. Interesting stories, activity booklets, teacher guides and a number of other learning resources are available which can be used for integrating road safety education in classrooms. The website was developed as part of the Road Safety Education Program (2006-07) which was implemented by the Sindh Education Foundation across 100 schools of Sindh province.



## Chemicals in your Child's Environment – Hidden Dangers http://pediatrics.about.com/ od/hiddendangers/a/0108\_e nv\_chmcls.htm

Read about those uncommon hazardous chemicals that exist in your child's environment and you are often unaware of. For example certain compounds in paints and BPA in plastic products children use can be extremely dangerous and should be avoided.



## Safe, Healthy Environments http://www.phacaspc.gc.ca/dcadea/allchildren\_touslesenfan ts/she\_main-eng.php

A wealth of information put together by injury prevention specialists to help families provide a safe home environment for their children.







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Pakistan's Pioneer Website on Early Childhood Development **WWW.ecdpak.com**