## WHY MUSIC SO EARLY?

Infants and toddlers need to hear and feel music early on if they are to begin to make sense of it. If, however, certain neurological pathways are not built early, they will become increasingly difficult to build later. The time to build and maintain those information highways is during the first months of life.

John Feierabend compares the child's developing mind to growing vegetables. For example, growing a brain might be compared to nurturing a tomato crop. Initially we plant more seeds than we expect to use. After the seeds have begun to grow, we thin out those which show the least promise. This allows the more promising plants sufficient space and nutrients to prosper. Seeds which are neglected in the early stages of germination are not ever likely to recover fully. While the plants should never be neglected, it is more detrimental to neglect them for two weeks in the beginning stages of development than to neglect them for two weeks in mid-summer.

The young child's mind is, in many ways, like that tomato crop. Initially the brain produces an abundance of neural pathways. Those pathways that show the most promise are maintained and intensified. Those that are neglected, atrophy. It is during the first two years of life that the brain will begin to determine which seeds to nurture-according to the available experiences. In his landmark book, *Frames of Mind*, Howard Gardner reports

In human beings the density of synapses increases sharply during the first months of life, reaches a maximum at the ages of 1 to 2 (roughly 50% above the adult mean density), declines between the ages of 2 and 16, and remains relatively constant until the age of 72.

In Endangered Minds, Jane Healy adds:

The strength and efficiency of synaptic connections determine the speed and power with which your brain functions. The most important news about synapses is that they are formed, strengthened, and maintained by interaction with experience.

It is much more difficult to reorganize a brain than to organize it in the first place. Organization inhibits reorganization. Carving out neuronal tracks for certain types of learning is best accomplished when the synapses for that particular skill are most malleable, before they "firm-up" around certain types of responses.

In the same book Healy presents the concept of "two directional" thinking and provides a considerable amount of support for the need to evoke responses from children. Information that only travels "in" (as in most television viewing) does not promote the necessary brain activity to nurture synaptic development. Learning which evokes responses from the child promotes the appropriate brain activity that stimulates synaptic growth. Healy quotes Phyllis Weikart as follows:

Feeling (the beat) has to be independent for the child; you can't make it loud and you can't make it visual as in videos; it has to be felt. Unless the child is rocked, patted, stroked, danced with at the same time, unless adults are creating the feel of the beat for the child who is hearing it, that feel of beat does not develop.

When these fascinating concepts are applied to music learning it is easy to realize the importance of appropriate musical experiences during the first two years. During these years, when the mind is making sense of the world, musical syntax is developing. Beat, meter, rhythm, tonality, and expressive sensitivity should be presented. Would you not talk to a baby simply because he/she cannot talk? Then why should we wait to introduce music until the child can sing and move? And while 100 years ago it was more common for infants and toddlers to receive precisely the correct kind of nurturing, today's parents of infants and toddlers need to be re-introduced to the wonder-full songs and rhymes that can develop their children's musicality. Classes for infants and toddlers with their parents can provide an opportunity to share songs and rhymes that are both excellent examples of music literature and are appropriate for developing the musical mind.

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