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Master's Orientation

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EndNote Project

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Alternative – Flexible Seating Action Plan

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Brain research confirms that physical activity – moving, stretching, and walking – can actually enhance the learning process. Eric Jensen in his article *Moving with the Brain in Mind* protests against the sedentary classroom style and offers a better way to spend the long days in our classrooms, not only for students, but for teachers. Teachers have so much to accomplish these days that there is no time to lose in moving around. If teachers only knew that moving and taking breaks would help students to better focus, learn and perform; they will consider alternative seating in a blink of their eyes!

He proposes the following good reasons to have students move more to learn more:

Circulation: Movement increases heart rate and circulation, which often increases performance. Stretching is especially important when students begin class in sedentary positions. More oxygen goes to key brain areas; the eyes can relax a moment, which prevents eye strain, and the body gets a break from musculoskeletal tensions. Increased physical arousal narrows our attention to target tasks.

Episodic encoding: Movement gives learners a new spatial reference on the room. The brain forms maps, not only on the basis o the scenery, but also from the body's relationship to the scenery.

A break from learning: Our brains are designed to learn short bursts of information followed by time to process the information. Evidence suggests that time spent not learning new content is very important. The human brain cannot learn an unlimited amount of explicit content. Movement can give learners a much-needed break.

System Maturation: as we grow up, our brains change and grow, too. Students experience pruning, neurogenesis, and myelination. In some cases, neural tissue doubles in size in a given area of the adolescent brain, whereas other areas shrink. If anything, we need more, not fewer, breaks from learning. "Young children in particular may require more breaks form seat work" (Bjorklund & Brown, 1998, pg. 604)

Good chemicals: certain kinds of movements can stimulate the release of the body's natural motivators. Two of the best are noradrenaline and dopamine. These energizers wake up learners, increase their energy levels, improve their information storage and retrieval, and help them feel god. A very short break or energizer increases arousal, but longer breaks allow the learner to be aroused and then come back to a more sustainable level of energy.

Too much sitting: although people can learn while sitting, the typical notion of sitting in chairs for an extended time may be disguised. The typical student who sits much of the day runs the following risks, poor breathing, strained spinal column and lower back nerves, poor eyesight, and overall body fatigue. We expend much energy just to maintain a posture, even a bad one. Sitting in any chair form more than a short (10-minute) interval is likely to have negative effects on the physical self, hence the mental self, and at a minimum, reduce the awareness of physical and emotional sensations. This creates fatigue, which is bad for learning. Students may seem restless and unable to concentrate – or worse, they may become undisciplined – when the real problem is bad ergonomics and lack of movement. We now know that today's chairs do not offer enough flexibility to optimize learning. As far back as 1912, Maria Montessori described the impact of chairs: "When chairs were used, children were not disciplined, but annihilated" (Montessori, 1986, pg. 797).

Benefits of Alternative Seating

Teachers need to engage students in a greater variety of postures, including walking, lying down, moving, learning against wall or desk, perching, or even squatting. A slanted desk means less fatigue, better concentration, and less eye straining, better reading. Students experience less painful electromyogram activity in the lower back when they use slanted work surfaces instead of flat ones (Eastman & Kamon, 1976).

Teachers should regularly engage students in movement. "The data suggest that exercise is the best overall mood regulator" (Thayer, 1996, pg. 129). The brain learns best and retains most when the organism is actively involved in exploring physical sites and materials and asking questions. "Merely passive experiences tend to attenuate and have little lasting impact" (Gardner, 1999. pg. 82). Students can use the body to learn: learners can stand up and demonstrate concepts, such as big or small, tall or short, quick or slow. They can have more fun demonstrating such words as crawl, roll, and surprise. Clapping or stomping out rhythms, words, or beats can make class more entertaining.

Active learning has significant advantages over sedentary learning. The advantages include learning in a way that is longer lasting, better remembered, more fun, age appropriate, and intelligence independent and that reaches more kinds of learners. Active leaning is not just for physical education teachers – that notion is outdated. Active learning s for educators who understand the science behind the learning

What does Alternative/Flexible Seating look like?

Alternative seating strategies include standing desks, floor seating, floor height or raised tables, scoop chairs, sit cushion, mats, bean bags, and therapy/exercise balls and many other objects that can foster alternative seating. Seating options permit fidgeting and movement in place

without disrupting peers, and without need for whole-class breaks in instruction, providing a viable alternative for teachers.

Conclusion

Alternative seating is fun for students and needed for teachers. Students deserve having seating options; they spend so many hours in school. Most if this time seated and asked to remain seated at all times. They do need a routing and modeling as to how to use alternative seating, they need to become responsible and aware of their learning process and privileges, as well. I am sure that alternative seating will be welcomed by my students and will feel thankful for people who have them and their learning as a priority.

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