

Raising Smarter Children

Creating an Enriched Learning Environment

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There are many ways to be smart. And there are many ways to enrich your home to develop your child's multiple intelligences. In this brief article, one in a series of articles on **Raising Smarter Children** for **Kagan Online Magazine**, we will focus on how to boost your child's intelligence by creating a home environment conducive to learning. Think of it as *Feng Shui* for the brain — just more interactive.

Eight Ways to Be Smart

Dr. Howard Gardner, a Harvard cognitive psychologist, is the originator of the most widely known theory of Multiple Intelligences. Intelligence is not one thing, claims Dr. Gardner. Intelligence is multi-faceted. Dr. Gardner identified eight types of intelligence:

Intelligence	Common Name	Associated Skills
Verbal/Linguistic	Word Smart	Written, Oral Communication Skills
Logical/Mathematical	Logic Smart	Analytic, Quantitative Skills
Visual/Spatial	Picture Smart	Design, Color, Spatial Skills
Musical/Rhythmic	Music Smart	Musical and Rhythmic Skills
Bodily/Kinesthetic	Body Smart	Physical, Movement, Non-verbal Expressive Skills
Naturalist	Nature Smart	Understand, Appreciate all Forms of Nature
Interpersonal	People Smart	Understand others, Leadership skills
Intrapersonal	Self Smart	Understand own Feelings, Values, Goals



A brain-friendly household is an enriched environment — an environment that engages your child's many ways of learning and understanding.

Enrichment and Brain Development

In classic studies, brain scientists have raised rats in different types of environments. The enriched environments were filled with toys and other rats. The impoverished environments were solitary, with no toys. Can you guess which rats were smarter? You guessed it. The rats that were raised in enrichment environments. They could figure out the twists and turns of a maze faster and better than the deprived rats. Perhaps even more important was what happened to their brains. Scientists found a number of changes to the structure of their brains. The brains of rats raised in the enriched environments were much more fully developed and actually weighed more!

Recent brain research on primates and humans confirms the principle of neural plasticity. That is, following enriching experiences, our brains become more fully developed. What this means is that we can actually grow better brains in our children by providing them with enriching experiences!

Enriching Your Home Environment

Because there are many different ways to be smart, there are many ways to enrich home learning environments to raise smarter kids. We can create a home environment for our children that encourages their multi-faceted intellectual growth.

The following are suggestions to make your home environment conducive to the development of the full spectrum of intelligences. The suggestions are categorized by the eight intelligences. The best part of enriching your home environment is that your child already has the most valuable, most sophisticated educational toy available —you!

As a parent, you are the engineer of many of your child's learning experiences. Intelligence is constructed as your children interact with their toys, you, and each other. No matter how colorful and enriching the learning environment is, it doesn't matter if your child does not interact with it. Taking the time to play and learn with your child is much more important than what is in your learning environment. The following suggestions are offered as ideas to provide a well-balanced approach to engage your child's many ways to be smart.



Having a well-stocked bookshelf is a step forward to creating a more “Word Smart” child. Reading to your child regularly is a leap.

Eight Ways to Enrich Your Household



Verbal/Linguistic

- **Bookshelf.** One of children's favorite activities is reading. For preschoolers the bookshelf is comprised of fairy tales, simple poems, children's literature. For school-age children the bookshelf may include personal interest magazines, novels, comic books, and reference books
- **Television.** Believe it or not, the television can be a good thing in moderation. An increasing number of educational shows, educational tapes, and DVDs are available. Some television programs offer closed caption (text of the dialogue) that can be used to teach reading.
- **Writing Supplies.** Encourage your budding author with a healthy supply of paper, pencils, pens and crayons.



Logical/Mathematical

- **Math Instruments and Playthings.** Let your child explore with the compass, ruler, yardstick, scale, and magnifying glass.
- **Tools.** Tools engage the logical and bodily intelligences. Each tool has a logical use. Encourage you child to learn the uses of the tool and better yet, help you fix things around the house.
- **Computer.** Your youngster will enjoy pointing and clicking his or her way around simple learning games. Your school-age child may be ready to create a database-driven Website. You will develop career skills and your child's logical organization and structure.



Visual/Spatial

- **Arts and Crafts Supplies.** It's amazing what you and your child can create with some simple supplies. With just some paper, crayons, scissors, and glue the possibilities really are limitless.
- **Painting Supplies.** Awaken the Picasso within your child. Start with finger paints. Move up to water paints. Bring on the acrylics. Then graduate to oils.
- **Illustrating and Drawing Software.** Computers make the impossible possible. There is a whole industry of computer illustration, photo manipulation, and animation software. Many are even available online for free!



Musical/Rhythmic

- **Music Player.** Studies have found children who listened to Mozart music for ten minutes performed better on spatial tasks. Dubbed, the "Mozart Effect" this line of research suggest that certain types of music can actually make kids smarter.
- **Instruments.** Research suggests playing an instrument not only enhances musical intelligence, but promotes the development other brain areas. Some of the most common household instruments include the piano, violin, recorder. Drums and other percussions are only for the very committed parents.
- **Karaoke machine.** You supply the music machine, your kids bring the vocals.



Bodily/Kinesthetic

- **Costume Closet.** Our physical dress and appearance transforms and transports us. Promote your child's imagination and actor within with costumes and makeup.
- **Sporting Equipment.** Most sporting equipment and constructive playthings will help your child develop eye-hand coordination and develop gross motor skills. In addition to being fun, physical activities develop the cerebellum, the part of the brain that controls some motor functions also plays a role in memory, decision-making emotion, attention, spatial perception and language.
- **Fine Motor Equipment.** Develop fine motor skills with sewing, knitting, tying, weaving, keyboarding, drawing or other equipment that requires fine manipulation of their fingers (or toes).



Naturalist

- **Fish Tank.** Want to really stretch your child's naturalist intelligence? Try your hand at a salt water tank. Careful your Moray Eel doesn't eat your Yellow Tangs.
- **Pet.** Caring for a pet is a terrific way to bond with an animal, plus pick up on insights to animal behavior and even our own. Each different species or breed has unique characteristics and different pets have different personalities.
- **Garden.** A flower or vegetable garden is the royal road to a green thumb. But if you're looking for an easy way to teach, go for herbs in a pot.
- **Observation Equipment.** Look up with a telescope or down with a magnifying glass or microscope. Give your child an insight to the cosmos and life itself.



Interpersonal

- **Telephone.** Ever notice that the most people-smart people are constantly on the telephone? Allow supervised telephone time.
- **Computer.** E-mail and instant messaging are the new medium for written communication. Give your child a jumpstart on the communication superhighway.
- **Games.** Play games with you child. Young children enjoy hide and seek, older children enjoy board games which allow a wide range of ways to interact.
- **Play Area.** Interaction with siblings, parents, and a variety of other children is an excellent way to develop people skills. Parents can help children develop important social and personal skills by allowing, and sometimes guiding, children during playtime.



Intrapersonal

- **Quiet Area.** Sometimes kids just need alone time. Time without interaction. Time without distractions. Time to listen to nothing but their own thoughts. Is there somewhere in your home your child can go to be alone? Perhaps that special place is in his or her own room. Or maybe in the garden.
- **Hobby Station.** Encourage your child to develop their own hobby — something they can do on their own. Whether it is photography, journaling, stamp or coin collecting, drawing, or listening to music. If they find satisfaction in an alone-time hobby, they are developing their intrapersonal intelligence.
- **Desk Space.** A desk area also allows for alone time with the advantage of a writing surface and space to store personal items.

Reviewing the list of resources you might think, "I already have a lot of this stuff." If that's the case, great! Your child's living and learning environment is already well-equipped. If you are missing some resources in the key categories of intellectual development, you may want to take this imbalance into consideration as you select your next gift or plan your next investment in your child's education and brain development. Many of the suggested resources are available at little, and some even at no cost.

Remember: the most important element in raising a smarter child is **altering his or her experiences within his or her environment**, not merely altering the environment itself. It's what your kids do and what you do with them, not what they have.