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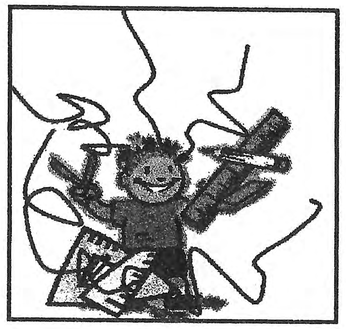

Occupational and Physical Therapy Information and Guidelines

Livingston County Special Services Unit

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Statement of Educational Relevance

Occupational and Physical therapy services shall be provided for students with disabilities who require appropriate therapeutic intervention to benefit from specialized instruction.

The Livingston County Special Services Unit with its member districts, provides therapy to support a child's special education services. This means therapy assists in attaining educational goals and objectives rather than focusing on achievement of separate goals and objectives. Therapy goals should:

- *Interrelate with defined components of the special education services*
- *Are needs driven, linked to priority learning issues and general environmental supports.*
- *Are provided only according to necessity, that is, what is needed to allow benefit from special education instruction.*

All therapy within the educational setting must have a relationship to each student's identified goals, and must have a direct impact upon the student's abilities to benefit from their educational program. **Occupational therapy goals may not stand alone with out relating to a classroom goal.**

*School based therapy is **not** intended to meet all therapy needs of a student. The school system provides the therapy specified on the Individualized Education Program deemed necessary by the educational team to achieve the educational goals and objectives identified for each student.*

Mode and Frequency of Educationally Related Therapy

Models for the delivery of service may include any of the following:

Direct

These services will be provided when the expertise of a Registered Occupational Therapist or Certified Occupational Therapy Assistant or Licensed Physical Therapist is needed to assist in the development of needed skills to enhance specialized instruction. The student's IEP team makes the decision of mode and frequency of services on a weekly basis. The OTR/PT consults with the student's team when goals are achieved or maximum progress has been made and the student is ready to be dismissed from services. Related services may be dismissed on the IEP and an eligibility review is not necessary.

Indirect or Consultative

Under the supervision of the OTR these services are provided through a team approach. They may include classroom strategies delivered by or assisted by any of the educational staff as decided by the IEP team. Goals on the IEP would be evaluated by the OTR/COTA and reported on quarterly.

Best Practices in the School Setting

Screening an individual student is ***not*** allowed under the Special Education Rules and Regulations. It is not appropriate to request an individual screen on a Problem Solving Intervention Plan, or by contacting the OTR/COTA or PT.

A generalized observation or screening may be permitted if ***all*** members of a class are included in the same activity.

Intervention

Through a Response to Intervention approach, strategies may be provided to the student by any of the educational team members. The OTR/COTA/PT may be invited to a team meeting and participate in the "brainstorming" aspect of the meeting. They may not be included as an implementer. Classroom strategies to try are listed later in this booklet.

Assessment

If a student is eligible for specialized instruction and has an IEP established and if classroom interventions have not been successful, the team may request an evaluation by the OTR or PT. It is important for these professionals to be present at the IEP meeting when this discussion occurs. At the very least, the professionals who are assigned to the building where the student attends should be consulted before this decision is made. These assessments are question based and should include classroom observations by other members of the team. ***These questions and assessment are focused on how the student is progressing or not progressing in achieving their established goals.***

Questions in the areas covered by Occupational and Physical therapy may be included in an initial evaluation as deemed necessary by the Assessment Team.

Occupational and Physical therapy may be provided under a Section #504 Plan.

Evaluation Process

Included in the assessment by the Occupational or Physical Therapist may be questions to be answered by several members of the team or by the Therapist alone. Assessment may include the following:

- *Review of Records including prior interventions*
- *Examination of the Student's work*
- *Interview with student and/or teachers/parents*
- *Standardized assessments*
- *Functional assessments*
- *Checklists*
- *Classroom observations of the student at work*

Performance Areas and Components

Occupational Therapy typically addresses the following

Performance areas:

- Activities of Daily Living (ADL)
- Educational/Vocational
- Play and/or Leisure
- Mobility/Movement
- Visual Perception
- Assistive Technology
- Seating/Positioning

Occupational Therapy typically addresses the following

Components of Movement::

- Strength
- Flexibility (range of motion)
- Muscle Tone and Coordination
- Speed
- Reflexes (righting/equilibrium)
- Respiratory Support

Occupational Therapy typically addresses the following:

Components of Perception:

Sensory:

- Tactile
- Proprioceptive
- Kinesthetic
- Visual
- Auditory
- Gustatory
- Olfactory
- Vestibular

Processing:

- Arousal/attention span
- Memory (recognition/orientation)
- Pain response
- Left/right discrimination
- Form constancy
- Position in space
- Visual closure
- Figure-Ground

Physical Therapy typically addresses the following:

- Mobility
- Movement
- Posture
- Positioning
- Safety Accessing Environments
- Seating arrangements

Following is a listing of the Elements of Performance. Consulting this list may assist teams in understanding which area the student may be having difficulty with and it may tailor interventions or assessment questions to the particular student.

Motor Control = Using the body in functional and versatile movement.

Oral Motor Control = Coordinating oropharyngeal musculature for controlled movement. (swallowing, eating, drinking)

Postural Control = Using righting and equilibrium adjustments to maintain balance during junctions in static positions.

Balance = Ability to maintain and/or regain upright position against gravity when balance has been threatened.

Praxis-Motor Planning = Conceiving and planning a new motor act in response to an environmental demand.

Laterality = Using a preferred unilateral body part for activities requiring a high level of skill.

Visual-Motor Integration = Coordinating the interaction of information from the eyes with body movement during activity.

Endurance = Sustaining cardiac, pulmonary, and musculoskeletal exertion over time.

Crossing Midline = Moving limbs and eyes across the midsagittal plane of the body.

Bi-lateral Integration = Coordinating both body sides during activity.

Stereognosis = Organizing sensory input into meaningful patterns and the sense of touch.

Body Scheme = Acquiring an internal awareness of the body and the relationship of body parts to each other.

Depth Perception = Determining the relative distance between objects, figures, or landmarks and the observer, and the changes in planes of surface.

Spatial Relationships = Determining the position of objects relative to each other.

Topographical Orientation = Determining the location of objects and setting the route to the location.

Initiation of Activity = Starting a physical or mental activity.

Termination of Activity = Stopping an activity at the appropriate time.

Sequencing = Placing information, concepts, and actions in order.

Categorization = Identifying similarities of and differenced among pieces of environmental information

Concept Formation—Organizing a variety of information to form thoughts and ideas.

Problem Solving = Recognizing, and defining a problem, identifying alternative plans, and then selecting, organizing, and implementing, and evaluating the outcome of the plan.

Generalization = Applying previously learned concepts and behaviors to a variety of situations.

Role Performance = Identifying maintaining, and balancing functions in society.

Social Conduct = Interacting by using manners, personal space, eye contact, gestures, active listening, and self expression.

Self Management = Use of coping skills, time management, and self control.

Balance = Identifying, maintaining, and balancing functions in society.

Possible classroom interventions

Sensory Processing (taking in the information provided by the environment and screening out what is important to organize oneself to act on the environment in an appropriate manner)

- Provide quiet, "take a break" spaces for the student who becomes over-stimulated by the environment. Regrouping and organizing themselves may allow them to complete the activity.
- Allow the student who experiences sensitivity to touch to stand at the end of the line and/or arrange the classroom seating to minimize the risk of being jostled or bumped by peers.
- Allow for modification to art activities for those students who are tactile defensive when touching mediums such as glue, paint, clay, etc. Providing tools such as brushes may increase participation.
- Warn the student of any loud noises before the occur.
- Carpeting or area rugs assist in minimizing classroom noise and may increase attention.
- To decrease fidgeting and to improve postural adjustments, allow the student to stand at the desk or work on the floor in a prone-on-elbows position. A bungee cord or Thera-Band wrapped around the chair legs provides sensory input to assist the student staying in their desks longer.
- A partially inflated air pillow or stadium seat may increase postural control by providing sensory input.
- Allow the student to be the teacher's assistant building in frequent "movement" breaks while having goal directed tasks to complete.
- To increase postural muscle strength and endurance, heavy work, such as pushing/pulling or carrying weighted objects, or using scooter boards or wheel barrow walking are effective strategies

Environmental Accommodations (controlling environmental factors such as visual and auditory stimulation can maximize a student's capability to remain focused and organized)

- Limit the amount of visual material hanging on walls and ceilings
- Store manipulatives in containers or cubbies

- Label where materials should be placed when not in use or when completed.
- Use a template picture for where to put items inside the desk.
- Place number or letter line directly on student's desk if they become distracted when trying to use board
- Limit auditory input from the hallway by closing the classroom door and seat distractible student away from open windows.
- Prepare student who is sensitive to noise for bells, fire drills, and announcements when ever possible.

Schedules and Structure Accommodations (Students with sensory integration difficulties will benefit from a predictable schedule/routine)

- Each morning outline the schedule for the day with the entire class. Highlight any changes in the routine.
- Discuss or create a Social Story about unexpected events before they occur to help student prepare for these surprise situations.
- Assist students in transitioning from one event to another by providing a warning or visual cue that a change will happen soon.
- Check assignments with student for each class to assure understanding.
- Use color-coding for subject notebooks to assist organization.

General Organizing Sensory Activities (Pressure, rhythm, oral-motor input, and exercise assist with organizing oneself)

- Placing your hands on the student's shoulders, or head with safe, firm pressure can help them slow down.
- Create a quiet corner in the room with headphones or music or books on tape.
- Classical music of Mozart or Vivaldi are thought to be conducive to learning during independent work time.
- Deep breathing before making a transition, entering into a busy environment, or beginning a challenging project can assist in organizing the student.
- Marching from one activity to another provides sensory, rhythmical input to feet and legs and can be organizing.
- Allow students to have crunchy, chewy snacks and water bottles for sucking liquids at their desks to be used when needed.
- Younger students can "hold up the walls", or "push the walls down" as they wait in line. Older students can do push-ups in their desks with their hands.
- Allow students to "fiddle" with small objects in order to increase their ability to maintain focus.
- Take movement breaks several times per day to stand up an stretch between activities.
- Adjust chair and table to a height suitable for the student to best perform. (Feet should touch floor while elbows rest comfortably on top without being hunched.)
- Students with low oral and postural tone often gain control for fine motor tasks when given gum to chew or hard candy to suck on during writing activities.
- Playing with whistles, blowing bubbles, can assist a student with oral motor activities.
- Reminding student of correct posture may assist in chewing, swallowing efficiency and decrease drooling or "messy" eating. Food texture may need to be modified.

Fine Motor Skills (fine motor skills impact manipulation of fasteners, scissor and writing skills)

- Writing on a vertical or slanted surface such as an easel, 3 ring binder, blackboard, paper taped to the wall, etc. can assist with developing the shoulder and wrist strength needed for accuracy.
- The development of the thumb, index finger, and middle fingers necessary to refine handwriting and scissor skills may be facilitated by:
- Using a spray bottle to squirt water on to a picture or a plant
- Using tweezers to pick up cotton balls
- Using small manipulatives such as beads or Unifix cubes
- Using a hole punch
- Pushing pegs into clay
- Cutting cardboard
- Using clothes pins
- Loop scissors can be used before regular scissors
- Cut strips of paper, straws, rolls of Play Doh
- Use a vertical surface when drawing to encourage wrist extension
- Use one hand to pick up small items, (coins, beads) move from palm to finger tips one at a time.
- Student can hold scissors with thumb in one hole and middle finger in other hole. Index finger can stabilize middle finger. Remind student to "steer" the paper with the non-preferred hand.
- Reinforce writing skills by using activities involving kinesthetic or tactile awareness such as:
- Writing in the air
- Writing with a wet paint brush on the board or side walk
- Writing in shaving cream
- Writing in sand
- Writing with eyes closed
- Writing on another's back to have them guess the
- letter, number, or word
- Remind students to use non-preferred hand to stabilize paper.
- Use small or broken crayons to help encourage hand and finger strength.
- Encourage play with small manipulative toys, such as Legos, Light brites, beads, etc.

Motor Planning (the ability to organize and sequence novel activities affecting self-help skills, independence in general, and motor development)

- Provide step-by-step directions, model, and ask student to try task.
- Use a consistent approach to learning new skills.
- Allow time to practice new skill, more time to "polish"
- Have student answer basic questions before beginning task. i.e. What do you need? What comes first, second, etc.
- If student has difficulty formulating ideas, "brainstorm" possibilities before beginning.

- Set up activities in an obstacle course manner.
- "Simon says" or sequencing games assist developing motor planning skills
- Walk the student through the activity.
- Timers, warnings, etc. can assist the student in transitions and allow more time for them to complete the transition from one task to another.
- Picture sequences assist the student in organization and smoother transitions
- Consistent places to store materials, such as an additional table, shelf, desk, may assist organization.
- Explore alternative methods to recording information other than handwriting. (voice recordings, oral reports, multiple choice questions, other technology)
- Allow extra time to complete assignments.

Visual Motor Skills (Students with delays/difficulties in this area may have trouble scanning or tracking- *reading-writing* or accommodating-*copying from the board*-and organizing their work-*sequencing*-

- Remove excess clutter from work area.
- Enlarge both materials to be read or written.
- Work to be copied from the board may be presented at the student's desk.
- Slant board to put materials on may assist reading or writing
- Highlight the left side of the page to assist student in left to right reference.
- Writing paper may need to have lines bolded for student to see easier.
- A pointer, finger, or index card may assist keeping place when reading.
- Highlighting the number the problem or question on seatwork or test papers will assist the student in completing each item and not skipping unintentionally.
- Touch point math may assist student who can not use number line successfully.
- Tracing letters or numbers with their eyes before writing may assist legibility. After writing on the board allow student to trace with eyes and then make changes.
- Mazes, word searches, and dot-to-dot activities assist the student in tracking and scanning skills.

Perceptual Skills (impacts the formation of letters and numbers, and the ability to organizes (spacing-line-up) written work on paper)

- Allow student to skip lines in between written work if lines are too close together.
- Boldness of guide lines may need to be enhanced if the student is not able to put symbols on the line because they can not "see" them.
- Allow student to use what ever spacing is optimal for them.
- Clean off desk of excess clutter to assist organization.
- Colored paper, or overlays may be beneficial.
- Graph paper may assist spacing.
- Provide additional practice activities
- Highlighting the left starting point may assist the student who has left to right progression difficulties.
- Slant boards (3 ring binders) may assist in perception of written information.
- Vertical book holders (cookbook) may raise the written information to eye level and increase perception.

- .Work to be copied from the board may need to be presented at the student's desk.
- Practicing letter or number formation may be enhanced by using different mediums such as clay, sand, shaving cream, string, etc.
- Practice writing very large on the board with eyes open and then shut can assist development.

The following are examples of questions which may be appropriate to an evaluation.

Appropriate questions for a Physical Therapist to investigate:

1. How does the student's physical limitations affect their mobility/movement in participating in school activities? What strategies could assist them?
2. What seating arrangement would assist the student in access to the curriculum and work completion?
3. How does the range of motion of the student's extremities impact access to the curriculum and participation in school activities? What strategies would assist access?
4. What environmental accommodations would assist the student in accessing the curriculum?
5. What are the student's gross motor and motor planning skills? What strategies could assist these areas for increased participation in the curriculum?
6. What strategies would assist the student in using "safety" procedures in the school environment?

Appropriate questions for an Occupational Therapist to investigate:

1. How does the student learn subject content the best? What strategies could assist the student's learning?
2. How are the student's social skills interfering with relationships with teachers and/or peers? What strategies could assist relationship building?
3. How does the student process the sensory input from the classroom? What modifications/adaptations would assist the student?
4. What are the student's gross motor skills? What strategies could assist improving these skills for greater participation ?
5. Why is the student having difficulty functioning safely within the classroom/school environment? What strategies could assist with their safety?
6. What compensation strategies is the student using to function within the classroom and how are these strategies affecting learning and social interactions?
7. What strategies can be implemented to improve the quality of the student's arm and/or hand movements used when needed to complete classroom activities?
8. How are the student's motor planning skills affecting fine motor, gross motor, social skills, play skills, and classroom success?
9. What are the student's fine motor deficits and what strategies can be implemented to increase fine motor performance?
10. How are the student's visual perceptual skills affecting classroom performance? What strategies can be implemented to improve these skills?
11. What factors are affecting the student's attention and what strategies can be implemented to increase the stu-

dent's ability to attend to a task?

12. What are the student's visual scanning and tracking skills and how do they affect learning? What strategies can be implemented to enhance these skills?
13. How efficiently can the student copy or use information written in a book or on a blackboard? What supports could be implemented to assist these skills?
14. What accommodations to the physical environment of the classroom may increase the student's mobility/ability to function successfully?
15. What accommodations/modifications to the student's work may increase success in the curriculum?

It is appropriate for classroom teachers to have input into any question listed above. Performance over time is valuable information and the Teacher is most important in providing this data to be included in the evaluation.

The Occupational Therapists and Occupational Therapy Assistants have training in several Handwriting curriculums. They are available to consult with teachers on the implementation of these curriculums. We encourage teachers to talk with the staff to promote developmentally appropriate skills and hopefully avoid common handwriting problems.

Sources for this informational handbook are from:

Best Practices of Occupational Therapy and Physical Therapy in the School Setting

State of Iowa Department of Education

The American Occupational Therapy Association

Illinois State Board of Education

The Journal of Occupational Therapy

The Effects of Vision on Learning and School Performance

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