



Education Law Center



**Long Range Facilities Planning
And Design Implementation
For Students with Disabilities:**

A Guide for New Jersey School Districts

September 2005

Forward

This document was prepared by Ruth Lowenkron, Senior Attorney, and Joan Ponessa, Director of Research, at the Education Law Center, in collaboration with:

Allen Abend, Deputy Director, Maryland Public School Construction Program

Diana Autin, Esq., Executive Co-Director, Statewide Parent Advocacy Network

Sue Sobel Gottesman, Esq., New Jersey Developmental Disabilities Council

Paula S. Lieb, Esq., Executive Director, New Jersey Coalition for Inclusive Education

Richard V. Olsen, Ph.D., Research Professor and Director, Health and Aging, Center for Architecture and Building Science Research, New Jersey Institute of Technology

Sarah Woodhead, AIA, Director of Design & Construction, Arlington, Virginia Public Schools

A special thank you to Richard Olsen for developing the [supplement](#) to this guide, and to Sarah Woodhead for providing the keynote speech at ELC's June 10, 2005 conference.



Education Law Center

**60 Park Place, Suite 300
Newark, New Jersey 07102**

**(973) 624-1815
TTY (973) 624-4618
Fax (973) 624-7339**

Long Range Facilities Planning and Design Implementation for Students with Disabilities: A Guide for New Jersey School Districts

I. Background

For the past year and a half, the Education Law Center (“ELC”) has been working on school facilities planning issues to assist New Jersey school districts in preparing the 2005-2010 Long Range Facility Plan (“LRFP”) required of each district by the Educational Facilities Construction and Financing Act, N.J.S.A. 18A:7G-1, et seq., and its implementing regulations, N.J.A.C. 6A:26-2.1, et seq. In September 2004, ELC published The Long Term Facilities Planning Process: A Guide to Improving Education While Improving Communities in collaboration with the Center for Architecture and Building Science Research at New Jersey Institute for Technology.¹

By 2005, it became clear that most of the districts were engaged in little or no planning for students with disabilities. In Spring 2005, ELC sponsored a statewide conference to help New Jersey districts understand their obligation to plan for students with disabilities, and to provide the districts with technical support. The conference was well attended and well received, with requests for more information. In response, ELC prepared this Guide, in collaboration with experts in the fields of facilities planning and inclusion of students with disabilities.

II. Introduction

1. Long Range Facilities Planning

The LRFP process presents a wonderful opportunity for New Jersey’s school districts to re-examine and strengthen their long term planning for educational adequacy in 21st century school facilities. It provides an opportunity for districts to work closely with the special education community to ensure that New Jersey’s unprecedented infusion of capital resources can enhance the physical facilities to support the education of students with disabilities, alongside their peers without disabilities, in the general education classroom, in-district.

Federal special education law – the Individuals with Disabilities Education Act, 20 U.S.C. § 1400, et seq. (“IDEA”) – provides that every eligible child has the right to a free and appropriate public education in the “least restrictive environment.” Educating a student with a disability in the “least restrictive environment” means, to the maximum extent appropriate, educating the student with students who do not have disabilities. Students with disabilities may only be educated in separate classes or separate

¹ Available at http://www.edlawcenter.org/ELCPublic/AbbottSchoolFacilities/FacilitiesPages/Resources/LRFP_Framework.pdf.

schooling, or otherwise removed from the general educational environment “if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.” See, e.g., 34 C.F.R. 300.550(b). Moreover, it should be noted that educating students in-district is far less expensive than educating them out of district.

Notwithstanding IDEA’s clear “inclusion” mandate, many school districts send students to segregated out-of-district special education programs because of in-district space constraints. This is illegal! Utilizing this Guide will guard against such illegal placements. Long range planning for students with disabilities must include consideration of bringing students back to the district, to their neighborhood schools and into the general education classrooms, to the greatest extent possible. All needs of students with disabilities should be examined to determine if the students serviced are being accommodated in adequate physical spaces and in the most appropriate setting to meet their needs.

While the final district –wide LRFPs are required to be submitted to the New Jersey Department of Education (“DOE”) in October 2005, every district has the right to amend this document at any time. N.J. S.A. 18A:7G-4 (c). Thus, if a district has not completed the requisite comprehensive review of special education needs, the opportunity to do so is still available.

It should be noted that, given the extensive time involved in implementing a district’s LRFP, the current students may not be the students who will utilize the new or renovated facilities, but the needs of current students serve as a gauge for assessing the needs of future students.

2. Project Planning

The special education community should be aware that the LRFP process is not the only time that it should be involved in facilities issues. The district-wide planning process is project specific, not design specific. In other words, the LRFP is a global document that tells the citizens and DOE what the district’s facilities needs are for the next five years, describing the buildings that need to be built, as well as the buildings that need to be renovated or require additions. It does not, however, lay out specific building designs or types of spaces needed. Once the LRFP is approved by DOE, the district can begin the design implementation phase and work on individual school projects. Input from the special education community in the design implementation phase is equally as important as its involvement in the LRFP process.

3. Universal Design

The watchword in facilities planning is universal design. Taking into account the facilities needs of such communities as the disabilities community will ensure that the facilities needs of all communities are met. All students will benefit from such universal

design features as improved acoustics and adequate space, and this in turn will improve the overall engagement of all students, as well as improve academic achievement.

4. Scope of Guidelines

This document is designed to provide a set of tools that can be reviewed and considered by each New Jersey district in developing LRFPs to meet the needs of students with disabilities and to help identify design elements that should be considered as a specific project is undertaken. The framework is designed to take the district from where it is now to where it should be during the coming years.

The scope of this document is limited to the intersection of facilities planning and inclusion of students with disabilities. For further information about issues related to other aspects of facilities planning, you can visit ELC's website at www.edlawcenter.org. With respect to other aspects of inclusion, please note that this document is just the tip of the iceberg. Moving from separation of students with disabilities to inclusion requires extensive planning and staff training. It goes without saying that enhancing a district's ability to educate children with disabilities--from mild to significant--will not result simply from creating more and better physical spaces in their neighborhood schools. Reducing the separation of children with disabilities will be impacted as much by increasing teacher expertise, changing attitudes and instituting innovative program models as it will be by adding square footage to buildings. The offices involved in the preparation of this document would be glad to help districts in their efforts to deal with these critical aspects of inclusion of students with disabilities.

III. Assembling Relevant Personnel

1. The School Board and Superintendent should assemble a Facilities Advisory ("FAB") to ensure consideration of a wide range of viewpoints in the facilities planning process. The FAB, which is mandated for all Abbott districts, "2005 Long Range Facilities Plan – Preliminary Guidelines"², should include district administrative staff, school administrative staff, instructional/curriculum /program decision-makers/planners, teachers for all program types, parents representing the full diversity of stakeholders (including parents of students with disabilities), community organization representatives, municipal officials, an architect, an engineer and other consultants retained by the District. A representative of the county center for independent living and/or the county or municipal office on disability, or a disability design specialist would also be appropriate to ensure that facilities will be accessible.
2. The School Board and Superintendent should also assemble an Inclusion Planning Board ("IPB") to ensure that special attention is given to the needs of students with

² Issued by the New Jersey Department of Education, Division of Finance, Office of School Facilities (January 28, 2005) and available at <http://www.nj.gov/njded/facilities/lrfp/guidelines/guidelines.pdf>.

disabilities. The IPB should consist of special education administrative staff, district and building-based general education administrative staff (i.e. principals), administrative/facilities staff, special education and general education teachers, students with disabilities, parents of students with disabilities and disability advocates. If there is a facilities planner or architect on staff, these individuals should also be included on the IPB. Either special education or administrative/facilities staff can lead the team, but the general education team members must be assured a key role to ensure the success of the Plan.

3. It is highly recommended that the FAB and IPB establish partnerships with experts in inclusive education for students with disabilities.
4. Both the FAB and the IPB should be standing committees that remain in existence even after the LRFP is completed to ensure proper implementation of the LRFP, to monitor the design and construction process and to ensure periodic oversight of all facilities.
5. The FAB and the IPB should work together to achieve optimal facilities planning.

IV. Preliminary Steps

1. The FAB and the IPS should ensure familiarity with, and adherence to, IDEA's inclusion mandate, as well as the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, both of which require facilities to be accessible to students, parents, and staff with disabilities, and both of which prohibit districts from having special education students bear a disproportionate share of the burden of insufficient space by being sent out of district or by being educated in temporary school facilities such as trailers or in less desirable locations such as basements.
2. The IPB should set clear goals for each type of placement, stated as a percentage of the total number of students receiving special education services. Particularly important is the goal for the percent of students receiving their education primarily outside the general classroom, but within the District, and the percent of students placed totally outside the District. The goals should have the objective of providing the most inclusive instructional settings and the least restrictive environment possible. Goals should also address the projected number of students who will participate in vocational programs and in schools that serve students district-wide such as magnet schools (if they exist). The following recommended goals track the national average for educating children in the least restrictive environment (2003)³:

³ See "Still Separate and Unequal: The Education of Children with Disabilities in New Jersey," New Jersey Council on Developmental Disabilities (2004), <http://www.njddc.org/sep-uneq.htm>. This publication contains a multitude of other statistics, including a breakdown of the above statistics by disability category.

less than 20% of the day outside general education classroom	41%
20-60% of the day outside general education classroom	30%
more than 60% of the day outside general education classroom	19%
Segregated facilities – Ages 5-21	2.9%
Segregated facilities – Preschool	3%

3. The FAB and IPB should review the physical condition and accessibility of all the District’s buildings, site components and systems, including rated capacity, acreage and square footage to ensure compliance with state regulations, see N.J.A.C. 6A:26-2.2(a)(2) - (12), as well as federal and state access regulations, and to ensure flexible use of space.
4. The IPB should develop facility guidelines for key special education functions. For example, although it should be obvious that speech therapy should not be provided in a stairwell, closet, cafeteria or auditorium, it may not be obvious, although it is equally important, that space for speech therapy have a sink, carpeted floor, etc.
5. The IPB should develop “adjacency” guidelines for where special purpose rooms should be placed vis a vis general education classrooms. For example, a room where speech therapy is delivered should be near the academic classrooms, not in a trailer outside the school, near the noisy parts of the building such as the gymnasium or cafeteria, or in a special education “wing.”
6. The IPB should develop specifications, or evaluate, and, if necessary, revise existing specifications, for such requirements as space, storage, plumbing and lighting to ensure that students with disabilities can be appropriately educated in all spaces, including instructional areas, support spaces and administrative areas.
7. The IPB should consider the special needs of students receiving special education services as outlined in the attached design guidelines by [Richard V. Olsen](#), as well as in a publication by Allen Abend, Deputy Director, Maryland Public Schools Construction Program.⁴ For example, consideration must be given to improved filtration and humidity control in heating and cooling systems (especially helpful for students with respiratory ailments or other medical conditions), improved acoustics (especially helpful for students with hearing impairments), visual fire alarms (especially helpful for students with hearing impairments) and increased building security (especially helpful for students who may be prone to leaving a school unsupervised).

⁴ “Planning and Designing for Students with Disabilities’, <http://www.edfacilities.org/pubs/disabilities.html>

V. Data Collection

1. The Administrative/Facilities staff should determine where students receiving special education services live, and where they attend school, noting patterns, if any, in the identification and placement of students. Depending on the size of the district, a Geographic Information System (“GIS”) can be very helpful in making this determination. Distribution should be even, with anything less than even signaling an area of possible concern. How does poverty, race or English language learner status overlay with disability? Are there other demographic factors that emerge from the data?
2. The FAB and IPB should obtain a copy of the District’s enrollment projections, which were prepared by a demographer pursuant to N.J.S.A. 18A:7G-4(d) and N.J.A.C. 6A:26-2.2.
3. The FAB should obtain the District’s Education Technology Plan prepared pursuant to DOE’s guidelines, available at http://www.nj.gov/njded/techno/state_plan.pdf.
4. The IPB should prepare a Report of Placement Needs. The report should set forth the placement needs of all current students with disabilities, disaggregated by area of residence (Section V-1, above), which (1) meet or exceed legal requirements; (2) are supported by established best practices/research-based methods for both education and universal design; (3) create capacity to accommodate a student population with a minimum 10% incidence of disability; and (4) meet the goals established pursuant to Section IV-2, above.

VI. Synthesis of the Data and Development of the Long Range Facilities Plan

1. The IPB should:
 - a. prepare a Survey of School Accessibility pursuant to federal and state access guidelines and Olsen and Abend design guidelines (attached);
 - b. project least restrictive environment needs for next five years based on Report of Placement Needs (Section V-4, above) and [Abend](#) and [Olsen](#) design guidelines, utilizing a cohort survival method, or other documentation, pursuant to N.J.A.C. 6A:26-2.2(a)(1)(iii), (iv);
 - c. present this information (Section VI-1-a, b, above) to the FAB to facilitate the development of the LRFP.
2. The FAB must review all data (Section VI-1-a, b, above) and meet with relevant personnel regarding the data. Ideally, the FAB will develop a common understanding of the existing conditions, desired outcomes and the barriers and opportunities along the way. In reality, differences of approach and opinion will

persist, but it is important to have all perspectives represented. It is possible, even likely, that some barriers may surface that are not amendable to resolution in an LRFP framework. These may be issues related to teacher training, operating budgets or other matters. It is important to designate a follow-up mechanism so that these issues are recognized, but do not stall the development of the LRFP.

3. The FAB should prepare the LRFP based on the Survey of School Accessibility (Section VI-1-a, above) and projected least restrictive environment needs (Section VI-1-b, above), and taking into account relevant information from the District's Technological Education Plan (Section V-3, above) and the District's Demographic Study (Section V-2, above).
4. If the FAB does not consider information set forth by the IPB, or if the FAB rejects any recommendations made by the IPB, it should include an explanation of its actions in its LRFP.
5. As the FAB concludes its work on the LRFP, the DOE guidelines require Abbott districts, and suggest for other districts, that the FAB endorse the proposed LRFP. Abbott districts are required to submit to DOE a list of FAB members and meeting minutes. The Superintendent can then respond to the FAB's recommendations, and the School Board can formally submit the LRFP to DOE.

VII. LRFP Implementation and Planning for the Future

The FAB and the IPB should ensure proper implementation of the LRFP and monitor the design and construction process. It is critically important that the FAB and IPB discuss with the architect the proposed design as each project in the LRFP moves forward. It is at this stage that all the elements of design that are critical for implementation of the students' special education services are developed.

VIII. Conclusion

The long-range planning process provides the perfect opportunity to re-examine the District's goals for special education students. New buildings and renovated buildings must meet the needs of students with disabilities, as well as the needs of their non-disabled peers. The location of some programs will change, the types of programs in certain schools will change, and students with disabilities can be brought back to the district, neighborhood school and general education classroom where they can receive the education mandated by law.

The individual project planning process is equally as important because it is at this stage that the building spaces, which must accommodate the needs of students with disabilities, are actually designed. The best way to ensure that building design is

adequate is for a broad spectrum of the special education and general education communities to provide input to the project planning process.

Summary Guidelines for School Design to Include Children with Disabilities

Richard V. Olsen, Ph.D.

Center for Architecture and Building Science Research

New Jersey Institute of Technology

Newark, New Jersey 07102-1982

Sensory Disabilities

Hearing

- Soundproofing in certain areas and good acoustics throughout the school will help all students hear and focus on tasks more effectively.
- Children with auditory processing problems benefit from sound that is balanced.
- Provide space near the classroom front board for a signer.
- Install FM Broadcast or surround sound in classrooms, labs, resource rooms, etc. Pre-wire new construction for these technologies.
- Good lighting and unobstructed views are needed to assist children who read lips.
- Alarm systems should be bi-modal—visual and auditory.
- Locate classrooms and labs away from “noisy function” areas (e.g., the gym, outdoor play grounds, cafeteria, band and chorus room, etc.) to decrease background noise.

Vision

- All signage and room numbers should be provided in Braille.
- Stairs should be eliminated and replaced with ramps to accommodate changes in levels that students with vision loss may not detect.
- Handrails and guides on the wall will assist with tracking
- Avoid objects that protrude into the hall (i.e.-water fountains).
- Eliminate or minimize glare in classrooms with good lighting, matte finishes, and sunlight filtration at windows and doors with windows.
- Install white boards in lieu of chalk boards and use “smart” or “activity” boards to magnify a lesson.
- Color code wings to assist wayfinding.

Speech

- Provide a separate speech therapy area for individual and group work.
- The speech therapy room should have good acoustics (preferably sound proofed), and be located away from noisy areas (cafeteria, gym, band room, main corridors, etc.).
- Provide illumination levels that enable students to observe proper word enunciation.

Learning and Intellectual Disabilities

Design concerns related to students with learning and intellectual disabilities focus heavily on their susceptibility to distractions. As a result, environmental supports are necessary to assist with task focusing and individualized learning. Distractions are both visual and auditory and can originate from a wide spectrum of sources.

Outside classroom distractions can come from:

- Hallways
- Other classes
- Noisy areas: gym, band room, chorus/music room, cafeteria
- Playgrounds, playing fields and outdoor gym classes
- Lawn maintenance
- Arriving and departing buses and other vehicular traffic

Inside classroom distractions can include:

- Simultaneously occurring lessons and activities
- The close presence of other children: sharing a table that is too small, other kids' materials (books, papers, devices, etc.) extending into their space, etc.
- Disruptive/distracting students
- Loud HVAC systems
- Other Noise (e.g., chairs that squeak when they are moved across the floor)
- Excessive visual stimulation from glare, clutter, displays, equipment, and supplies that fill the classroom

Recommendations to combat distractions/over stimulation include:

- Good acoustics to decrease distracting background noises (white noise, acoustical panels, ceiling tiles, etc.).
- FM broadcast so the teacher is clearly heard, distractions are filtered out, and the student can remain focused on the lesson or activity.
- Bathrooms nearby. The trip to the bathroom can create a major, and lengthy, distraction. If the distance to the bathroom is short, the amount of un-focused time spent out of the classroom is decreased.
- Lighting and window treatments that can filter out visual sources of distractions (e.g., glare, direct sunlight, and outdoor activities) and make the front board easy to see.
- The use of furniture to create sub-areas in the classroom that the teacher can easily monitor. Distraction-prone students, or students working in small groups, can be separated from the larger class so they can focus more directly on their work without being distracted by activities in the main classroom.
- Separate rooms and areas outside the classroom so children can be removed for more individualized learning or if they are experiencing behavioral or focusing issues.
- Sub-areas within the classroom created through retractable screens, dividers, study carrels, etc. These spaces can be used for 1:1 teaching of children with autism spectrum and for children who need to focus but do not need to be separated from the class.
- Separate mini-rooms for discrete trial learning in a classroom for children with autism.
- Classrooms located away from playing fields, the cafeteria, the entrance to the school and other areas of potential distractions.
- Additional stimulation control through:

- enclosed storage so students are not visually distracted/stimulated by supplies and equipment that are stored all over the classroom.
- zoned lighting that can be dimmed.

Emotional-Behavioral Disabilities

Children with emotional-behavioral disabilities may need to be removed from the immediate environment when an emotional outburst has either already occurred or is about to erupt. A safe “quiet” or “re-focus” room where a child could be taken as a pre-emptive strike to diffuse an impending de-compensation or after an emotional outburst will address this need. The re-focus room should be large enough to accommodate several students and one or two teachers. The room should look and feel comfortable and soothing. The re-focus room should be located close to the classrooms so an upset child does not have to walk down long hallways in full view of others.

Other Considerations:

- Classrooms often need to accommodate the teacher and other adults. In addition to the general education teacher, at various times of the day, there may be a co-teacher, teacher-consultant, paraprofessional, related services therapist, or a one-on-one aide, etc. in the room. Adequate space and furniture are needed to accommodate these additional personnel.
- With the growing use of classroom technology, additional space is needed for both using and storing computers, scanners, smart boards, LCD projectors, etc. When in use, visual technologies should be stationed in areas where they are visually and auditorily accessible (i.e.-the front center of the room). When stored, they need to be in an enclosed and lockable space.
- Electrical outlets should be numerous and placed throughout the walls and floors of the classroom. This makes all technologies readily accessible and does not relegate students who need electrical power for laptops or communication devices to the back or edge of the room where the outlets are.

Physical/Orthopedic Disabilities

A. General Design

The entire school should be accessible so all students can be included, alongside each other, in all activities. Here are some basic guidelines:

- Make every entry accessible so students with mobility problems are not relegated to the “handicapped” entrance
- Design wide halls and doorways throughout the facility
- Provide an accessible stall and sink in each bathroom throughout the building.
- Install elevator(s) in the most logical location to minimize travel time from first to second floor classrooms.
- Steps and long distances are problematic for children using arm canes, manual wheelchairs, or prosthetic legs. Travel issues for students with mobility problems can be reduced by design schemes that minimize distances.
- Classroom doors should be spaced far enough apart so they open flat against the wall without hitting each other. This maximizes the clear opening for a

wheelchair. (It also relieves congestion in the hallway that occurs from large numbers of students simultaneously passing through multiple doorways in close proximity to each other.)

- Mobility devices (wheelchairs, walkers, etc.) come in a large variety of sizes and shapes. Classrooms should be large enough to allow students to maneuver through the room and sit comfortably at a desk or table.
- The gym, auditorium, and stage should be designed so they are accessible and allow the student with a disability to participate in all activities and sit and work with their classmates. The stage should be accessible from both front and back.
- Playgrounds, playing fields and other areas on the grounds should be accessible via smooth, paved pathways.

B. Equipment

- Equip doors with press plate openers.
- Select accessible lockers for students that provide key or combination lock options.

C. Furniture

- Provide accessible (adjustable height) tables and chairs that do not look different than the other furniture in the room.
- Choose tables and chairs with straight legs. Students using wheelchairs or with gait or perceptual problems might trip over or ride into a protruding chair leg.
- Seating attached to a desk is generally not accessible.

Specialized Rooms

Resource Rooms

Resource rooms function as classrooms for children in need of special attention.

- The resource room should look like, and be equipped similarly to, the regular classrooms in the school.
- The room should have the capability of being divided into sub-areas so students can work individually or in small groups.
- Older students may be sensitive to the fact that they have to use the resource room. Consider locating this room in less trafficked areas and reducing the visibility into the room from the hall.

Life Skills Training

Independent Living or Life Skills training areas may need to be provided for students with intellectual disabilities.

Physical, Occupational, and Speech Therapy Spaces

With the growth of inclusive education, the demand for physical (PT), occupational (OT) and speech therapy services has increased. It is logistically and financially more feasible to provide therapy in the school setting than to send students out to off-site providers.

Designated therapy spaces are currently unavailable in most schools. Therapists are providing therapy in areas of the school that lack privacy and equipment. These spaces include corridors, the cafeteria, the back of classrooms, etc. A designated therapy room with proper equipment shared by the physical and the occupational therapists should be included in the design. (Requirements for Speech Therapy areas are listed above.)