

Sample Letter to Educators: Mitochondrial Disorder and its Implications for Teachers of Mainstreamed Students

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Ms. Maccione was kind enough to share a letter that she has used in her schools.

Mitochondrial disorder, simply put, is the lack of energy in a cell. The mitochondria are like tiny “power plants” within a cell’s cytoplasm. Their job is to supply each cell with energy. In a healthy person, they produce oxygen to convert fatty acids, carbohydrates and proteins into energy. In someone with this disease, this process is lacking and instead of getting energy, they will be fatigued in 3 main areas of the body - the heart, the brain, and the skeletal muscles. Damage to the mitochondria results in chronic fatigue. Having lack of oxygen in these 3 major areas can impair a child’s ability when in the mainstream classroom.

As we know, students do enter the regular education classroom with IQ scores anywhere from 70 - 80 to 100. These students do not qualify for exceptional education programs and are considered to be in what we call the “gray area” of learning. Students with mitochondrial disorder may have these similar IQ scores, although these scores may not be a true indication of IQ. If their brain is fatigued they may not be able to think or react quickly in testing situations. These children tire more easily and may not always be able to physically keep up with their workload. We need to first learn about their condition and make common sense adjustments in the classroom. (This rule of thumb should apply to any handicapping condition). As teachers and professionals we need to keep “the main thing, the main thing.” When we are executing a lesson on adding double-digit numbers, what is our goal? Our goal is for each student to master learning how to add double-digit numbers.

When we are confident that mastery has taken place and the practice worksheet is passed out to the class, the student with mitochondrial disorder may do much better answering the first 10 problems, or 10 of your choice rather than all 50 like the rest of the class. He will finish at the same amount of time as the others because of the fatigue factor, but will leave the lesson with a sense of accomplishment and the mastery, which was your goal in the first place.

By no means should these students or any student be “let off the hook” from learning what is required in each subject area. Their individual learning styles need to be taken into consideration when assessing mastery of a skill. These students tend to be auditory learners. When taking a spelling test, they may do better orally. They should be required to know all the spelling words but it may be difficult for them to pass if they have to write them all out on a timed test.

The teacher could set up what is called an “adjusted day” during which the student works in each subject area, in combination with their learning style, to show the educator that they know the material. The oral spelling test is an example of this. Using markers, for say, math, because of the easy flow, is much more helpful than using a pen or pencil. Some do well using a hand held tape recorder to speak reports into. When walking to another classroom or activity, it may be necessary to have a “buddy” to carry books. Often these students will be slower in line and having a friend there will be helpful to the disabled student as well as encouraging compassion in the non-disabled student.

These special situations may not be necessary for each subject because time of day may be a factor, but it may be necessary with some and should be considered when educating these students.

Some educators may feel that these students should be in the low reading or math group since they are slower, but their slowness is often due to fatigue only and not a reflection of their cognitive abilities as stated above. By being in the middle or higher group, they would learn and retain more since many students, as previously mentioned, are

such auditory learners. They will pick up more just by listening to others.

We as educators just have to get creative and again use common sense to educate any special needs student without going to the extremes of pity or excusing them from work. They have the right, like anyone else, to reach their fullest potential.

Having a special needs student in your classroom is a wonderful learning opportunity. It will enhance your classroom in ways you never have imagined. You and your other students will be better for it. You just have to be willing to grow and learn.