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English 2A

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In a world that revolves around “better, faster and stronger” is it surprising that we are so obsessed with advancing our children at such a young age? Music surrounds us wherever we go. A common saying is that a child’s brain is like a sponge, ready to soak up anything thrown their way. A human brain is ready for anything starting at the crucial fetus stage. Brain development is imperative the first few years of life. In the first few years of life the brain begins to develop and form connections, these years are among the most important. A fetus inside the mother’s womb can take in sound, which starts the early stimulation and development of one’s brain. A child, whether inside or outside of the womb, has a great ability to hear sounds, and given the right type of music, it can have a positive effect on children.

Classical music can have powerful effects on children even before birth while inside the mother’s womb. Recent studies show that:

> Children exposed to classical music in the womb show a positive change in physical and mental development after birth. In this experiment, fetuses were exposed to 70 hours of classical music during the last week of pregnancy. When studied at six months, theses babies were more advanced in terms of motor, linguistics and intellectual development than babies who received no musical stimulus during pregnancy (Robledo).

The fetus

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> Can hear at approximately six months of development and receives sound information from the outer regions of the mother through its own auditory system. With support from touch, taste and smell, hearing plays a prominent role in connecting the outside world while we are in the womb (Federico)

The positions of a child inside the mother's womb can effect how clearly the fetus can retrieve sound. Stimulation varies when the fetus changes position in the uterus (Federico). Sound vibrations are also affected by the "location of the hipbones of the mother" (Federico). One of the most effective positioning of the fetus to receive sound is when "fetuses are in the breech position they will receive more intense intrauterine sound. This is a result of the proximity of their auditory system to the sounds of the mothers heartbeat, as well as the circulatory sounds of the placenta, among other noises and sounds" (Federico). Slight movements or abrupt movements can show the recognition of sounds and how "rhythm exists in the spontaneous movements of a fetus, in intrauterine breathing movements, heart rate, sucking and kicking, in state of alertness and quite, and partly in reaction to what is heard, for example the beating of the mother's heart, the hum of blood pumping through her arteries and placenta, the flow of air in and out of her lungs, and her voice" (Robledo). You can track the type of music your child enjoys because "babies breathe in time with the music they enjoy" (Robledo).

Babies at birth are greatly affected by the usage of music whether it is music introduced while outside the womb or it is music remembered from inside the womb.

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When babies who were “prenatally stimulated hear familiar music, they usually turn their heads in the direction where the music is coming from” (Federico). Babies who hear familiar music:

> change their facial expressions while listening to theses rhythmic sound variations, perhaps even smile and increase their sucking. Their pupils might dilate and eyed begin to stare for 4 to 10 seconds. They will stretch their small fingers and toes. Cardiac rate will probably slow down a bit and breathing become more regular (Federico).

Babies who interact with a lot of sounds “will not necessarily respond to repetitive sounds, but will probably respond to sounds with melodious variations”(Federico). Infants have the ability to “distinguish the intensity, tone, and pitch of sounds and be more alert and sensitive when the stimulus is present”(Federico). While a new environment is presented at home “we can observe the advantages of the previous prenatal stimulation. Music will help to organize this development stage” (Federico). If we play for an infant the

> “background music that was played during the pregnancy, while the baby is resting, these melodies will recall intrauterine listening, giving a feeling of security and trust. It is suggested not to sing the same song while feeding and bathing, lest the different feelings be confused. It is possible that one night if

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> babies hear the same song they will be unable to interpret if this means they will be fed or bathed"(Federico).

Newborns have the ability to recognize music played while in womb even perk up or fall asleep when hear a familiar song (Brody).

It is very important to choose the right type of music for your baby. The effect that music had on a child whether inside or outside of the mothers womb all depends on the type of music and how it is being transferred towards the infant. Choosing the wrong music can have negative effects. Important qualities must be remembered while playing music and how "presenting your baby the right mix of styles, melody, harmony and rhythm, it is believed that the brain is stimulated into creating more connections, providing your baby a head start in life"(Brody). The right type of music is implied for when the baby is both inside and outside of the mother's womb. Characteristics for negative music are "recordings which are too fast and too intense to be absorbed by a baby in a good way"(Brody). However, changing the orchestration and tempo, classical music can be successfully adapted for babies, offering wonderful benefits (Brody). A fetus can hear at "approximately six months of development so it is recommended you begin playing music at this time for short periods on a daily basis"(Brody). It is important to "try to have at least one parent present, in order to see your baby's reaction to the music and for you to respond to, and interact with your baby"(Brody) It is important to limit this time to no more than 20-30 minutes each time, and a maximum of one hour a

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day (Brody). Although music played in a correct way can be very beneficial to your child, there is such a thing as too much music at one time. Keep time limits. Too much exposure will give your baby too much information to process. Constant exposure to music could ultimately make your baby see music as an unimportant sound"(Brody). Music played at home must not be to "loud and must be played with no other distractions"(Brody) While the fetus is inside the mothers womb there are two ways you can play music for your child. You may "place old fashion headphones on stomach-limit time to no more than an hour a day, not to loud, since the music is up so close and may over stimulate the baby"(Robledo). Another way is to play music as a background sound; ensuring that the music is not too loud and not causing over-stimulation but the fetus can still hear the music being played (Robledo). Although classical is one of the better-known types of music for making a positive effect, "listening to cheerful music can stimulate antibody production, the chemicals that fight infections. Therefore, it may be wise to play cheerful music when coughs and colds are circulating" (Hicks).

> You have the ability of seeing the reaction that babies have toward the music by: "looking into your baby's eyes to see if a connection has been made with music. Music should be captivating and put your baby in a good mood. Your baby should also interact with the music and be engaged when the song you are playing is active and stimulating"(Brody)

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Playing music on a daily basis “helps reduce the mental and physical stress a mother is experiencing due to the pregnancy, reducing your stress also reduces your baby’s stress, which makes for a healthier birth”(Brody) Playing the same music from birth, your baby will recognize it bringing pleasant association and it will bring the baby back to the safe period inside the womb. The music therefore will relax and comfort your baby (Brody). According to Dr. Brewer, research shows that musically stimulated babies seem to develop more quickly, talking up to six months earlier, and have improved intellectual development (Robledo). “This development refers to the increase of spatial understanding needed to complete suck tasks as jigsaw puzzles. Spatial intelligence is also imperative in activities such as higher brain functions of mathematics, music, and chess”(Robledo). There’s plenty of research showing how “classical music has a stimulating effect on the body and mind, which in turn can lead to improve physical and emotional health, and can help the development of new born babies”(Robledo).

Infants have a lot more going on than we can by just looking at them. Infants have the ability to comprehend so much when they’re so little. Every sound that a baby is opened up to helps the development of that child throughout his or her life.