

**Department of Student Services  
Newton Public Schools**

MEMO

TO: Dr. David Fleishman, Superintendent of Schools  
School Committee for Newton Public Schools  
FROM: Dr. Judy Levin-Charns  
Assistant Superintendent for Student Services  
DATE: December 12, 2011  
RE: Trends in Disabilities in Special Education

**Trends in Disabilities in Special Education**

The School Committee asked the Department of Student Services to update its June 2010 report on current trends in disabilities in special education in the Newton Public Schools (hereafter NPS). The June 2010 report included trends in disabilities in special education in NPS, district and state disability data and data from out-of-district placements from 2003 to 2009. Data analysis indicated an increasing number of students in four disability categories: autism, communication, health, and neurological. The disability category specific learning disability decreased over time, declining in each of the five years. Implications for planning were presented. These data and analyses are updated in this report through October 2011.

In the period since the 2010 report, NPS implemented the following actions to ensure that students with a wide range of needs are successful in making effective progress in the least restrictive environment.

- Providing on-going professional development to general and special educators to support their understanding of working with students with complex needs, including participation in professional learning communities. This is to ensure that all students have full access to the general education curriculum. In 2010-2011 elementary special education teachers were provided professional development in the areas of literacy and reading comprehension. Regular and special educators were trained in co-teaching and tiered instruction. This year regular and special educators are participating in workshops related to literacy and science integration for grades K-1-3-4-5; literacy and social studies integration for Grade 2; and co-teaching, differentiated instruction, tiered instruction, and special education laws and regulations.
- Utilizing the assistive technology specialist to assist students across a range of disabilities and school levels. The assistive technology specialist continues to provide direct support to students and consultation to Teams to aid students in accessing the curriculum, and to provide professional development to teachers and aides.
- Developing a comprehensive system for providing transition supports and services for students with disabilities specifically in the area of job development. In September 2010 a job coach was hired to support students in preparing for employment. The job coach and transition specialist collaborate and work with Teams to ensure that students access appropriate resources for the transition from school to adult life;
- Developing a program for students with autism spectrum disorders at Newton South by assigning a facilitator to coordinate services. This program began in September 2011;
- Providing additional direct reading intervention at the high school level. Two reading specialists were hired in September 2010 and a third was hired in September 2011 (total FTEs 2.1);
- Evaluating the effectiveness of co-taught classrooms across the district and exploring options for expansion. In September 2010 six co-taught classrooms (across five elementary schools) were created. In September 2011 this was expanded to fourteen, with eight additional classrooms across seven elementary schools. Co-taught classrooms provide services to a neighborhood cohort of students with a variety of learning and social needs at an identified grade level. This model allows for increased flexibility in grouping and scheduling, making it possible for students with special needs to receive instruction from a highly qualified teacher. Program effectiveness is measured by student achievement on grade level benchmarks and progress towards IEP goals, input from teachers and parents, and overall program evaluation by building principals and co-directors of elementary student services;
- Building additional supports for students with social-emotional-behavioral needs at all levels through restructuring existing programs. Central High School, now in its third year, continues to provide an in-district alternative for students with emotional and behavioral needs who may have otherwise been placed out-of-district. Space has been renovated to allow for two additional classrooms.

Section I - Disability Data October 2007 – October 2011

Table 1 below presents the total number of students with a disability in each category of disability as reported to the Department of Elementary and Secondary Education (DESE) in October of each year. See Appendix A for the disability definitions per the DESE website. The table below provides the count of students in each disability category and the percent change in numbers from each prior year and overall 2007 to 2011.

**TABLE 1: Count of Students in NPS by Disability Category**

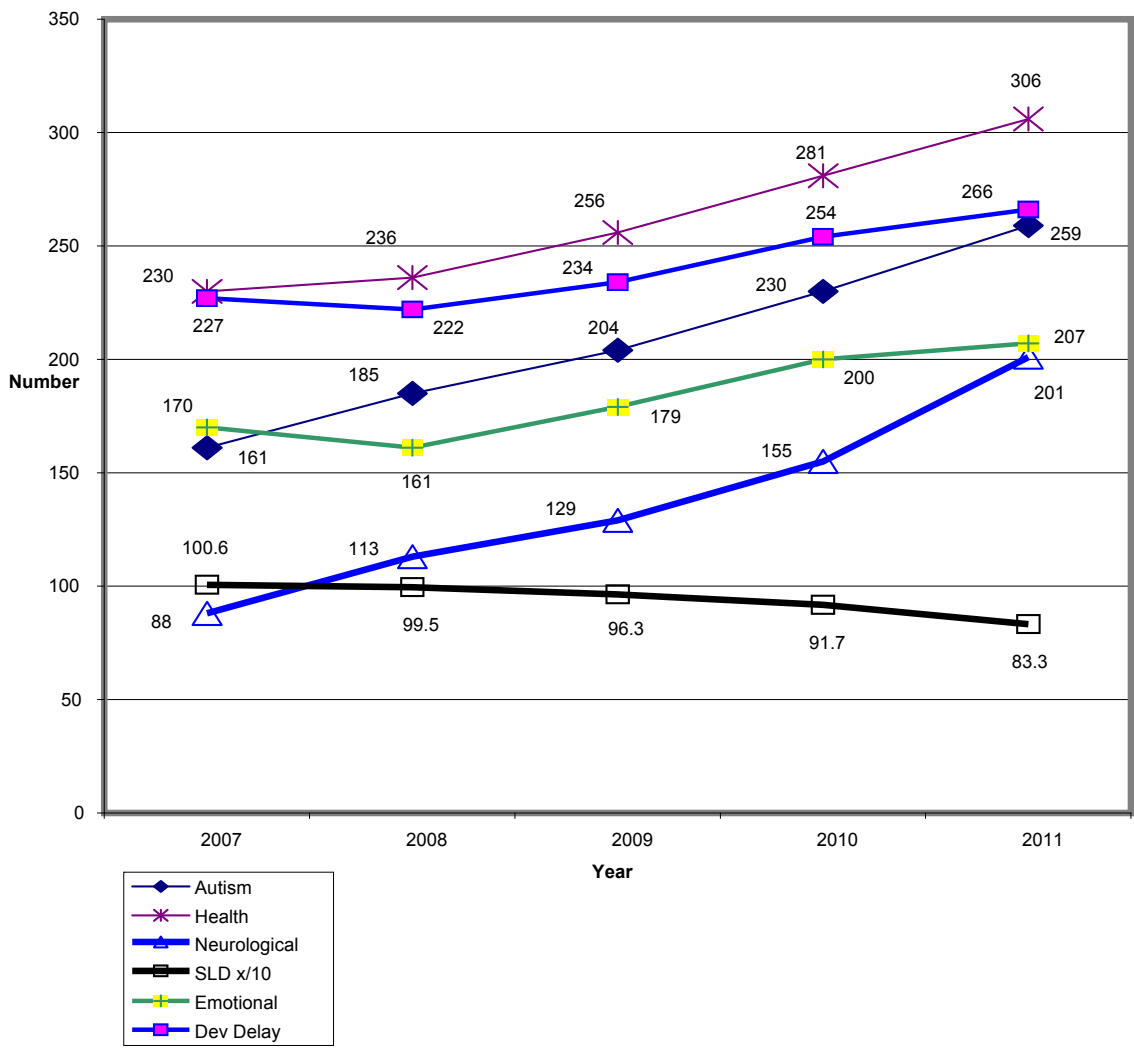
<b>Primary Disability</b>	<b>2007</b>	<b>% change from 2007</b>	<b>2008</b>	<b>% change from 2008</b>	<b>2009</b>	<b>% change from 2009</b>	<b>2010</b>	<b>% change from 2010</b>	<b>2011</b>	<b>% change over four-year period</b>
Autism	161	15%	185	10%	204	13%	230	13%	259	61%
Communication	254	3%	262	2%	268	-3%	261	14%	297	17%
Developmental Delay	227	-2%	222	5%	234	9%	254	5%	266	17%
Emotional	170	-5%	161	11%	179	12%	200	4%	207	22%
Health	220	7%	236	8%	256	10%	281	9%	306	33%
Intellectual	50	-10%	45	-9%	41	9%	45	16%	52	4%
Multiple Disabilities	32	0%	32	-16%	27	4%	28	-4%	27	-16%
Neurological	88	28%	113	14%	129	20%	155	30%	201	128%
Physical	16	-19%	13	-15%	11	36%	15	-36%	11	-31%
Sensory/Deaf-Blind	2	0%	2	0%	2	-50%	1	0%	1	-50%
Sensory/Hearing	16	-6%	15	-7%	14	-14%	12	42%	17	6%
Sensory/Vision	7	-14%	6	33%	8	0%	8	13%	9	29%
<i>Specific Learning Disabilities</i>	<i>1006</i>	<i>-1%</i>	<i>995</i>	<i>-3%</i>	<i>963</i>	<i>-5%</i>	<i>917</i>	<i>-9%</i>	<i>833</i>	<i>-17%</i>
None Specified			2							
<b>Total</b>	<b>2249</b>		<b>2289</b>		<b>2336</b>		<b>2407</b>		<b>2486</b>	

A student may demonstrate more than one disability; however, it is the Team’s responsibility to determine the primary area of disability. The Team can indicate a secondary and/or tertiary disability that are all taken into consideration when developing the student’s Individual Educational Program (IEP). The primary disability is the disability that is reported to the state. It is important to understand that within each disability category there is a wide range of severity of need from low, moderate, to high level of need. For this reason each student’s program is individualized to meet his or her level of need and to provide a free and appropriate education (FAPE).

The greatest changes over the five years 2007 to 2011 were in neurological disabilities (128%) and autism (61%). Substantial changes also were seen in health (33%), emotional disabilities (22%), developmental delay (17%), and communication (17%). These disability categories continued the increasing trends identified in the previous report (June 2010). The greatest percent increases in the previous report (June 2010) were in neurological disorders (122%), autism (117%), health (91%) and communication (59%). Substantial increases also continued to be seen in autism, health, and communication but the magnitude of these increases were not as large in the most recent comparison (61% vs. 117%, 33% vs. 91% and 17% vs. 59% comparing 2003 to 2009 and 2007 to 2011 for the three disabilities respectively). Developmental delay (17%) and emotional disabilities (22%) increased more in the 2007 to 2011 period than in the 2003 to 2009 period (8% and 1%, respectively). Specific learning disabilities continued to decrease at approximately the same rate as reported in 2010.

Figure 1 shows the number of students with selected disabilities for years 2007-2011 (for purposes of display the graphed number of students with specific learning disability (SLD) is the actual number divided by 10). The number of students demonstrating autism and neurological disabilities continued to increase every year. These students often require multiple and intensive services to make effective progress. Additionally, an aide may be needed in order to provide these services and allow access to the general education curriculum and environment. The number of students diagnosed with specific learning disability decreased over the same time period (2007-2011). This may be a function of a number of factors such as early intervention for reading and math support, improved clarity in classification of disabilities as well as a shift in federal and state eligibility determination implemented in 2008.

Figure 1: Number of Students w/Disability by Year



Comparison to State Data

Table 2 compares disability data from Newton to Massachusetts data provided by the DESE. The comparison to state data shows that NPS' change in percent of students in each category generally parallels state trends from year to year. Of all students having disabilities, the percent of NPS students with autism spectrum disorders, health, and neurological disabilities are larger than the state percent, and both the NPS and state percents continue to increase. The percent of students with communication disabilities is substantially lower than the state percent - the NPS percent has decreased since 2007 as the state percent has increased. The decline in the percentage of students with specific learning disabilities (SLD) is also apparent both in NPS and at the state level, but NPS identifies students with SLD at a higher rate than the state.

The decline in number of students with specific learning disabilities (SLD) in NPS and in Massachusetts is consistent with the national trend; as is the increase in number of students with autism spectrum disabilities (Scull and Winkler, 2011). States vary in their definitions for the disability categories, complicating comparisons to national data.

**TABLE 2: Comparison of NPS Data to State Data - Percentage of Students by Disability Category for Students Identified with a Disability**

<b>Primary Disability*</b>		<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Autism	Newton	7.2%	8.1%	8.7%	9.8%
	State	4.6%	5.3%	5.9%	7.3%
Communication	Newton	11.3%	11.4%	11.5%	10.8%
	State	16.6%	16.7%	17.3%	17.7%
Developmental Delay	Newton	10.1%	9.7%	10.0%	10.6%
	State	9.7%	10.0%	10.1%	10.7%
Emotional	Newton	7.6%	7.0%	7.7%	8.3%
	State	8.5%	8.4%	8.4%	8.5%
Health	Newton	9.8%	10.3%	11.0%	11.7%
	State	5.7%	6.4%	6.9%	8.5%
Intellectual	Newton	2.2%	2.0%	1.8%	1.9%
	State	7.2%	6.8%	6.6%	6.3%
Multiple Disabilities	Newton	1.4%	1.4%	1.2%	1.2%
	State	3.1%	3.0%	2.9%	2.9%
Neurological	Newton	3.9%	4.9%	5.5%	6.4%
	State	3.4%	3.7%	3.9%	4.5%
Physical	Newton	.7%	.6%	.5%	.6%
	State	.9%	.9%	1.0%	.9%
Sensory/Deaf/Blind	Newton	<.1%	<.1%	<.1%	<.1%
	State	.2%	.1%	.1%	.1%
Sensory/Hearing	Newton	.7%	.7%	.6%	.3%
	State	.8%	.8%	.7%	.7%
Sensory/Vision	Newton	.3%	.3%	.3%	.3%
	State	.3%	.3%	.3%	.4%
Specific Learning Disabilities	Newton	44.7%	43.5%	41.2%	38.1%
	State	39.0%	37.6%	35.8%	31.5%
<b>Total</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\*Data from the DESE website \*www.doe.mass.edu

**Section II - Out-of-District Placements**

Table 3 presents the total number of students placed by NPS in out-of-district settings. The data are from February 2007-2011 and October 2011, and includes students who eventually return to in-district programming or exit special education due to reaching the maximum age (22).

School Level*	2007	2008	2009	2010	2011	October 2011
Early Childhood	2	0	0	1	1	1
Elementary	17	11	11	15	16	18
Middle	27	29	25	35	37	32
Secondary	74	85	91	79	90	106
<b>TOTAL</b>	<b>120</b>	<b>125</b>	<b>127</b>	<b>130</b>	<b>144</b>	<b>157</b>
# of students returning to in-district during year and aged out	11	3	7	13	8	5
Agreements	13	16	21	28	35	29
*Data from February 2007-2011 and October 2011 indicated as reported monthly to the NPS School Committee.						

The total number of students in out-of-district placements increased by 24 over a four-year period when comparing the February 2007 and February 2011 counts. The number of students in out-of-district placements increased by an additional 13, bringing the number to 157 in October 2011. This represents 6% of the total number of students receiving special education services (2486 students, October 2011 SIMS report) and 1.3% of the total number of students enrolled in NPS (12079, October 2011 SIMS report). Although there has been shifting at the early childhood, elementary, and middle school levels, the overall numbers have been relatively stable with a slight increase at these levels.

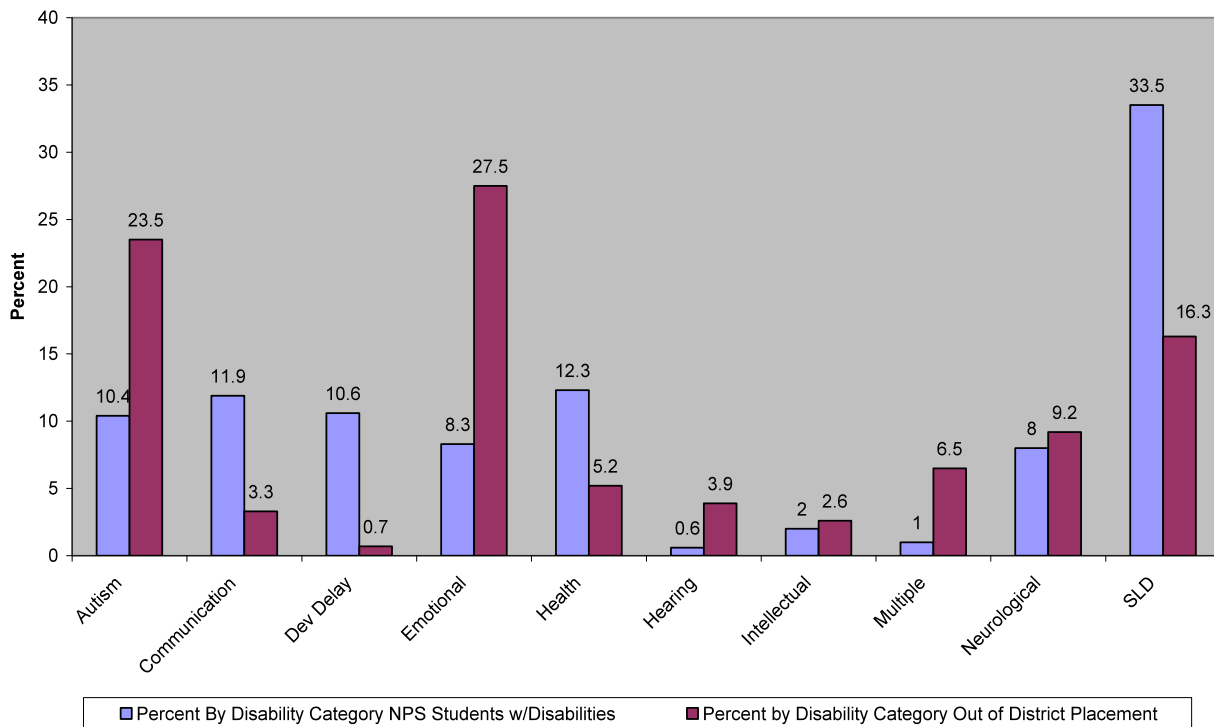
The number of students placed out at the high school level has fluctuated over the past five years, with a low of 74 students to a high of 106 in October 2011. It is anticipated that in January 2012 two students will age out (turn 22), one student will graduate, and one agreement will end. In April 2012 one additional student will age out. This will bring the number of students placed out at the secondary level from 106 to 101 students.

The number of agreements increased across all five years peaking in February 2011 to 35. However in October 2011 the number decreased to 29. It is anticipated that the number of agreements in the 2011-2012 school year will be similar to the 2010-2011 school year.

Figure 2 shows the percentages of students by disability category placed out-of-district by NPS in October 2011. These percentages are based on the total number of students placed out of district by NPS (157) as compared to the total number of students in special education in NPS (2486). Within the group of students who are placed out-of-district, the greatest percentage is students who have been identified with an emotional disability or autism. Students with emotional disabilities represent 27.5% of the total out-of-district placements, but these students only represent 8.3% of the students in special education. Similarly, students with autism represent 23.5% of the out-of-district placements and are only 10.4% of the total number of students in special education. These are students whose needs are so complex and unique that the specialized supports provided in a particular out-of-district placement makes it the least restrictive and most appropriate environment for making effective progress.

As evidence of the unique needs of some students and the level of specialization required, we continue to place students in over 50 out-of-district programs. An out-of-district placement is proposed after all available in-district services have been utilized or considered. This is an on-going process by the Team to determine a student's effective progress in the least restrictive environment and in the context of FAPE. Agreements are the result of the dispute resolution process where the parties may not agree about what is FAPE for a particular student.

**Figure 2: Percent of Students by Disability Category Placed Out-of-District by NPS and Percent of Students by Disability Category of Total NPS Students with Disabilities**



**Section III - Implications for Planning**

The Department of Student Services monitors trends in disability categories and develops programming to respond to changing needs within NPS. We anticipate that these categories will impact all aspects of planning going forward.

• **Communication and Specific Learning Disabilities**

The trend data indicate an increase in the number of students with communication impairments, and a decrease in the number of students with specific learning disabilities. From 2007-2011 the number of students with communication impairments fluctuated with slight increases and decreases, with a larger increase in 2011. We continue to anticipate the need to maintain and add highly qualified speech/language pathologists as needed as well as further develop the team of speech/language pathologists who provide services to students who need augmentative communication devices. There is also a significant increase in students diagnosed with autism spectrum disorders who require services and consultation of high intensity and frequency.

Although there is a decrease in the number of students identified as having a specific learning disability, this continues to remain the largest disability category in the district. NPS continues to develop and implement programs at all school levels providing interventions and supports for students with specific learning disabilities.

Examples include: tiered instruction as an early intervention response at all levels, the REACH program at the elementary level, the learning disability programs at the middle school level, academic support (Newton North), the Learning Program (Newton South), and academic support provided through special educators in learning centers and/or regular classroom settings throughout the district.

•Autism

The continued increase in the number of students with autism spectrum disorders over the past five years continues to have implications for programming. Students with autism spectrum disabilities present significant needs in communicating, social/behavioral interacting, and learning. The development and implementation of Applied Behavior Analysis (ABA) programming throughout all school levels has been in response to the growing number of students in need of these services. ABA services include a combination of supported inclusion, discrete trial training, small group instruction, and incidental teaching strategies. Board Certified Behavior Analysts (BCBAs) provide services to students and consultation to IEP Teams and parents. Most students with autism spectrum disorders are supported in the Neighborhood Inclusion program, in social pragmatics groups, and through other types of services and supports that are determined and provided based on individual student needs such as occupational therapy, speech/language therapy, and adaptive physical education. NPS will need to continue implementing a comprehensive autism support program at all levels.

•Emotional

The continued increase in the number of students with emotional disabilities has implications for staffing and programming. Students with emotional disabilities at all levels require the support of mental health professionals such as school psychologists, social workers, guidance counselors, and prevention/intervention counselors. In addition, as is true in most high schools, middle to late adolescence is generally a time where emotional and behavior disorders become most manifest.

•Health and Neurological

The continued increase in number of students with health and neurological disabilities also has implications for programming. Students with health and neurological disabilities may require the support of many staff members including assistants, nurses, occupational and/or physical therapists, speech/language pathologists, psychologists, and behavior specialists. It is anticipated that the number of students in these categories of disability will continue to increase, as advancements in medical technologies and interventions are continually improving the overall health and well being of children with these disabilities. In addition, students who become eligible for special education services due to deficits in their executive functioning are typically categorized as having a neurological disability.

Action Items

NPS provides individualized services and supports to ensure that students are able to access school and make effective progress in both academic and social-emotional domains. Across all areas of disability, NPS will need to address the following action items to ensure that students with a broad range of needs are successful in making effective progress in the least restrictive environment. These include:

- Identifying the need for and developing of additional programming for students with autism spectrum disorder at the middle school level;
- Identifying the need for and development of additional programming and supports for students with social-emotional-behavioral needs at all levels;
- Continuing to provide professional development to general and special educators to facilitate collaboration and to support their understanding of working with students with complex needs in order to ensure that all students have full access to the general education curriculum;
- Continuing to utilize an assistive technology specialist to assist students across a range of disabilities and school levels;
- Training staff in supporting students for transitional planning and services and building partnerships within the community for job development and with surrounding school districts to share resources;
- Continuing to evaluate the effectiveness of co-taught classrooms across the district and exploring options for expansion;
- Continuing to identify spaces for additional programming;
- Monitoring of special education expenditures for budget projections.

*Disability* shall mean one or more of the following impairments:

(a) *Autism* - A developmental disability significantly affecting verbal and nonverbal communication and social interaction. The term shall have the meaning given it in federal law at 34 CFR §300.8(c)(1).

(b) *Developmental Delay* - The learning capacity of a young child (3-9 years old) is significantly limited, impaired, or delayed and is exhibited by difficulties in one or more of the following areas: receptive and/or expressive language; cognitive abilities; physical functioning; social, emotional, or adaptive functioning; and/or self-help skills.

(c) *Intellectual Impairment* - The permanent capacity for performing cognitive tasks, functions, or problem solving is significantly limited or impaired and is exhibited by more than one of the following: a slower rate of learning; disorganized patterns of learning; difficulty with adaptive behavior; and/or difficulty understanding abstract concepts. Such term shall include students with mental retardation.

(d) *Sensory Impairment* - The term shall include the following:

*Hearing Impairment or Deaf* - The capacity to hear, with amplification, is limited, impaired, or absent and results in one or more of the following: reduced performance in hearing acuity tasks; difficulty with oral communication; and/or difficulty in understanding auditorally-presented information in the education environment. The term includes students who are deaf and students who are hard-of-hearing.

*Vision Impairment or Blind* - The capacity to see, after correction, is limited, impaired, or absent and results in one or more of the following: reduced performance in visual acuity tasks; difficulty with written communication; and/or difficulty with understanding information presented visually in the education environment. The term includes students who are blind and students with limited vision.

*Deafblind* - Concomitant hearing and visual impairments, the combination of which causes severe communication and other developmental and educational needs.

(e) *Neurological Impairment* - The capacity of the nervous system is limited or impaired with difficulties exhibited in one or more of the following areas: the use of memory, the control and use of cognitive functioning, sensory and motor skills, speech, language, organizational skills, information processing, affect, social skills, or basic life functions. The term includes students who have received a traumatic brain injury.

(f) *Emotional Impairment* - As defined under federal law at 34 CFR §300.8(c)(4), the student exhibits one or more of the following characteristics over a long period of time and to a marked degree that adversely affects educational performance: an inability to learn that cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems. The determination of disability shall not be made solely because the student's behavior violates the school's discipline code, because the student is involved with a state court or social service agency, or because the student is socially maladjusted, unless the Team determines that the student has a serious emotional disturbance.

(g) *Communication Impairment* - The capacity to use expressive and/or receptive language is significantly limited, impaired, or delayed and is exhibited by difficulties in one or more of the following areas: speech, such as articulation and/or voice; conveying, understanding, or using spoken, written, or symbolic language. The term may include a student with impaired articulation, stuttering, language impairment, or voice impairment if such impairment adversely affects the student's educational performance.

(h) *Physical Impairment* - The physical capacity to move, coordinate actions, or perform physical activities is significantly limited, impaired, or delayed and is exhibited by difficulties in one or more of the following areas:

physical and motor tasks; independent movement; performing basic life functions. The term shall include severe orthopedic impairments or impairments caused by congenital anomaly, cerebral palsy, amputations, and fractures, if such impairment adversely affects a student's educational performance.

(i) *Health Impairment* - A chronic or acute health problem such that the physiological capacity to function is significantly limited or impaired and results in one or more of the following: limited strength, vitality, or alertness including a heightened alertness to environmental stimuli resulting in limited alertness with respect to the educational environment. The term shall include health impairments due to asthma, attention deficit disorder or attention deficit with hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia, if such health impairment adversely affects a student's educational performance.

(j) *Specific Learning Disability* - The term means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think speak, read, write, spell, or to do mathematical calculations. Use of the term shall meet all federal requirements given in federal law at 34 CFR §§300.8(c)(10) and 300.309.