

**Clinical and Educational Services Analysis
for the
Amesbury Public Schools**



Amesbury Public Schools



EXECUTIVE SUMMARY

The leadership of the Amesbury Public Schools commissioned this comprehensive review of specific areas within the domain of its special education program. A clinical and educational services analysis (CESA), which contains a proprietary methodology that triangulates information gleaned from qualitative sources, quantitative analyses, and established benchmarks with respect to school-based practices, was utilized to achieve this broad operational objective.

More specifically, the qualitative analyses comprised: (1) a series of interviews with related service providers, educators, paraprofessionals, and administrators; (2) a review of documents (i.e., IEPs) to ascertain the effectiveness of educational-therapeutic interventions; and (3) an understanding of “how” special education services are delivered to students in reference to best practices, student outcomes, and Least Restrictive Environments. Quantitative analyses included: (1) multidimensional descriptive statistical analyses of the District’s related services and support personnel in reference to staffing configurations, workloads, service delivery models, and programmatic trends; and (2) financial reviews of expenditures (e.g., out of district placements, contracted related services costs, etc.) relating specifically to the provision of special education services.

Recommendations are offered throughout this document in order to promote the inter-related constructs of programmatic effectiveness and efficiencies within the contexts of student outcomes, appropriate utilization of personnel resources, and financial resources.



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INTRODUCTION

As mutually agreed upon between Futures Education and the leadership of the Amesbury Public Schools (hereafter, referred to as *the District*), the essential components of this analysis were designed to describe, analyze, and provide recommendations to improve specific aspects of its special education delivery system. These particular areas under investigation included: (1) the efficiency and effectiveness of related services within the specific domains of speech and language pathology, occupational therapy, and physical therapy; (2) the utilization of paraprofessionals; and (3) out of district placements and programs.

For ease of presentation, the content areas pertaining to the clinical related services (i.e., speech-language, occupational, and physical therapies) and paraprofessional supports will be considered together in the *Related Services* section. For the purpose of this discussion, the term *effectiveness* is operationally defined in a very specific manner in order to answer the question: *To what degree do the services under review promote optimal educational outcomes and student access to his or her curriculum?* Efficiency, for the purpose of this discussion, refers to the seminal issue of cost-effectiveness; put more the point, this component of the analysis attempted to answer the question *Is the District getting the "bang for its buck" with respect to the related services under review?*

Corresponding recommendations are provided at the end of each section and the document concludes with a global consideration of the delivery system in view of the constructs under review and the implications for short- and long-term programmatic and fiscal enhancements.

RELATED SERVICES

ADHERENCE TO AN EDUCATIONAL MODEL

Introductory Commentary

In keeping with the mandated educationally-based nature of school-based services, as presumably detailed in a given student's Individualized Education Program (IEP), related services may be best provided via an in-class, integrated model. For example, goals related to social skills may be addressed in a classroom setting where peer interactions take place in a more naturalistic context. Consequently, "all things being equal," this therapeutic-educational orientation achieves five broad objectives: (1) provision of services in the least-restrictive environment (LRE); (2) a paradigm whereby transference of skills to the classroom is more easily attained; (3) an increased opportunity for service providers to model therapeutic interventions to instructional staff; (4) the creation of a platform that allows for an integrated IEP, thus optimizing educational outcomes within the authentic academic milieu of the classroom; and (5) the presumptive creation of a culture, which



through avoiding a medical-clinical model, will ideally facilitate a reduction of the need for intensive services, discharge from services, and ultimately, District expenditures.

The authors of this study reiterate that there may very well exist circumstances where the traditional, individual pull-out treatment paradigm remains appropriate. For example, consider the following scenario: A speech-language pathologist (S-LP) needs to train a student to use fluency-enhancing techniques to address a severe case of stuttering. In this situation, the specialist may plausibly choose a “pull-out” model to address the underlying foundation skills. However, in the authors’ view, such situations in school-based practice are the exceptions proving the rule, and therefore an integrated, in-class service delivery model should be conceptualized as the “default” for all IEP stakeholders.

- Per report, a “in-class” service delivery model is an emerging practice within the District, and appear to be more advanced for occupational therapy (OT) than for speech-language pathology (S-LP). A random sample of 50 students receiving at least one of these services corroborates the interviews: an analysis of speech-language services revealed that the percentage of treatment that took place outside of the general education classroom (i.e., minutes designated on the “C” grid of the IEP) was 79%, as compared to the 74% for occupational therapy.¹

It is possible that the students whose IEPs were chosen as part of this analysis may have constituted a sampling error for this particular statistical parameter; however, 16 of the 17 students with the Educational Disability of Communication or Specific Learning Impairment (i.e., those that were essentially mainstreamed also received all of their services outside of the general classroom).

- As shall be elaborated in a subsequent section, the educational “value added” of the therapy services was frequently difficult to discern during the qualitative analysis of the IEPs. For example, several physical therapy (PT) goals and objectives referred to *throwing, catching, hopping, etc.* without the requisite linkage as to how these foundation skills would help the students access the educational environment: The ultimate purpose of school-based PT services. Similarly, there was neither explicit nor implicit connectivity to school-based performance in several of the OT goals, that addressed *yoga, copying, and building* stated within prior elements of the IEPs.
- Another metric that is useful to assess the effectiveness of school-based therapy services is to assess the correlation between service minute and age. There are a number of reasons for the fact that students, as they progress from pre-school to high school, typically receive fewer therapy minutes across time. The reasons are typically: (1) students achieve their stated goals and are discharged (i.e., the interventions have been effective); (2) the students themselves wish to be discharged, as services in the higher grades may be socially stigmatizing; (3) due to “plateauing” of skills, services are no longer effective; and (4) other personnel such as paraprofessionals may “take over” interventions that no longer

¹ the sample size (5 students) for PT services was too small for extrapolation on the “push in” issue



require a skilled professional. For whatever the reason, if the number of service minutes diminishes, then students are afforded more opportunities to remain with their peers (whether typical or non-typical), thus allowing them more time in the classroom for valuable instructional time; from a legal perspective, the more time students spend in the classroom, the more compliant a district is with Least Restrictive Environment (LRE) parameters.² The modest negative correlation (.23) between service minutes with age (as presented graphically in Appendix A) is typical, and is commended by the authors of this study. It should be noted, for both arithmetic and clinical perspectives, that the negative correlation was attenuated by the fact that two high school students ages 20 and 19 were receiving weekly service minutes (across the three disciplines) of 150 and 115 minutes, respectively. Based a review of these two particular IEPs, it is believed that these students are being over-serviced and speaks to an absence of integrated model as described in the *Recommendations* section.

- The paraprofessionals are reported to provide an important and valuable service to students in promoting their educational successes and interactions with typical peers. However, there are many factors whether real or imagined that currently present as obstacles to optimizing their collective effectiveness:
 - Although it is commendable that the paraprofessionals are afforded the opportunity to attend workshops during professional development days, it was reported that the content of these sessions is not always of practical benefit to support the students or programs that they are responsible for.
 - The sharing of information via the IEPs and direct teacher communication is frequently inconsistent, and hampers “real time” knowledge of student’s current needs and their corresponding interventions; in a related matter, some paraprofessionals reported a “schism” between special- and regular education teachers.
 - The paraprofessionals reported doing the same job as tutors but receiving less pay; the only difference they are aware of is that a tutor has a 4year degree and paraprofessionals do not, which is consistent with an overall theme that paraprofessionals perceive that the roles and responsibilities for paraprofessionals, regular, and SPED teacher are inconsistent.
 - The paraprofessionals reported “across the board” staff do not feel valued by administration.

² The essence of LRE refers to the belief that a student who has a disability should have the opportunity to be educated with non-disabled peers to the greatest extent possible; however, the argument can be made that removal of a student from both his classroom and other educationally-disabled peers (as is the case in center-based programs) also constitutes a more restrictive environment for that same student



IEP REVIEW

A review of the IEPs were considered in terms of: (1) their *internal consistency*, or the degree to which the elements of the document were mutually supporting, and thus “painted” a cohesive profile of the student; (2) whether interventions were educationally sound and adhere to accepted standards of practice; and (3) the degree to which the goals and benchmarks were measurable and supported educational need. Please note that italicized entries are verbatim, and are taken directly from the reviewed IEPs.

- In general, there was inconsistent “linkage” in the elements contained within *Present Levels of Educational Performance (General Curriculum; PLEP A)*, *Present Levels of Educational Performance (Other Educational Needs; PLEP B)*, and the *Current Performance Levels (CPL)*, that justified the need for skilled services across the disciplines. For example, for one student was receiving OT services to: *maintain an appropriate force on objects and peers followed by heavy work activities*.

In concert with the majority of districts the authors have analyzed, and as mentioned previously, PT and OT services appeared to be adhering more to a clinical-medical model with respect to their services. In the PLEP B section, there was little in the way of language connecting the student’s purported physical, sensory, or fine-motor deficits disability to how the deficits were negatively impacting access to his or her access to the educational environment.

- Deviations of evidenced-based practice were rare and included one instance of OT utilizing oral-motor treatments to facilitate mouth strength for a student with developmental disabilities. In the authors’ collective experience, there is not evidence in the literature to support this practice.
- Across all disciplines, and most notably for OT and S-LP, there was a paucity of consistent measurable and concise goal writing that centered around how mastery of skills sets for receptive tasks were being assessed. For example, one OT wrote that a student would *maintain eye contact with other people during motor activities, follow a tennis ball sequence, color within the lines* without corresponding quantifiable parameters (note that this is not an educationally-directed goal). Similarly, one S-LP wrote that one student would achieve 80% accuracy in responding to questions; however, the critical elements that are missing in this objective are: (1) out of how many trials (80% may be 4/5 trials of 16/20, with the latter being a more valid measure to ensure stability of the skills set); (2) from a field of a certain closed set (i.e., is the student choosing the correct picture from a field of 2, 3, 4, or 5 pictures); the clinician would have much more confidence if the student could choose from a greater field, as “random chance” would diminish with the addition of each foil item. The reader is referred to Appendix B to determine how many correct responses across trials and choices constitute mastery above chance levels (at the .05 confidence interval).



EXIT AND ENTRY CRITERIA

Introductory Commentary

Ideally, criteria relative to entry and exit eligibility eliminate any ambiguity with respect to candidacy for services. The existence and implementation of uniform criteria ensures external consistency, or the degree with which all students within the District are allowed equal access to services. Clearly, from clinical, logistical, and legal (e.g., Civil Rights) perspectives, the importance of uniform exit and entry criteria that is easily referenced, understood, and enacted by all stakeholders cannot be over-stated

- Neither the S-LPs, OTs, nor physical therapists utilize systematic, district-wide exit and entry criteria with which to determine eligibility for services. Consequently, it appears that the omnipresent, and ambiguous, “professional judgment” remains the primary criterion for the determination of eligibility for these services. To underscore this point, the S-LPs appear to be using a liberal statistical criterion of 1 standard deviation (SD) below the mean (i.e., the 16th percentile) vs. the conventional 1 and ½ SDs (i.e., the 7th percentile) on composite scores to qualify students for services or (that is, not the conventional and) *adverse effect on educational performance*.³ To the extent that conventional practice mandates that candidacy for services requires composite score(s) that fall below a threshold of no less than one standard deviation below the mean, it may be speculated that there are students within the District that are currently receiving speech-language services that may not need to be.

It is interesting to speculate if the District’s apparent over-representation of educational disabilities in the area of Communication impaired, which represents a plurality of 21% of all students in the District is reflective of the absence of exit and entry criteria. Typically, the Specific Learning Disabled category is the most prevalent, exceeding the Communication category by 14% (32% vs. 18%).⁴

- Consequently, given the inherent subjectivity and lack of systematic processes across all service providers disciplines, it appears that the omnipresent, and ambiguous, “clinical judgment” remains a featured determining factor of eligibility for many services. The ramifications of the “clinical judgment” have traditionally included:
 - The potential for parental pressure to over-ride the IEP team’s decision(s), given that there is no operational document for IEP teams to reference. This theme appears prevalent based on the interviews, as parents and advocates believe that “more is better” and team leaders are hamstrung without a District-wide document.

³ In a more global sense, the issue of what constitutes an “adverse effect on education” has not yet been operationally defined as part of a District-wide exit and entry document for all three disciplines

⁴ Based on Department of Elementary and Secondary Education (DESE) data for the year ending 2009



- There tends to be disagreement between some clinicians regarding the practice patterns.
- The potential for entrance and exit decisions (even when student have achieved their stated goals) to be made on a more emotional and subjective basis, and for non-service providers to override the clinicians' decisions.

There is also an absence of exit and entry criteria for paraprofessional supports. Despite the District's commendable practice of assigning paraprofessionals to teachers and programs, their optimal efficiency may be compromised by this absence as well as a lack of clear job responsibilities that was alluded to in the previous section.

PERSONNEL RESOURCES

Introductory Commentary

In light of the increasingly constricted special education budgets state and nationwide, this particular section will address the often-neglected issues of efficiency and cost-effectiveness within the context of the current staff configuration and caseload sizes. As part of this analysis, the benchmarking process of comparing the District's staff to other single-town districts to its over-all special education population was utilized.⁵

- The District employs 7.2 full-time equivalent (FTE) S-LPs (including 4.2 S-LPs and 3 speech-language assistants) equating to a ratio of approximately 58 students (i.e., the "pool" of students that may require speech-language services via an IEP within a district, not the caseloads of the clinicians) in special education for every 1 S-LP staff member, which is extremely low with our past analyses; these ratios have ranged from a low of 1:53 to a high of 1:90, and an average of 1:85.

The 2.8 FTE OT staff (comprising registered occupational therapists and assistants, and all but 1 FTE COTA through contractors), which equates to a ratio of 190 students in special education for every OT staff member. This ratio of students to staff is in-line with our past analyses, which have ranged from a low of 110:1 to a high of 224:1 and a median of 175:1.

The 1.6 FTE PT equates to a ratio of 1 PT to 262 students in special education, which is more highly staffed in comparison to our past analyses, to the range of ratios of 212:1 to 1440:1 during our past analysis, with a median of 350:1.

⁵ As part of this analysis, the benchmarking process of comparing the District's related services staff to other single-town districts in Massachusetts to the over-all special education population was utilized; a preliminary workload analysis is provided in Appendix C



- Currently, there are 40.5 paraprofessionals funded through special education that are employed in the District, which equates to a ratio of one for every 9.5 students. It has been the authors' experience for this ratio to range from approximately 3:1 to 15. Consequently, in comparison to our past analyses, this is considered to be a reasonable number of paraprofessionals; however, greater efficiencies may be realized with the institution of a comprehensive and unified exit and entry criteria.

RECOMMENDATIONS

- The District is strongly encouraged to revisit the creation of district-wide entry and exit criteria for related services. It is recommended that all of the clinicians convene to re-create this document and that all of the stakeholders agree on the requisite criteria, thereby ensuring their equitable application. As a minimum, this document should focus on the binary issue of whether or not a student should qualify for (any or all) services based on functional educational performance (as operationally defined), the need for skilled services, and (i.e., not *or*) performance on *composite* standardized tests that are no less than 1 and ½ standard deviations below the mean. It is recommended, to the greatest degree possible, that professional and clinical judgment be expunged from these documents to optimize objectivity at IEP meetings.

In addition the protocol may be amended to: (1) specify the intensity of service delivery based on the variables of age, effect(s) of the disability on academic performance, and the nature of the educational curricula; (2) specify roles and responsibilities in conjunction with other educational professionals and leadership; the addition of this component of the exit and entry criteria will minimize duplication of services (e.g., literacy, handwriting, etc.) and, presumably, expenditures as well as assuring parents and guardians that their students will receive services with the appropriate personnel (thereby facilitating discharges from therapy services); (3) adapt a District-wide philosophy where the service providers can act as a consultant-especially for older students-via integrated models; (4) assure that 1:1 treatment is reserved for the most extreme cases (as illustrated in Appendix C., 60% of the speech-language interventions occurred with group treatments, which although commendable, could be higher with institution of the 1:1 proviso); and (5) "crosswalk" treatment with evidenced-based research, thereby assuring that staff are collectively adhering to research-driven interventions.

- The authors of this study strongly encourage the special education leadership to conduct a 100% focus review of the middle and high school speech-language caseload to ensure appropriate utilization of this service with a particular focus on modalities that may be assumed by other school personnel.
- A fully operational integrated therapy model-in effect its own version of a co-taught model-will ensure that all IEP stakeholders "own" the goals and objectives, thereby further ensuring educational outcomes and the cross-validation of progress monitoring (i.e., multiple service providers and educators will be required to all provide input during



marking periods) while simultaneously optimizing the District's finite related services personnel resources. To this end, intensive professional development (PD) addressing integrated models will be essential. In conjunction with this initiative, continue to encourage intensive professional development for the service providers and special education in the writing of quantitative and educationally-directed goals.

- As part of an intensive professional development (PD) series, allow the therapy and teaching staff (particularly those serving the self-contained programs) to participate in a program to facilitate improvement in the writing of educational, measurable, and cohesive IEPs. It is speculated that this training may provide an important foundation for the "move" to an integrated service model, whereby all educators "own" all of the interventions and goals, thereby making a transition to a consult model and a decrease of service minutes more tenable while simultaneously improving efficiencies of the related services staff.
- The District should consider further specifying entry and exit criteria for paraprofessional support personnel; in this manner, further parity and equalization of access to services can be ensured for the students across the District, irrespective of the school in which they attend. The "default" model will be to continue to assign paraprofessionals to teachers and programs and not to specific students. It will be instructive to overlay the needs of students currently receiving the continuum of paraprofessional supports against this prospective criteria to determine if the current staffing levels are required. It is speculated that equalizing candidacy from services will further ensure compliance from a Civil Rights perspective.

If supports are deemed necessary beyond the programmatic assignment of the paraprofessional, it is strongly recommended that objective, measurable, and explicit IEP goals specifying corresponding functional skills that will allow attenuation (if not complete discharge of the paraprofessional supports) be included as a featured component of the IEP. This element may be included as part of the exit and entry criteria.

- Intensive PD for the paraprofessionals to address the specific educational-therapeutic needs of the services that they serve is considered to be a critical. Although this is obviously an expense for the District in difficult economic times, such an investment may be "pennies on the dollar" in that increased education and personnel capacity may result in the ultimate reduction of paraprofessionals to the extent that student independence will be optimized while simultaneously allowing increased personnel capacity as part of the "bring back" initiative.
- The plausibility of utilizing a greater proportion of assistants across all disciplines (who are recognized as licensed service providers in Massachusetts), may be a viable option for the District to realize significant cost savings. Therefore, the following staffing models may be considered to be a long-term initiative:



1.5 COTAs and .5 OTR
.5 PTAs and .5 PT
3 SLP/As and 2 SLPs

In this scenario, the registered service providers could assume more supervisory and evaluative duties, allowing the assistants to treat a greater number of students. It is speculated that, with the change of practice patterns, enactment of exit and entry criteria, and an operational pre-referral process, that the number of related services staff can be reduced without impacting the effectiveness of these services.

- All team members should work together to continue to foster a “culture” that promotes discharge, or at the very least, a reduction from (all) special education services when appropriate at the initiation of each IEP. If not yet explicitly stated, all initial IEPs should contain language that states that eventual discontinuation of services should be viewed as a celebration and not a denial of services.

This recommendation is neither meant to script nor to remove the professional latitude from IEP participants, but it is essential that the “culture of dismissal” be broached from day one in order to prevent potential contentious meetings in the future. To this end, team members should consider the following to ensure a unified district “voice” at the IEP meetings:

- Introduce the concept of discharge at the time of the initial IEP; the mastery levels for each goal and objective should be highlighted, and a general discussion of anticipated timelines for treatment should occur. It should be emphasized that discharge from services may occur at any time in the process, and need not wait until the three year review. Parents should be encouraged to see discharge from related services as a reason for celebration, rather than as a denial of entitled services.
 - It may be helpful for the team, as lead by the District representatives, to provide a legal context for programming decisions by introducing the concepts of LRE, FAPE and the *required vs. beneficial* dichotomy as they pertain to eligibility for related services.
 - If a student is making sufficient progress toward goals, a transition to a less intrusive consultation model, to ensure collaboration between service providers and classroom staff, may ease the transition and help “prepare” the parents for discharge from services. In addition, the use of an RTI - “step-down” approach will provide students with needed supports that not need be under the aegis of special education.
- It is recommended that team leaders clearly communicate to the service providers that in-class or consultative service delivery is the “default” mode and the “burden of proof” that



more restrictive pull-out services rests on the service providers. Obviously, it is beneficial for the team members to discuss and iron out such issues prior to the IEP, in an appropriate forum, in order to provide a staff unity at the meetings.

- Although many of the teachers and administrators appear to have a basic understanding of school-based services, it may be beneficial to allow the service providers to discuss the roles, responsibilities, and proscriptions of school-based clinicians to the entire school staff, thus further promoting unity and camaraderie between the clinicians and educators and further “setting the stage” for an integrated model. In addition, as part of a community outreach initiative, the roles, responsibilities, and educational mission of school-based service provision may be posted on the District’s website; in this manner, parents and other stakeholders in the community will be further educated about school-based services.

OUT OF DISTRICT PLACEMENTS

- There are currently 42 students attending out of district (OOD) placements; thus, approximately 10% of students with IEPs attend programs out of the district. This number compares favorably with data we have gathered from other districts, that average approximately between 8-12% of their special education students requiring OOD placements. Just under half of the students (45%) have a diagnosis of emotional/behavioral disability. Another 8 students (19%) have a diagnosis of Autism (often with serious behaviors). Thus, serious emotional, behavioral or autistic disabilities account for just over 2/3 of the OOD placements. These findings are similar to findings in other districts.
- As is the case in other districts, there is an obvious rise in OOD placements beyond the early elementary grades, beginning at grade five.⁶ This trend would appear to suggest that inclusion works well in the lower grades, and the District programs geared to a lower incidence and higher needs population is working well as a “keep-in” initiative.
- The FY10 budget for OOD placements is approximately \$2.1 million, excluding transportation. When 45 day and partial year tuitions are factored out, the estimated OOD cost per student is \$55,000, which includes cost share arrangements but does not include transportation (OOD transportation has been budgeted at \$262,544).
- The culture with regard to OOD placements in Amesbury appears to be one of prevention and bring back *where possible*. Per report, there is a strong sense of shared ownership with a willingness to keep students in the District staff. Practical Issues impacting the return of students include:

⁶ Ninety percent of the students in OOD placements are between grades 5-12 and range in age from 9-21. Forty two percent are in the Middle School (grades 5-8) and forty eight percent are at the high school or post-high school level.



- A lack of space
 - Severity of student disabilities
 - Heterogeneity pertaining to age and disability (e.g., the three students classified as Learning Disabled are all of disparate age, making it impractical to create an in-district program for students with these profiles)
 - District capacity to sustain and retain intensive programs with highly skilled staff
 - Unilateral placements by parents and/or unwillingness to bring student back
 - Inter-agency agreements and unilateral placement
- The authors commend the practice of the Administrator of Special Education in attending all of the Team meetings of OOD students (as evidenced in IEP documents), and her consequent familiarity with each of the 42 students in OODs. She knows which students the district can service and should be targeted for bring back. In addition, she works collaboratively with the Department of Mental Health and the Department of Children and Families in an attempt to gain cost-share agreements whenever possible. In short, it is the authors' expressed opinion that the OOD placements are very well managed.
- The IEP analysis of OOD students comprised 9 students with Emotional Disturbances, 3 students with autism, and 8 students with Learning Disabilities, ADHD, or cerebral palsy. In general, the IEPs were well-written with a comprehensive student profile, history, testing data, and description of disability. Testing instruments appeared to be valid, current, and appropriate in regard to disability. Individual and group counseling were included in most of the plans for students with emotional/behavioral issues; however, most students did not receive related services in the domains of speech-language, occupational, or physical therapies. Several students required a Functional Behavioral Assessment and the assessments provided documentation for Behavior Plans and corresponding reference to the plans was noted on the 5 IEPs requiring such plans.

The district maintains a range of in-district programs at the elementary, middle and high schools which assists in providing alternatives to out of district placement and also serve as a means of re-entry for students transitioning back into the district from out of district placements.

It is notable that although every plan made a comment as why students needed to be placed in a more restrictive placement, not a single plan indicated criteria for return to



LRE (i.e., the District). The authors have included a sample rubric in Appendix D that leadership may find helpful to facilitate these discussions at IEPs for students in OODs.

Recommendation

- Possible areas for new in-District programs should focus on emotional/behavior and autism at the Middle and High School transition points, with the Middle School receiving higher priority. Because new program development has more to do with space than with a willingness to bring students back, a thorough analysis of school and/or community physical plant will need to be undertaken.

SUMMARY AND FINAL COMMENTARY

The authors of this study applaud the effectiveness of the District's special education program as lead by Ms. Glennon, which provides its special education students with a quality education in keeping with the letter and spirit of the policies and procedures contained within IDEA and the state of Massachusetts, as well as its own high standards. The recommendations that were provided throughout this document are designed to further promote efficiencies without sacrificing the District's well deserved "track record" for its programmatic effectiveness and are reiterated below:

1. Enhance the "cultural" and logistical underpinnings for successful discharge from related and paraprofessional services that will center on the creation of exit and entry criteria with respect to qualitative and quantitative factors that may, or may not, represent candidacy for all services within the contexts of LRE, FAPE, best practices, and an educational model.
2. Further define roles and responsibilities as they pertain to potential overlap of special- and regular-education instruction and the specific skill sets required of the therapy staff. Institute an integrated model of service delivery whereby the "default" mode will be for therapists to be assigned to classrooms for a specified amount of time to support the teachers with co-teaching, consultation, and provision of effective educationally-based interventions.
3. Revisit the staffing configuration for the therapies as it relates to the use of assistants while simultaneously equalizing workloads for all service providers.
4. Continue to develop programmatic and personnel capacities via professional development to optimize support in-District students and as a platform to both "keep in" and "bring back" students with severely challenging educational needs.

Finally, the authors present a continuum of partnership options which District leadership may choose to facilitate the needed capacity, logistical, cultural, and procedural changes

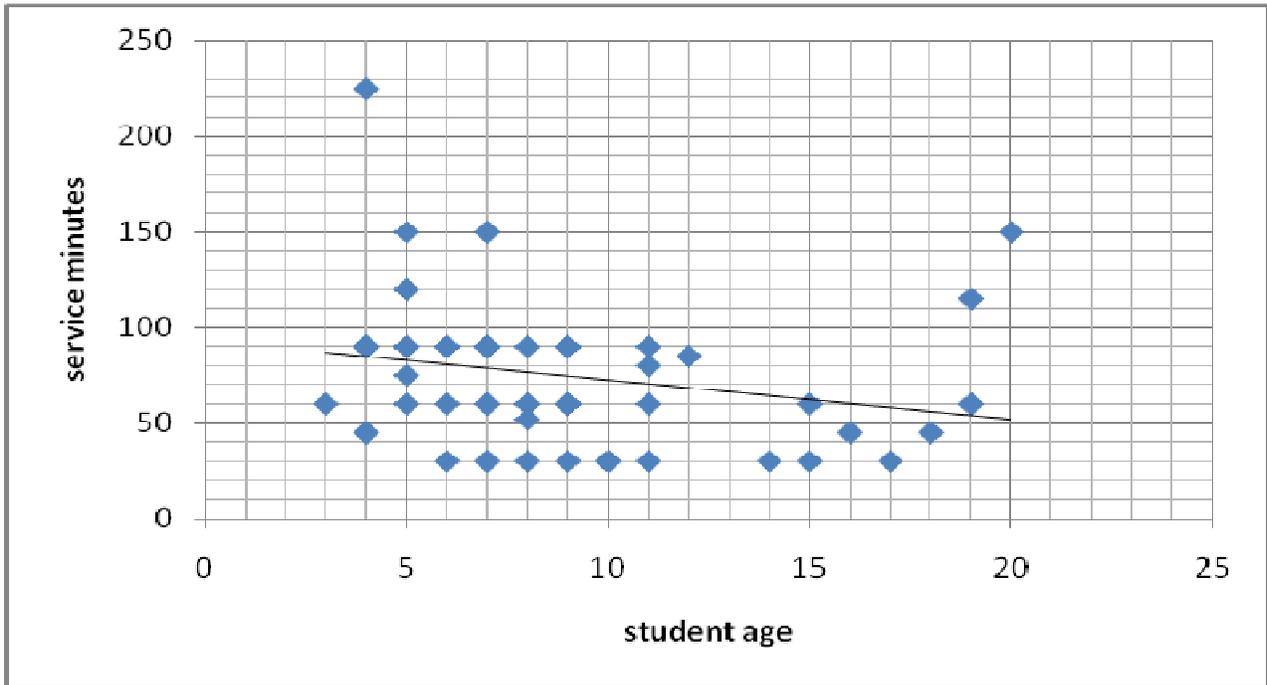


that are deemed necessary to enhance the fiscal viability of the special education program, thus ensuring a re-distribution of funds to other aspects of District's educational programs. These options may include, but need not be limited to:

1. An intensive professional development series;
2. A management partnership to ensure that specific services (i.e., paraprofessionals and related services) are being delivered in the most efficient and effective manner; or
3. A partnership with a single provider to bring all related services and paraprofessionals under a "single umbrella" thus ensuring fidelity to the District's programmatic philosophies and cost certainty.



Appendix A: The Scatter plot Illustrating the -0.23 Correlation of Service Minutes and Age



Note the downward slope of the trend line, underscoring the desirable negative correlation between service minutes and age



APPENDIX B. NUMBER OF CORRECT ITEMS FOR FORCED CHOICE TASKS TO ENSURE MASTERY ACROSS TRIALS AND CHOICES (AT .05 CONFIDENCE INTERVAL)

NUMBER OF TRIALS	10	15	20	25
NUMBER OF CHOICES				
2	8	11	14	17
3	6	8	10	12
4	5	7	8	10
5	4	6	7	8



Appendix C. Preliminary Work Load⁷ Analysis (Names Withheld)

Speech
 Discipline Work Load Summary With Testing Factored Out 188 hours

Number of Staff	6	
Number Full Time Staff	5.78	
Direct Service Hours (% in parentheses)	136.5	(72.6)
Individual	44.5	(32.6)
Group	81.5	(59.7)
Consult	10.5	(7.7)
Indirect Service Hours (% in parentheses)	51.5	(27.4)
Travel	4	(2.1)
Other	47.5	(25.3)

	MIN %	MAX %		MIN	MAX
group	46	100	caseload	32	56
individual	0	67	wt case	33	56
consult	0	13			
direct	49	81			
testing	0	14			
travel	0	6			
other	16	37			

Speech

Service	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
group	2.5	3	1.5	3.25	0.5	10.75	0.46	35.00	35
ind	2	1	1	1.75	4	9.75	0.41		
consult	0	0	3	0	0	3	0.13		

⁷ Workloads-that is the all student-directed activities that include both direct and indirect-will be used as opposed to caseloads given that it is a more valid metric to determine how the services providers are spending their time. Many of the schedules were not available for analysis and a more comprehensive analysis will be submitted once secured.



direct	4.5	4	5.5	5	4.5	23.5	0.67
testing	0	0	0	0	0.5	0.5	0.01
other	2.5	2	1.25	2	1.5	9.25	0.26
travel	0	1	0.25	0	0.5	1.75	0.05
Totals	7	7	7	7	7	35	1.00

Speech
A

Service	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
group	2.5	3	1.5	3.25	0.5	10.75	0.46	35.00	35
ind	2	1	1	1.75	4	9.75	0.41		
consult	0	0	3	0	0	3	0.13		
direct	4.5	4	5.5	5	4.5	23.5	0.78		
testing	0	0	0	0	0	0	0.00		
other	1.5	1	0.25	1	1	4.75	0.16		
travel	0	1	0.25	0	0.5	1.75	0.06		
Totals	6	6	6	6	6	30	1.00		

Speech
A

Service	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
group	4.5	4.5	4	4.5	4	21.5	1.00	56.00	56
ind	0	0	0	0	0	0	0.00		
consult	0	0	0	0	0	0	0.00		
direct	4.5	4.5	4	4.5	4	21.5	0.72		
testing	0	0	0	0	0	0	0.00		
other	1.5	1.5	2	1.5	2	8.5	0.28		
travel	0	0	0	0	0	0	0.00		
Totals	6	6	6	6	6	30	1.00		

Speech

Service	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
group	2.5	2	3.5	1.5	0.5	10	0.59	33.00	33
ind	2	1	1.5	1.5	0.5	6.5	0.38		
consult	0	0.5	0	0	0	0.5	0.03		
direct	4.5	3.5	5	3	1	17	0.49		
testing	0.5	2	0	0	2	4.5	0.13		
other	2	1.5	2	4	3.5	13	0.37		
travel	0	0	0	0	0.5	0.5	0.01		
Totals	7	7	7	7	7	35	1.00		



Speech

Service group	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
ind	1	0.5	1	0.5	0.5	3.5	0.12	55.00	55
consult	1	0.5	0.5	0.5	1	3.5	0.12		
direct	6	6	6	6	4.5	28.5	0.81		
testing	0	0	0	0	0	0	0.00		
other	1	1	1	1	2.5	6.5	0.19		
travel	0	0	0	0	0	0	0.00		
Totals	7	7	7	7	7	35	1.00		

Speech

Service group	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
ind	2.5	2.5	4.5	4	1.5	15	0.67	32.00	34
consult	0.5	0	0	0	0	0.5	0.02		
direct	4.5	5	5.5	6	1.5	22.5	0.69		
testing	1	1	0	0	2.5	4.5	0.14		
other	1	0.5	1	0.5	2.5	5.5	0.17		
travel	0	0	0	0	0	0	0.00		
Totals	6.5	6.5	6.5	6.5	6.5	32.5	1.00		

PT

Service group	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
ind	2	1.75	2.25	4.25	1.5	11.75	0.64	35.00	35
consult	0	0	0	0	0	0	0.00		
direct	3	4.25	3.75	5.25	2.25	18.5	0.53		
testing	0	0	0	0	2	2	0.06		
other	3.5	2.25	1.75	0.75	2.25	10.5	0.30		
travel	0.5	0.5	1.5	1	0.5	4	0.11		
Totals	7	7	7	7	7	35	1.00		

usure of
F/T hours



OT

Discipline Work Load Summary With Testing Factored Out

38
hours

Number of Staff	2	
Number Full Time Staff	1.08	
Direct Service Hours (% in parentheses)	25.5	(67.1)
Individual	16.5	(64.7)
Group	6.5	(25.5)
Consult	2.5	(9.8)
Indirect Service Hours (% in parentheses)	12.5	(32.9)
Travel	0.75	(2)
Other	11.75	(30.9)

	MIN	%	MAX		MIN	MAX
group	0	27		caseload	1	47
individual	63	100		wt case	5	47
consult	0	10				
direct	14	75				
testing	0	21				
travel	0	2				
other	22	64				

OT

Service	Mon	Tues	Wed	Thurs	Friday	Totals	%	Caseload	Wt case
group	0.5	1	1	2	2	6.5	0.27	47.00	47
ind	4.5	4	3	2	2	15.5	0.63		
consult	0.5	0.5	0.5	0.5	0.5	2.5	0.10		
direct	5.5	5.5	4.5	4.5	4.5	24.5	0.75		
testing	0	0	0	0	0	0	0.00		
other	1	0.5	2	1.75	2	7.25	0.22		
travel	0	0.5	0	0.25	0	0.75	0.02		
Totals	6.5	6.5	6.5	6.5	6.5	32.5	1.00		



OT

Service	Mon	Tues	Wed	Thurs	Friday	Totals	%s	Caseload	Wt case
group	0	0	0	0	0	0	0.00	1.00	5
ind	0	0	0	1	0	1	1.00		
consult	0	0	0	0	0	0	0.00		
direct	0	0	0	1	0	1	0.14	only lists	
testing	0	0	0	1.5	0	1.5	0.21	1 student	
other	0	0	0	4.5	0	4.5	0.64	on sched.	
travel	0	0	0	0	0	0	0.00		
Totals	0	0	0	7	0	7	1.00		



Appendix D. A Protocol for Ensuring Student Education in Least Restrictive Environments and Process for Consideration of Out of District Placement

The concept of Least Restrictive Environment (LRE) for students with disabilities is based upon the principle that students, in general, benefit most from participating in the enriched educational environment of the general education classes and programs with their age appropriate typical (non-disabled) peers. This provides opportunities for discussion, observation, socialization, and other benefits that may best be accrued through learning in a typical environment. Not only is this best practice and proven to be the most productive environment for learning, it is required by federal and state law.

There may be circumstances in which students require specific educational interventions or instruction in more restrictive environments due to the nature and severity of their disability. The following continuum of LRE provides a progression from the general education program to a separate self-contained educational setting outside the student's regular school and District.

The provision of LRE is relative to an individual student. A setting that might be the least restrictive environment for a student with one type of special education need may be excessively restrictive for a student with a different or less intensive need. To address this variation, the Planning and Placement Team (PPT) is required to review and analyze each student and develop an individually designed education program (IEP) for each student identified as requiring special education and related services to benefit from the educational program offered by the school district. The more removed a student is from the general classroom, the more restrictive the educational environment.

The steps indicated herein represent a sequential progression from the general education classroom to an out-of-district residential setting. As indicated earlier, educational programming is an individualized process reflecting the specific needs of a student. The steps identified in this document are a generalization of this process. There may be circumstances where a student requires immediate placement in a more restrictive setting due to the nature of the disability or placement by a state agency for reasons that are not educational in nature. In all cases, the PPT will attempt to provide special education programs and services in the least restrictive environment relative to the individual student's needs.

The following progression or rubric reflects the recommended general best practice for determining LRE for a student identified as requiring special education and specifically for determining the need for placement in an out-of-district educational setting. The PPT will consider these factors in prescribing an educational program for every student requiring special education.



**LRE PROGRESSION
(1 LEAST RESTRICTIVE – 12 MOST RESTRICTIVE)**

- (1) Is the student able to benefit (demonstrate learning and progress within the curriculum) from the general education program of studies in the following environments:
- (2) General classroom with typical instruction provided by the classroom teacher
- (3) General education classroom with accommodations (differentiation) by the classroom teacher and other general education supports and services
- (4) General education classroom with special education consultation
- (5) General education classroom with special education instruction or support in the classroom
- (6) General education classroom for most of the school day with some instruction required out of the classroom by a special education teacher or related services provider.
- (7) Special education classroom for most of the school day with some instruction provided in the general education classroom
- (8) Special education classroom within the student's home-school with all instruction in a special education setting.
- (9) Special education instruction (with opportunities to participate in general education programs with non-disabled peers where possible) in another school within the district school
- (10) Special education instruction (with opportunities to participate in general education programs with non-disabled peers where possible) in a public school in another school district
- (11) Special education instruction day program in a non-public (special education) school outside the district with no opportunity to participate in general education classes or programs with non-disabled peers.
- (12) Special education instruction in a self-contained residential setting with no opportunity to participate in general education classes or programs with non-disabled peers.