One-Way Mirror Specifications – (Appendix K – Figure 3 – page 102)

The architectural drawing for the Sound-Proof Partition currently specifies, 3/16” THK TEMPERED GRAY TINTED GLASS (12% LIGHT TRANSMITTANCE).

**CORRECTION:** The specification should have stated **88%** light transmittance, not 12%. The numbers were mistakenly switched. Tempered clear glass with ¼” thickness has a 12% reduction in light transmittance, allowing 88% of the light to pass through. (See Wall Section Detail with corrected specification on following page.)

Equipment and Furniture (Appendix K – page 99)

**COUNTERTOP/TABLE HEIGHT:** The paragraph below describes the optimal table/countertop height so that the teacher and child can comfortably work and observers can clearly observe the child’s reading and writing work. **The 25-inch height is not wheelchair accessible according to Americans with Disabilities Act (ADA) requirements.** Some schools have addressed this issue by using a table with adjustable legs. This adjustment allows needed flexibility to meet the ADA requirements while still allowing the needed height for observing most lessons. **Training sites should work with a local architectural firm to assure that construction meets all requirements.**

“The tutoring room where teachers conduct lessons with one of their Reading Recovery children requires a long, narrow, rectangular tabletop on which the teacher and child work. The tabletop, either a child’s table, a table with adjustable legs, or a built-in tabletop, must be 25 inches from the floor. The table surface needs to be large enough for teacher and child to sit side-by-side and to accommodate Reading Recovery teaching materials that include a child’s books basket, magnetic letters on trays, chalk and erasers, a writing book, pencils and scissors, and oak tag strips for writing. A narrow surface keeps the lesson material, especially books, close to the glass and therefore readable by the observers! **The surface of the tabletop should be the same height as the bottom of the one-way mirror.**

**RECOMMENDATION:** Training sites may choose to work with a local architectural firm, lighting and sound engineers to assure that specifications in this document meet current construction requirements.

Guidelines and Specifications for the Reading Recovery Training Facility

Reading Recovery's professional development is widely recognized as the key reason struggling children can become successful readers in a relatively short period of time. The opportunity to teach and/or observe two Reading Recovery lessons is part of every session.

The in-service training facility consists of a large classroom and a smaller tutoring room joined by a one-way mirror. Because lessons are taught behind this one-way mirror, they have been informally known as behind-the-glass sessions. These professional development sessions occur weekly during the training year then at least six times annually during all the subsequent years teachers are active in Reading Recovery.

A visit to one or two training facilities will help you understand the details of the facility's design. Trainers at the university training center can answer any questions that come up during the planning and construction of the facility.

The Setting
Location
A central district location in a school or administration building is a good site for your training facility. Accessibility by public transportation, especially in urban settings, and ample, safe parking make on-time arrival more likely. Try to plan a location with travel time of an hour or less whether by car or public transit. In a multiple-district site with a large geographic area, you may decrease travel time by constructing two training facilities as the number of trained teachers increases. If the facility is nearer to schools in the participating district(s), transporting children to the facility for sessions is somewhat easier to arrange.

Availability of the Space
If the facility is to be a multi-purpose space, it is important to ensure that all of the Reading Recovery requirements are met. Flexible scheduling during or after school is desirable. The facility must be available at least an hour or two before Reading Recovery training, professional development, or information sessions to allow the teacher leader to prepare the space. Professional development sessions and information sessions that include a lesson for administrators, teachers, board members, and government officials may need to be scheduled in this facility during the school day. Sometimes the tutoring room doubles as an office space and teaching space for other students.

Space
The professional development model requires that a one-way mirror be installed between a large classroom and a small tutoring room. A retractable screen or curtain covers the window in the classroom during the day so that both rooms can be used for other purposes. Both rooms need adequate lighting, ventilation, heating, and air conditioning.

The classroom needs to be large enough to accommodate an area for viewing the lesson and a discussion space. (See Figure 1.) The viewing area includes six low and six high stools for observation of lessons in front of the one-way mirror. Space is also needed for a few visitors (e.g., the principal, first-grade teacher, or administrator considering implementing Reading Recovery) to stand behind the stools while they observe teaching and learning behind the one-way screen. Because the teachers are participating in a professional learning experience during the teaching session, visitors are asked to refrain from commenting or asking questions during the session. Visitors may ask questions after the teaching session if time permits or ask questions of the teacher leader at a later time.

The discussion area, usually at the other end of the classroom, needs to accommodate chairs arranged in a circle around a low coffee table for 12 teachers and the teacher leader. (See Figure 1.) To create a safe space for teachers to take risks during learning, visitors usually do not attend the discussion session; occasionally they do. They sit outside the discussion circle, reserving questions and comments until after the session has finished. This arrangement, without a large table as a barrier, facilitates participant discussion during class. If tables are needed for particular activities, stored folding tables can be used. In addition, space in or out of the classroom for coats, boots, backpacks, etc. should not be underestimated, especially in cold, snowy climates!

The smaller tutoring room will allow a teacher and child to work while being observed by Reading Recovery professionals. Sometimes a family member sits at the back of the tutoring room to observe a child’s lesson. Room to store little books and supplies should be part of the design. During the training session, two teachers will conduct back-to-back Reading Recovery lessons in the tutoring room.

The floors of the classroom and the tutoring rooms must be at the same level to allow clear viewing between the rooms. This allows the observers to look through the mirror to clearly see the child and teacher at work.
Separate entrances in each room are desirable to allow a child to enter the tutoring room without seeing the group of adults who will be observing the lesson. Soundproofing between the rooms maintains privacy for the teacher and child during the lesson so they cannot hear the observers’ discussion. An architect or a structural engineer will be needed to ensure that the facility meets all specifications.

One-Way Mirror and Soundproof Wall
The size of the window (i.e., the opening for the one-way mirror) should be 4 feet high by 8- to 10 feet wide, unobstructed by vertical supports (See Figure 3). Tempered glass is required for safety. The bottom edge of the window should be no more than 25 inches off the floor. This allows observers to see the tabletop where the child and teacher are working. The vertical edges of the window should not be in the corners of the room, but rather should allow enough wall space on either side of the window for the leader. (See Figure 2 and Figure 3.)

The wall between the two rooms must be completely soundproof. There are different ways to insulate for soundproofing so it is wise to have an acoustical expert advise you. Providing the dimensions of the two rooms and a drawing and description of both rooms when you meet with an audio professional is a first step. Often your advisor may prefer to see the site in person.

Two panes of glass are used to construct the window – a vertical one-way mirror and a sloping transparent pane of glass. The installation of the glass and the one-way mirror impacts the soundproofing. In some sites the glass and mirror are seated in rubber or something comparable (on top and bottom) to prevent vibrations from traveling from the piece of glass to the mirror or vice versa. A sound barrier should be used around the entire perimeter of the frame.

A basic installation for the dry wall between the two rooms should also include acoustical fiberglass insulation. If the room has a dropped ceiling, be sure that the soundproofed wall with insulation extends from the floor to the top of the actual ceiling to ensure sound proofing (i.e. not just to the top of the dropped ceiling). The dry wall above and below the glass also should contain this insulation. Any outlet or opening in the walls between the rooms (e.g. electrical, sound, or video) must be filled with acoustical fiberglass, foam, or comparable material. Carpeting in both rooms often enhances the audio quality by absorbing extraneous noise. Carpet also decreases the loud, cavernous sound quality of a bare classroom. Every situation is unique, and all soundproofing needs to be customized for your individual situation. This is why it is important to have an acoustical professional assist you.

Lighting
The classroom for observers must be dark so that the child and teacher in the tutoring room cannot see through the one-way mirror. In classrooms with windows, dark window coverings are needed to screen out all light in the observation room. It is also important that the observers’ view of the lesson be unobstructed by their own reflections, so the sloped pane in the window should be a type of glass that will minimize glare (for example, nonglare glass or glass with a lightly tinted film). The frame on either side of the glass and in between the two pieces of glass should be painted dark brown or black in a matte finish to minimize glare. In addition, if classroom and tutoring room walls are painted a somewhat darker color (not white or a light color), this will help to avoid reflections on the glass. Canister lights in both rooms that can be aimed straight downward will be less likely to cause reflections on the glass.

The tutoring room must be exceptionally well lighted. The lighting in the tutoring room must be very bright. Additional track lighting directed on the tabletop will enhance the observers’ views of the print on the page. Lighting in the classroom will be controlled by the teacher leader or trainer who stands beside the one-way mirror during discussions. Place the classroom dimmer switch within easy reach for the teacher leader conducting the session.

Sound System
An audio expert from an industrial audio systems business can advise you on purchasing and installing equipment for your facility. You will need a microphone in the tutoring room, speakers, amplifier, and volume control in the classroom. The specific system to fit your needs depends on the size of the two rooms and the physical environment of each room (e.g. ambient noise, or sound absorbent materials).

You will need a microphone in the tutoring room. A variety of microphones have been used successfully in Reading Recovery training facilities. A good choice is a PZM microphone mounted on the table, in the wall, or from the ceiling. If you use a table microphone be sure to set it on a rubber surface (e.g. mouse pad) to decrease the distracting noise from shuffling papers and dropped books. The microphone should be as unobtrusive as possible, far enough away from inquiring children’s hands so that it doesn’t become a distraction. If mounted in a wall or hanging from
the ceiling, the microphone must not be near anything that creates ambient noise such as a fan, heating or air conditioning vent. To ensure privacy when lessons are not in session, install a wall-mounted on-off switch for the microphone near the teaching table in the tutoring room.

In the classroom, the standard of performance for your audio system is that all observers must easily hear the teacher and child talking. A small wattage amplifier (15 to 35 watt public address amplifier and two to four small, wall speakers) will usually work. In addition, the teacher leader must be able to adjust the volume control for the speakers. The volume control should be mounted beside the glass to allow easy access in the classroom. Carpeting in both rooms often enhances the audio quality by absorbing extraneous noise.

**Equipment and Furniture**

The tutoring room where teachers conduct lessons with one of their Reading Recovery children requires a long, narrow, rectangular tabletop on which the teacher and child work. The tabletop, either a child's table, a table with adjustable legs, or a built-in tabletop, must be 25 inches from the floor. The table surface needs to be large enough for teacher and child to sit side-by-side and to accommodate Reading Recovery teaching materials that include a child's books basket, magnetic letters on trays, chalk and erasers, a writing book, pencils and scissors, and oak tag strips for writing. A narrow surface keeps the lesson material, especially books, close to the glass and therefore readable by the observers! **The surface of the tabletop should be the same height as the bottom of the one-way mirror.**

The child's chair height must allow him to look down at his book placed flat on the table. Besides the table and chairs, the room will also include an easel with a magnetic white board on front and a blackboard on the back. We also recommend that the room contain one or two electrical outlets.

The large classroom space allows teachers to both observe and discuss the lesson they have seen. Observation occurs as they sit in front of the window; then participants move to a circle of chairs at the other end of the classroom for discussion after the lesson. For a training class of 12 participants, six (6) low stools placed side-by-side form the first row in front of the window. The second row consists of six (6) high stools. Some sites budget for a few extra stools for ongoing professional development sessions that may have slightly larger groups. Chairs are arranged around a low table, approximately the height of a coffee table in a circle. About 15 to 20 stackable chairs can accommodate a training class with visitors or a professional development session.

The classroom also may include an adjustable easel with a large flip chart, a magnetic white board for demonstrations, and a bulletin board for notices. **The teacher leader must also have access to an overhead projector, a screen, a VCR and monitor (27-inch or larger), and a tape recorder.** If PowerPoint software is to be used, an LCD unit and computer will be needed. If security is an issue, a secure place to store equipment is a must! Check to insure there are enough electrical outlets on each wall for AV use. Book shelving, filing cabinets, and storage facilities can be located either in the classroom and/or tutoring room.

**Classroom Equipment**

- Black out shades or curtains for all windows
- Ventilation, lighting, heat, and air conditioning
- Adequate electrical outlets
- Dimmer switch near control panel
- 2 sound speakers on classroom side of one-way mirror
- Amplifier and volume control panel on classroom side of the one-way mirror
- 6 low and 6 high stools for viewing lesson
- 15 to 20 stackable chairs
- Large, low coffee table
- Several six-foot folding tables, easily stored
- Screen or curtain to cover the glass
- Overhead projector and screen
- Video monitor and VCR
- LCD unit and computer
- Large easel for flip chart and large, magnetic white board
- Book shelving and storage if needed
- Space for coats, backpacks and other bags (in or outside the classroom)
Tutoring Room Equipment and Supplies

- Tabletop at same height as glass (25 inches)
- Two small chairs
- PZM microphone and on-off switch (part of sound system)
- Adequate ventilation, heat, and air conditioning
- Adequate electrical outlets
- A set of little books and storage space for them
- Easel and large magnetic white board/chalk board
- Eraser and white board pens
- Magnetic letters and tray or storage box
- Small white board
- Scissors and oak tag strips for sentence writing
- One inch Post-it tape
- Legal size envelopes
- Writing books and water soluble pens

*If used as office:*
- Shelving and storage
- Filing cabinets
- Telephone and answering machine
- Computer, printer, and Internet access
- Storage cabinets

**Office Space**
Your teacher leader will need office space to accomplish the administrative part of her work. Equipment for that office will include a computer with Internet connection, a printer, a locked cabinet for filing and data storage, and a telephone with answering machine. Your teacher leader will monitor and enter data daily on the Internet. This information is essential for planning and evaluating your Reading Recovery implementation. Often the tutoring room is designed with enough space so that a teacher leader can use it as an office and for teaching children.

**Waiting Area**
For each training session, children are transported to participate in Reading Recovery lessons. A principal, teacher, and/or parent accompanies the child to the session and then makes sure that the child gets home safely. The Reading Recovery teacher must stay to attend the last part of the class and cannot transport the child home.

A comfortable waiting area is needed for children and their adult companions, especially for the second child to be taught each day. A few games, art materials, and little books help adults and children pass the waiting time more quickly.

**Timing**
Having your facility completed by June will ensure that it is ready for the Observation Survey Workshop usually held in July or August.
Figure 1:

Suggested Plan Configuration: Classroom & Tutoring Room

NOT TO SCALE

Figure 2:

Suggested Elevation of Observation Window in Classroom

NOT TO SCALE
Figure 3:
Cross-Section of Soundproof Partition w/ Observation Window
NOT TO SCALE

TUTORING ROOM

CLASSROOM

HARD WOOD TRIM PAINTED MATTE BLACK OR DARK BROWN
EPOXY SEAL AT PERIMETER OF GLASS AT TOP & BOTTOM
HARD WOOD TRIM W/ DARK MATTE FINISH AT BOTH SIDES & TOP & BOTTOM OF GLASS
1/4" THK TRANSPARENT MIRROR (REFLECTIVE SIDE FACING TUTORING ROOM)
3/16" THK TEMPERED GRAY TINTED GLASS (12% LIGHT TRANSMITTANCE)
ANGLE OF GLASS 87°

MILLWORK STUDENT-TEACHER WORK SURFACE
COUNTER SUPPORT

ACOUSTICALLY LINED GYPSUM WALLBOARD PARTITION TO EXTEND TO STRUCTURAL SLAB
PROVIDE (2) GROMMETS AT COUNTER, MIN. 2" IN DIAMETER

THIS DRAWING IS SOLELY INTENDED AS A GUIDELINE AND IS NOT TO BE USED FOR CONSTRUCTION PURPOSES. PLEASE CONSULT AN ARCHITECT PRIOR TO CONSTRUCTION