ST. TAMMANY PARISH PUBLIC SCHOOLS

General Education Access Guide

Modification Guide for teaching strategies, accommodations and content standards.

Revised June 2005

INFORMATION PROCESSING
TEACHING STRATEGIES AND STUDENT ACCOMMODATIONS

TABLE OF CONTENTS

INTRODUCTION

Students participating in the general assessment are expected to address the Louisiana Content Standards and be provided the necessary supports and accommodations to reach these challenging standards. The purpose of this guide is to provide a process that will promote access to and success within the guaranteed curriculum for students participating in LEAP. This process will provide an opportunity for the teacher to

- be knowledgeable about <u>how</u> the student learns,
- meet the students needs
- to enable the student to be involved in and progress in the guaranteed curriculum.

INFORMATION PROCESSING
(WHAT IS IT?)

To understand the proposed process, the users of this guide must have an understanding of the concept *information processing*. Information processing is a construct that is now consistently present in definitions of learning theory nationally. Information processing theory has been evolving in the research literature since 1958. It has recently been successfully adopted by many states as a model for developing statewide assessment measures and for developing a student's individualized education program.

While it is important to know a student's standardized test score in a content area, it is even more important to know how that student learns and his profile of strengths and difficulties within a reliable model of information processing.

Using an information processing model, the teacher must analyze why a student has reacted to assessment probes in a given manner rather than emphasize the standardized score. Innovative strategies are necessary to obtain descriptive information about the student in order to plan an individualized program and to design effective teaching strategies. In this way, the dynamic interactions of the child's ability to process information, the curriculum, and the teaching strategies can be integrated for the educational benefit of the student.

Information processing is a research-based concept that has been borrowed from communications theory to look at the temporal and spatial characteristics of the human mind. The basic premise is that information is operated on by various mental structures and processes whose functions are to acquire, manipulate, organize, store, retrieve, and express information. The information processing model is a way to explain behavior by describing the mental structures and processes that influence the way a student collects, stores, modifies, and interprets environmental information or information already stored internally.

The information processing model offers three dynamic stages of processing:

- sensory input (intake through senses)
- integration (attachment to existing concepts), and
- output (communication of information).

Information processing occurs internally, but is affected by occurrences and experiences in the community, home, and school of the student. Of course, memory underlies all the processing of information.

The following six dynamic, interactive, overlapping, and complex components of information processing are frequently identified: acquisition, manipulation, organization, storage, retrieval, and expression.

A student may have difficulty with one or more of the six information processing components. Once identified, that student's difficulty may be addressed with creative accommodations and effective teaching/learning strategies.

The advantages of the information processing model are significant in that

- the focus is on the processing of information in solving a task,
- the emphasis is teaching the student how to learn along with what to learn,
- the concept is that the student is an active processor of information,
- the student's needs are targeted for specific teaching/learning strategies, and
- there is coordination possible with performance-based models of assessment.

The following chart provides a simplified visualization of the attributes of the six components of information processing.

SENSORY INPUT	INTEGRATION	OUTPUT
Acquisition	Manipulation Organization Storage Retrieval	Expression

INFORMATION PROCESSING PROFILE

The purpose is to develop an information processing profile to determine what supports are needed for a student to access and make progress in the general curriculum. The literature is rich in describing information processing models. The state of Louisiana has chosen, with permission, to adapt the terms and process described by the Minnesota Department of Children, Families, and Learning.

Information Processing is the act of receiving, recalling, and using information to function is an environment. The components of information processing include the following:

- Acquisition   accurately gaining, receiving and/or perceiving information

- Manipulation   the process of applying, using, or altering information

- Organization   structuring information, i.e., categorizing, sequencing

- Storage   adding information to existing information

- Retrieval   locating or recalling stored information

- Expression   communicating information

Information Processing components are

- observable

- noticeable in a variety of settings

- identified with sensor input (auditory, visual, tactile, or kinesthetic) integration, or output (spoken, written, gestural, or motoric)

- overlapping

- interactive in the sense that one may impact another

- complex and dynamic

Steps in Developing an Information Processing Profile

Teachers are encouraged to develop an information processing profile to determine what supports are needed for a student to access and make progress in the Guaranteed Curriculum.

Step 1: Complete the Teacher Questionnaire (v). Additional data may be gathered as needed: Observation Form (vii), Home / Family Questionnaire (ix) and Student Interview (x).

Step 2: Review each section to determine the predominant component of information processing that may be interfering in the student's learning. The Profile Summary (xii) will help to identify the strengths and weaknesses.

Step 3: Once a major weakness is identified, refer to the accompanying teaching strategies and student accommodations to assist in determining instructional supports needed for the student to be successful in addressing the Guaranteed Curriculum.

Teacher Questionnaire / Interview

Student's Name_____ Grade _____ Birth Date _____

Teacher _____ Date _____

Directions: Please rate the student on the following behaviors that might indicate the presence of an information processing condition. Each section represents one component of information processing. Additional information may be recorded on a separate sheet of paper or on the back of this form.

Acquisition - accurately gaining, receiving and/or perceiving information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Links new information to that previously learned	❑	❑	❑	❑	❑	❑
Obtains information by hearing	❑	❑	❑	❑	❑	❑
Obtains information by seeing	❑	❑	❑	❑	❑	❑
Obtains information by reading	❑	❑	❑	❑	❑	❑
Obtains information by touching	❑	❑	❑	❑	❑	❑
Comprehension skills are good	❑	❑	❑	❑	❑	❑
Learns through repetition	❑	❑	❑	❑	❑	❑
Recognizes differences in sounds	❑	❑	❑	❑	❑	❑
Recognizes differences in the printed word	❑	❑	❑	❑	❑	❑
Recognizes differences in numbers	❑	❑	❑	❑	❑	❑
Obtains information thru multi-sensory approach	❑	❑	❑	❑	❑	❑
Can discriminate visually	❑	❑	❑	❑	❑	❑

Manipulation – the process of applying, using, or altering information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Applies learned information to new situations	❑	❑	❑	❑	❑	❑
Infers information	❑	❑	❑	❑	❑	❑
Summarizes information	❑	❑	❑	❑	❑	❑
Interprets information	❑	❑	❑	❑	❑	❑
Writes sentences of varying length and complexity	❑	❑	❑	❑	❑	❑
Analyzes and solves problems of varying complexity	❑	❑	❑	❑	❑	❑
Interprets social cues	❑	❑	❑	❑	❑	❑
Uses a variety of ways to explain, clarify or reuse	❑	❑	❑	❑	❑	❑
Differentiates details from key concepts	❑	❑	❑	❑	❑	❑
Ability to proofread written assignments	❑	❑	❑	❑	❑	❑

Organization - structuring information, categorizing sequencing, etc.	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Hands in assignments on time	❑	❑	❑	❑	❑	❑
Has an organized locker or desk	❑	❑	❑	❑	❑	❑
Sequences information	❑	❑	❑	❑	❑	❑
Prioritizes information (note taking, open book tests)	❑	❑	❑	❑	❑	❑
Follows school routines	❑	❑	❑	❑	❑	❑
Completes class assignments	❑	❑	❑	❑	❑	❑
Completes homework assignments	❑	❑	❑	❑	❑	❑
Uses planner to manage assignments	❑	❑	❑	❑	❑	❑
Articulate a strategy before beginning a task	❑	❑	❑	❑	❑	❑
Follows written directions	❑	❑	❑	❑	❑	❑
Follows oral directions	❑	❑	❑	❑	❑	❑
Comes to class with materials	❑	❑	❑	❑	❑	❑
Copies number problems with proper alignment	❑	❑	❑	❑	❑	❑
Labels, categorizes, and associates information	❑	❑	❑	❑	❑	❑
Begins task as expected	❑	❑	❑	❑	❑	❑
Aligns work spatially	❑	❑	❑	❑	❑	❑
Sequences information	❑	❑	❑	❑	❑	❑
Completes assignments	❑	❑	❑	❑	❑	❑

IPP-TQ (10-/2003) v

Storage – adding information to existing information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Follows two-to three step directions	❑	❑	❑	❑	❑	❑
Immediately recalls information (short term memory)	❑	❑	❑	❑	❑	❑
Retains sequences	❑	❑	❑	❑	❑	❑
Remembers information by writing it down	❑	❑	❑	❑	❑	❑
Recognizes or recalls information over time (long term	❑	❑	❑	❑	❑	❑
Remembers information by saying it out loud	❑	❑	❑	❑	❑	❑
Remembers information by seeing	❑	❑	❑	❑	❑	❑
Retains information through example	❑	❑	❑	❑	❑	❑
Remembers information by linking new information to previously learned information	❑	❑	❑	❑	❑	❑
Retrieval - locating or recalling stored information	**Almost Always**	**Frequently**	**About 1/2 the time**	**Seldom**	**Hardly ever**	**Not observed**
Responds in acceptable amount of time	❑	❑	❑	❑	❑	❑
Uses strategies to help recall information	❑	❑	❑	❑	❑	❑
Counts and calculates automatically	❑	❑	❑	❑	❑	❑
Recalls sounds associated with letters and words	❑	❑	❑	❑	❑	❑
Recalls sequential steps for tasks	❑	❑	❑	❑	❑	❑
Remembers facts	❑	❑	❑	❑	❑	❑
Recalls names, labels, and vocabulary	❑	❑	❑	❑	❑	❑
Retrieves known information to use in written	❑	❑	❑	❑	❑	❑
Retrieves known vocabulary concepts to build or expand	❑	❑	❑	❑	❑	❑
Expression – communication information	**Almost Always**	**Frequently**	**About 1/2 the time**	**Seldom**	**Hardly ever**	**Not observed**
Responds appropriately to nonverbal communication	❑	❑	❑	❑	❑	❑
Asks questions/gives answers related to content	❑	❑	❑	❑	❑	❑
Participates in class discussions	❑	❑	❑	❑	❑	❑
Uses appropriate nonverbal behaviors in conversation	❑	❑	❑	❑	❑	❑
Obtains information by touching	❑	❑	❑	❑	❑	❑
Organizes thoughts for written expression	❑	❑	❑	❑	❑	❑
Communicates in writing to expand ideas, explain answers	❑	❑	❑	❑	❑	❑
Uses skills to negotiate desires and appropriately asserts	❑	❑	❑	❑	❑	❑
Produces speech sounds correctly	❑	❑	❑	❑	❑	❑
Exhibits age appropriate voice patterns (hoarse, volume)	❑	❑	❑	❑	❑	❑
Exhibits age appropriate speech sound production	❑	❑	❑	❑	❑	❑
Writes legibly	❑	❑	❑	❑	❑	❑
Uses appropriate social skills/language for situation	❑	❑	❑	❑	❑	❑
Connected speech is intelligible	❑	❑	❑	❑	❑	❑
Speaks clearly without stuttering (ex.: repetitions,	❑	❑	❑	❑	❑	❑
Responds appropriately to nonverbal communication	❑	❑	❑	❑	❑	❑
Asks questions/gives answers related to content	❑	❑	❑	❑	❑	❑
Participates in class discussions	❑	❑	❑	❑	❑	❑

INFORMATION PROCESSING PROFILE
Observation Form

Student's Name _____ Grade _____ Birth Date _____

Teacher _____ Date _____

Subject: _____ Student / Teacher Ratio _____

Assessor (if different from teacher) _____

Beginning Time _____ Ending Time _____

Setting _____

Task (describe) _____

Check the observed level of the student's functioning. Please use reverse side for more specific comments or relevant dialogue.

Academic Areas	No problem	Some problem	Significant problem	Not observed	Comments
Basic reading skills	❏	❏	❏	❏	
Reading comprehension	❏	❏	❏	❏	
Mathematical reasoning	❏	❏	❏	❏	
Written expression	❏	❏	❏	❏	
Oral expression	❏	❏	❏	❏	

Behavior	No problem	Some problem	Significant problem	Not observed	Comments
Hyperactive	❏	❏	❏	❏	
Hypoactive	❏	❏	❏	❏	
Impulsive	❏	❏	❏	❏	
Distractible	❏	❏	❏	❏	
Perseverative	❏	❏	❏	❏	
Disruptive	❏	❏	❏	❏	
Uncooperative	❏	❏	❏	❏	
Impaired social interaction	❏	❏	❏	❏	
Overly compliant	❏	❏	❏	❏	
Other relevant behavior	❏	❏	❏	❏	

Information Processing	No problem	Some problem	Significant problem	Not observed	Comments
Understands visual material (A)	❏	❏	❏	❏	
Comprehends Information (A)	❏	❏	❏	❏	
Applies information (M)	❏	❏	❏	❏	
Makes inferences (M)	❏	❏	❏	❏	
Interprets information (M)	❏	❏	❏	❏	
Brings classroom materials (O)	❏	❏	❏	❏	
Begins task promptly (O)	❏	❏	❏	❏	
Completes assignment (O)	❏	❏	❏	❏	
Uses planning skills (O)	❏	❏	❏	❏	
Follows directions (O)	❏	❏	❏	❏	
Remembers visual material (S)	❏	❏	❏	❏	
Remembers auditory material (S)	❏	❏	❏	❏	
Recalls information (R)	❏	❏	❏	❏	
Responds in timely manner (R)	❏	❏	❏	❏	
Uses strategies to recall (R)	❏	❏	❏	❏	
Writes legibly (E)	❏	❏	❏	❏	
Participates in class (E)	❏	❏	❏	❏	
Demonstrates fluency in speech (E)	❏	❏	❏	❏	

S = Storage, O = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

Indicate how the observed behavior relates to the student's academic functioning.
_____
_____
_____

Does the general education teacher think the observation period is representative of typical behavior for this student in the classroom?   ❏ Yes   ❏ No

Other comments and observations: _____
_____
_____
_____
_____

INFORMATION PROCESSING PROFILE
HOME / FAMILY QUESTIONNAIRE / INTERVIEW

Student's Name _____ Parent(s) _____
Birth Date _____ Age _____ Grade _____
School _____ Teacher(s) _____

Dear Family Member,

Please complete this form. The information you provide will be used in planning appropriate services for your child.

Rate your child's performance at home or in the community on the following items:	Does very well	Occasionally requires parent assistance	Always requires parent assistance	Not applicable
Understands what he/she reads (A)	❑	❑	❑	❑
Understands what he or she sees (A)	❑	❑	❑	❑
Understands what he or she hears (A)	❑	❑	❑	❑
Learns a new game (A)	❑	❑	❑	❑
Solves problems (M)	❑	❑	❑	❑
Explains something he or she learns (M)	❑	❑	❑	❑
Assembles or repairs things (M)	❑	❑	❑	❑
Demonstrates artistic ability (M)	❑	❑	❑	❑
Organizes (O)	❑	❑	❑	❑
Uses planning skills (O)	❑	❑	❑	❑
Follows two- to three-step directions (S)	❑	❑	❑	❑
Remembers (S)	❑	❑	❑	❑
Recalls events from the school day (R)	❑	❑	❑	❑
Recalls specifics from a special event (R)	❑	❑	❑	❑
Reads aloud (R)	❑	❑	❑	❑
Knows basic math facts (R)	❑	❑	❑	❑
Carries on a conversation (E)	❑	❑	❑	❑
Writes legibly (E)	❑	❑	❑	❑

A = Acquisition, M = Manipulation of Information, O = Organization, S = Storage, R = Retrieval, E = Expression

1. In your opinion, what can the school staff do to help your child at this time?
_____
_____

2. Share strengths and special abilities your child has that the school staff should know.
_____
_____

3. Describe the way your child learns best.
_____
_____

Form completed by _____ Date _____

THANK YOU VERY MUCH FOR YOUR HELP!

INFORMATION PROCESSING PROFILE
Student Interview

Student's Name _____ Grade _____ Birth Date _____

Teacher _____ Date _____

Directions: Which would best describe you. (Read items to student and modify as needed.)

Acquisition - accurately gaining, receiving and/or perceiving information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly Ever
I remember things without having them repeated.	❑	❑	❑	❑	❑
I learn new things easily.	❑	❑	❑	❑	❑
I understand what I read	❑	❑	❑	❑	❑
I understand what someone tells me.	❑	❑	❑	❑	❑
I understand my class work.	❑	❑	❑	❑	❑

Manipulation - the process of applying, using, or altering information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly Ever
I can find more than one way to answer a question.	❑	❑	❑	❑	❑
I can explain what I learn to my parents.	❑	❑	❑	❑	❑
I like to do math problems.	❑	❑	❑	❑	❑

Organization - structuring information, categorizing sequencing, etc.	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly Ever
I turn my assignments in on time.	❑	❑	❑	❑	❑
My locker and desk are in order.	❑	❑	❑	❑	❑
I run out of space when I am writing.	❑	❑	❑	❑	❑
When I write papers, I get information before I begin writing.	❑	❑	❑	❑	❑
I make notes or an outline before I write.	❑	❑	❑	❑	❑
I edit or change my writing at least once before handing my paper in to the teacher.	❑	❑	❑	❑	❑
When I do math story problems, I think about the information before I do the work.	❑	❑	❑	❑	❑
I can tell a story in the right order.	❑	❑	❑	❑	❑
I know how to study for a test.	❑	❑	❑	❑	❑

Storage - adding information to existing information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly Ever
After hearing new information, I learn it by saying it again to myself.	❑	❑	❑	❑	❑
I spell words by seeing the word in my mind.	❑	❑	❑	❑	❑
I spell words by sounding out the letters.	❑	❑	❑	❑	❑

IPP-SQ (10/2003)

x

Retrieval - locating or recalling stored information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly Ever
I know my basic addition facts.	❏	❏	❏	❏	❏
I know my basic multiplication facts.	❏	❏	❏	❏	❏
I use pictures when I do a math problem.	❏	❏	❏	❏	❏
I remember things from the past.	❏	❏	❏	❏	❏
I remember the specific information I have studied for a test.	❏	❏	❏	❏	❏
I like to play games that are timed.	❏	❏	❏	❏	❏
I do things at a fast rate of speed.	❏	❏	❏	❏	❏

Expression - communication information	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly Ever
I can tell you how to get around the building.	❏	❏	❏	❏	❏
I like to: read aloud	❏	❏	❏	❏	❏
draw	❏	❏	❏	❏	❏
give oral reports	❏	❏	❏	❏	❏
do an experiment	❏	❏	❏	❏	❏
show how to do something	❏	❏	❏	❏	❏
write	❏	❏	❏	❏	❏

Write your answers to these questions.

Name two things that are alike and tell why (M,E)   1) _____   2) _____

Name two things that are different and tell why (M,E)   1) _____   2) _____

How do you remember new information, such as spelling words, a friend's phone number, etc.? (S,O,E)

What are the names of all of your teachers including physical-ed., music and art? (S,O,E)

_____   _____   _____

_____   _____   _____

_____   _____   _____

A = Acquisition, M = Manipulation of information, O = Organization, S = Storage, R = Retrieval, E = Expression

INFORMATION PROCESSING PROFILE SUMMARY

Student's Name_____   Grade _____ Birth Date _____

Teacher _____   Date_____

PROCESSING	STRENGTHS: Almost Always/Frequently	WEAKNESSES (Needs): Seldom/Hardly Ever
Acquisition	•Links new information to that previously learned (T) •Obtains information by ___ Hearing, ___ Seeing / Visual (T) (F), ___ Reading (T) (F) (S) (O), ___ Touching, ___ Multi-sensory approach (T) • Comprehension skills (T) (O) (S) • Learns through repetition ((T) • Recognizes differences in ___ Sounds ___ Printed word ___ Numbers (T) • Can discriminate ___ Visually ___ Auditorily (T) • Learns a new game (F) • Learns a new things easily (S) • Remember things without having them repeated (S) • Understands ___ class work (S) • Understands visual material (O) • Understands what he/she ___ reads, ___ sees, ___ hears (F) (S) • Additional Comments:	•Links new information to that previously learned (T) •Obtains information by ___ Hearing, ___ Seeing / Visual (T) (F), ___ Reading (T) (F) (S) (O), ___ Touching, ___ Multi-sensory approach (T) • Comprehension skills (T) (O) (S) • Learns through repetition ((T) • Recognizes differences in ___ Sounds ___ Printed word ___ Numbers (T) • Can discriminate ___ Visually ___ Auditorily (T) • Learns a new game (F) • Learns a new things easily (S) • Remember things without having them repeated (S) • Understands ___ class work (S) • Understands visual material (O) • Understands what he/she ___ reads, ___ sees, ___ hears (F) (S) • Additional Comments:
Manipulations	• Applies learned information to new situations (T) (O) • Infers Information (T) (O) • Summarizes information (T) • Interprets information (T) (O) • Writes sentences of varying length and complexity (T) • Analyzes and solves problems of varying complexity (T) (F) • Interprets social cues (T) • Uses a variety of ways to explain, clarify or reuse communication of a specific topic (T) (F) • Differentiates details from key concepts (T) • Ability to proofread written assignments (T) • Assembles or repairs things (F) • Demonstrates artistic ability (F) • Finds more than one way to answer a question (S) • Can explain what has been learned to parents (S) • Likes to do math problems • Additional Comments:	• Applies learned information to new situations (T) (O) • Infers Information (T) (O) • Summarizes information (T) • Interprets information (T) (O) • Writes sentences of varying length and complexity (T) • Analyzes and solves problems of varying complexity (T) (F) • Interprets social cues (T) • Uses a variety of ways to explain, clarify or reuse communication of a specific topic (T) (F) • Differentiates details from key concepts (T) • Ability to proofread written assignments (T) • Assembles or repairs things (F) • Demonstrates artistic ability (F) • Finds more than one way to answer a question (S) • Can explain what has been learned to parents (S) • Likes to do math problems • Additional Comments:

KEY:

(**T**) = Information from Teacher Questionnaire (**F**) = Information from Home and Family Questionnaire
(**O**) = Information from Observation Form (**S**) = Information from Student Questionnaire

PROCESSING	STRENGTHS: Almost Always/Frequently	WEAKNESSES (Needs): Seldom/Hardly Ever
Organization	•Hands in assignments on time (T) (S) •Completes ___ class assignments and ___ homework assignments (T) (O) •Organizes (Desk, Locker, etc.) (T) (O) (S) •Sequences information (T) •Prioritizes information (note taking, open book tests) (T) •Follows school routines (T) •Uses planning skills, such as planner to manage assignments (O) (F) •Articulate a strategy before beginning a task (T) •Follows directions ___ Written, ___ Oral (T) (O) •Comes to class with materials (T) (O) •Begins task promptly and as expected (T) (O) •Copies number problems with proper alignment (O) (T) •Labels, categorizes and associates information (T) •Aligns work spatially (T) •Sequences information (T) •Runs out of space when writing (S) •Gets information before beginning to write a paper (S) •Makes notes/outline before beginning to write (S) •Edit or change writing at least once before handing in paper to teacher (S) •Thinks about information before working on or doing a math story •Can tell a story in the right order (S) •Know how to study for a test (S) •Brings classroom material (O) • Additional Comments:	•Hands in assignments on time (T) (S) •Completes ___ class assignments and ___ homework assignments (T) (O) •Organizes (Desk, Locker, etc.) (T) (O) (F) •Sequences information (T) •Prioritizes information (note taking, open book tests) (T) •Follows school routines (T) •Uses planning skills, such as planner to manage assignments (O) (F) (T) •Articulate a strategy before beginning a task (T) •Follows directions ___ Written, ___ Oral (T) (O) •Comes to class with materials (T) (O) •Begins task promptly and as expected (T) (O) •Copies number problems with proper alignment (O) •Labels, categorizes and associates information (T) •Aligns work spatially (T) •Sequences information (T) •Runs out of space when writing (S) •Gets information before beginning to write a paper (S) •Makes notes/outline before beginning to write (S) •Edit or change writing at least once before handing in paper to teacher (S) •Thinks about information before working on or doing a math story •Can tell a story in the right order (S) •Know how to study for a test (S) •Brings classroom material (O) • Additional Comments:

Storage	• Follows two- to three-step directions (T) (F)
	• Immediately recalls information (short term memory) (T)
	• Retains sequences (T)
	• Remembers ___ visual material, ___ auditory material (O) (F)
	• Remembers information by writing it down (T)
	• Recognizes or recalls information over time (long term memory) (T)
	• Remembers information ___ by saying it out loud, ___ by seeing, ___ by linking new information to previously learned information (T)
	• Retains information through example (T)
	• Learns new information by after hearing by repeating it (S)
	• Spells ___by seeing the word in their mind
	        ___by sounding out the letters (S)
	• Additional Comments:
		• Follows two- to three-step directions (T) (F)
		• Immediately recalls information (short term memory) (T)
		• Retains sequences (T)
		• Remembers ___ visual material, ___ auditory material (O) (F)
		• Remembers information by writing it down (T)
		• Recognizes or recalls information over time (long term memory) (T)
		• Remembers information ___ by saying it out loud, ___ by seeing, ___ by linking new information to previously learned information (T)
		• Retains information through example (T)
		• Learns new information by after hearing by repeating it (S)
		• Spells ___by seeing the word in their mind
		        ___by sounding out the letters (S)
		• Additional Comments:

Key:

   (T) = Information from Teacher Questionnaire   **(F)** = Information from Home and Family Questionnaire
   (O) = Information from Observation Form   **(S)** = Information from Student Questionnaire

PROCESSING	STRENGTHS: Almost Always/Frequently	WEAKNESSES (Needs): Seldom/Hardly Ever
Retrieval	● Recalls___ events from the school day, ___ specifics from a special event (O) (F) ● Responds in acceptable amount of time (T) ● Uses strategies to help recall information (T) ● Counts and calculates automatically (T) ● Recalls sounds associated with letters and words (T) ● Recalls sequential steps for tasks (T) ● Remembers facts (T) ● Recalls names, labels, and vocabulary (T) ● Retrieves known information to use in written communication (T) ● Retrieves known vocabulary concepts to build or expand vocabulary (T) ● Rote memory skills such as in math computation and use of formulas are good (T) ● Retrieves known information to use in oral communication (T) ● Knows basic , ___ math facts, ___ addition facts ___ multiplication facts (F) (S) ● Uses pictures when doing math problems (S) ● Remembers things from the past (S) ● Remembers specific information after studying for a test (S) ● Likes to play timed games (S) ● Does things at a fast rate of speed (S) ● Reads aloud (F) (S) ● Responds in a timely manner (O) ● Uses strategies to recall (O) Additional comments:	● Recalls___ events from the school day, ___ specifics from a special event (O) (F) ● Responds in acceptable amount of time (T) ● Uses strategies to help recall information (T) ● Counts and calculates automatically (T) ● Recalls sounds associated with letters and words (T) ● Recalls sequential steps for tasks (T) ● Remembers facts (T) ● Recalls names, labels, and vocabulary (T) ● Retrieves known information to use in written communication (T) ● Retrieves known vocabulary concepts to build or expand vocabulary (T) ● Rote memory skills such as in math computation and use of formulas are good (T) ● Retrieves known information to use in oral communication (T) ● Knows basic , ___ math facts, ___ addition facts ___ multiplication facts (F) (S) ● Uses pictures when doing math problems (S) ● Remembers things from the past (S) ● Remembers specific information after studying for a test (S) ● Likes to play timed games (S) ● Does things at a fast rate of speed (S) ● Reads aloud (F) (S) ● Responds in a timely manner (O) ● Uses strategies to recall (O) Additional comments:
Expression	● Writes legibly (T) (O) (F) ● Responds appropriately to nonverbal communication (T) ● Asks questions/gives answers related to content (T) ● Participates in class discussions (T) (O) ● Uses appropriate nonverbal behaviors in conversation (body language, facial expressions, gestures, eye contact (T) ● Obtains information by touching (T) ● Organizes thoughts for written expression ((T) ● Communicates in writing to expand ideas, explain answers and/or describe (T) ● Uses skills to negotiate desires and appropriately asserts these in communication interactions (T) ● Produces speech sounds correctly (T) ● Exhibits age appropriate ___ voice patterns (hoarse, volume) ___ speech sound production (T) ● Uses appropriate social skills/language for situation (T) ● Connected speech is intelligible (T) ● Speaks clearly without stuttering (T) ● Carries on a conservation (F) ● Demonstrates fluency in speech (O) ● Can tell you how to get around the building (S) ● Likes to ___ read aloud, ___ give oral reports, ___ write, ___ do an experiment, ___ show how to do something, ___ draw (S) Additional comments:	● Writes legibly (T) (O) (F) ● Responds appropriately to nonverbal communication (T) ● Asks questions/gives answers related to content (T) ● Participates in class discussions (T) (O) ● Uses appropriate nonverbal behaviors in conversation (body language, facial expressions, gestures, eye contact (T) ● Obtains information by touching (T) ● Organizes thoughts for written expression ((T) ● Communicates in writing to expand ideas, explain answers and/or describe (T) ● Uses skills to negotiate desires and appropriately asserts these in communication interactions (T) ● Produces speech sounds correctly (T) ● Exhibits age appropriate ___ voice patterns (hoarse, volume) ___ speech sound production (T) ● Uses appropriate social skills/language for situation (T) ● Connected speech is intelligible (T) ● Speaks clearly without stuttering (T) ● Carries on a conservation (F) ● Demonstrates fluency in speech (O) ● Can tell you how to get around the building (S) ● Likes to ___ read aloud, ___ give oral reports, ___ write, ___ do an experiment, ___ show how to do something, ___ draw (E) Additional comments:

Key: **(T)** = Information from Teacher Questionnaire **(F)** = Information from Home and Family Questionnaire
(O) = Information from Observation Form **(S)** = Information from Student Questionnaire

IPP-SUM (10/2003)   Summary Page 3 of 3

TEACHING STRATEGIES

AND

STUDENT ACCOMMODATIONS

Sources:
  General Education Access Guide
  Content Standards Modification Reference Guide

Supplement to LINKING THE **GENERAL ACCESS GUIDE** WITH THE **IEP**

Revised June 2005

> **Acquisition**: accurately gaining, receiving and/or perceiving information.
>
> ### LIST OF RECOMMENDATIONS FOR ACQUISITION

PAGE

ACQUISITION
Recommendation #1 – <u>Develop strategies for content mastery.</u>

TEACHING/LEARNING STRATEGIES

- Provide a partial outline and study questions.
- Outline key ideas and concepts.
- Color code or highlight key ideas.
- Use an overhead projector for class and lab notes.
- Use color-coded paper to organize concepts.
- Use timelines to present ideas.
- Use story maps.
- Pair a student with a buddy to check note taking.
- Use alternative method of taking/presenting notes (example: on note cards rather than 8½ x 11 paper.)
- Break down notes into categories by providing questions relevant to the subject.
- Provide notes on a computer disk.
- Teach self-instruction strategies.
- Use memorization techniques.
- Use graphic displays.
- Use content mastery routines.
- Teach skimming of text.
- Read titles and topic sentences.
- Strategies Intervention Model (SIMS – University of Kansas).
- Use first and last sentences.
- Use first letter mnemonics.
- Use buddy reader.
- Use taped materials.
- Use typing/word processing skills.
- Use multimedia technology.
- Provide background information pertinent to subject of story selection.
- Use the Circle Map to define an object or idea in context. (From Thinking Maps Program)

ACCOMMODATIONS

- Provide a copy of the teacher's notes written on the student's reading level.
- Provide taped notes.
- Provide a copy of another student's notes.
- Make sure intervention matches the student's mode of communication (e.g. Braille, sign language/cued speech, communication devices, assistive listening devices.)

Recommendation #2 – Provide supplemental and parallel materials/activities/ curricula/tests.

TEACHING/LEARNING STRATEGIES

- Use a variety of books and materials on the same topic but on different reading levels or different levels of difficulty (example: use a variety of materials and books on the same topic.)
- Use text with more visual aids/illustrations.
- Alter and vary presentation methods to include:
  - Altering the format of presentation (examples: cover some material on a page, cut a window, use color overlays)
  - Reduction of materials on a page
  - Alter the format of chapters in a text (example: move questions from back of chapter to appropriate area in text)
  - Making copies of text pages and highlight key areas—utilize a minimum number of pages rather than an entire chapter at once
  - Paraphrase chapters within a text – use paraphrase section as a text
  - Using tabs to organize material in a textbook
  - Using a collection of software on the same topic to provide varied materials and activities
  - Using video presentations on the same topic
  - Use a tape recorder to reward paraphrase materials
  - Utilizing on-site experiences in the community
  - Inviting guest speakers or mentors
  - Use communication board – design to match the same topic
  - On-site experiences in the community
  - Guest speakers or mentors
  - Using media: magazines, newspapers, television, film, video, radio
  - Allowing dramatizations of events
  - Dramatizations of events

ACCOMMODATIONS

- Alter and vary presentation methods to include:
  - Reducing materials on a page
  - Altering format of chapters in a text (ex., Move questions from the back of a chapter to appropriate area in text)
  - Copying pages of text - utilizing a minimum number of pages, rather than an entire chapter at once
  - Paraphrasing chapters within a text (Use paraphrased section as the text)
  - Using a tape recorder to reword paraphrased material
  - Using communication board designed to match the same topic
- Provide auditory/visual/written/partial outline.

ACQUISITION

Recommendation #3 – Allow computer assistance with reading, math, languages and within all content.

TEACHING/LEARNING STRATEGIES

- Identify local resources.
- Preview, evaluate software programs.
- Evaluate effectiveness of assistive technology.
- Choose programs that support curriculum.
- Choose programs that re-teach/remediate/reinforce and accelerate skills.
- Choose programs that aid in practice and application.
- Choose programs that enhance/enrich the content.

ACCOMMODATIONS

- Provide adaptive technology as needed.
  - Large keyboard, large screen, speed of mouse, head pointer, touch window, computer buddy, v-tech, mega dots (software).
- Provide assistive listening devices.
- Use sign language/cued speech enhanced software stories.
- Provide listening devices/adaptors for computers.

ACQUISITION
Recommendation #4 – <u>Utilize strategies for reading.</u>

TEACHING/LEARNING STRATEGIES

- Use Multisensory Structured Language techniques.
- Teach phonological awareness.
- Develop visual/verbal cues.
- Use teacher modeling.
- Use anecdotal stories/language experience.
- Provide resources to stimulate the visual process.
    - pictures • textures • colors • sign language • cued speech
    - films/videos • captioned films and videos • auditory stimulation
- Use who, what, when, where method.
- Use neurological-impress method.
- Develop a sight vocabulary/whole word strategy.
- Develop a broad-based vocabulary associated with age/grade appropriate content.
- Use cloze procedure for reading.
- Use computer-assisted reading.
- Use choral reading.
- Use repetitive reading.
- Use shared reader.
- Develop word predicting techniques.
- Use literature circles.
- Use a ruler to pace the print reader.
- Use sound/symbol/syllable principles.
- Provide a wide variety of grade/age appropriate supplemental materials.
- Teach at a pace commensurate with the students' abilities to process and respond to new information.
- Provide consistent use of syntax and grammar.
- Use **KWL** technique for reading:
    K   What you already <u>know</u> about the topic.
    W   What you <u>want</u> to know about the topic.
    L   What you have <u>learned</u> about the topic.

ACCOMMODATIONS

- Use technological aids such as speech synthesis, Closed Captioned TV (CCTV), hand-held magnifiers, or monocular.
- Use Braille; acquire large print materials.
- Provide technologically enhanced print, computer – large sized fonts, hand-held magnifiers, think board, CCTV or monocular.
- Use audio text books.

ACQUISITION
Recommendation #5 – Develop written expression skills.

TEACHING/LEARNING STRATEGIES

- Teach the use of spell checkers, thesaurus, and dictionaries (texts/computer).
- Teach **STOP** strategy for opinion essay.
  Suspend judgment
  Take a side
  Organize ideas
  Plan more as you write
- Teach the **TREE** Strategy for opinion essays
  Topic sentence
  Reason to support premise
  Examine soundness of reason
  Ending for paper
- Teach **COPS**.
  Capitalize
  Overall appearance
  Punctuation
  Spelling
- Teach typing/word processing skills.
- Teach spelling through singing.
- Teach semantic mapping.
- Teach editing, prioritizing and list making.
- Allow inventive spelling, but teach conventional spelling.

ACCOMMODATIONS

- Use computer-assisted writing technology.
- Allow inventive spelling, but teach conventional spelling.
- Eliminate copying from boards or books to paper.
- Allow computer-generated print.

ACQUISITION
Recommendation #6 – <u>Use varied mathematical/computation strategies.</u>

TEACHING/LEARNING STRATEGIES

- Provide a variety of manipulatives.
- Teach *Touch Math*.
- Pair auditory reinforcement with finger counting.
- Allow students to check their work with a calculator.
- Use computer assisted mathematics.
- Allow finger counting.
- Allow students to use charts and tables for reinforcement.
- Provide model of a completed problem.
- Sing facts.
- Have students recite facts chorally.
- Allow students to illustrate problems.
- Teach problem-solving strategies. (e.g., **DRAW**)
  <u>D</u>iscover the sign.
  <u>R</u>ead the problem.
  <u>A</u>nswer or draw and check.
  <u>W</u>rite the answer.
- Act it out.
- Emphasize the critical components of the task.
  - Highlight important words
  - Draw boxes around computation sign
  - Associate numerals to number words
  - Use rebuses (pictures)
  - Break down problem into steps
- Use flash cards.

ACCOMMODATIONS

- Use calculators.
- Write fractions to represent the appropriate size visually:
  - **½**   ⅓   ¼
- Use large sized keys on calculator for students with motor or visual impairments.
- Superimpose textures or Braille on keys.
- Use "talking calculator" or computer program.
- Allow/encourage the use of mathematics manipulative materials.

ACQUISITION
Recommendation #7 – <u>Use varied materials in mathematics instruction/testing.</u>

TEACHING/LEARNING STRATEGIES

- Use an overhead calculator for group instruction.
- Highlight reciprocals on mathematics grid for easy access and reinforcement.
- Provide partially filled mathematics grid and allow student to complete it.
- Laminate grids to encourage use and reuse.
- Have students use calculators to check work.
- Provide written or illustrated directions on how to use the calculator.
- Provide algebra tiles.
- Relate mathematics to real life.
- Use an overhead projector using algebra tile.
- Use a calculator/mathematics grid in instruction/testing.
- Use manipulatives (geo boards, Cuisenaire rods).

ACCOMMODATIONS

- Use large sized keys on calculator for the student with motor or visual impairments.
- Superimpose textures or Braille on keys.
- Use "talking calculator" or computer program.
- Allow/encourage use of mathematics manipulative materials.

ACQUISITION
Recommendation #8 – <u>Provide frequent changes in instruction.</u>

TEACHING/LEARNING STRATEGIES

- Schedule breaks by using alternative activities (example: learning centers, motor play).
- Break longer tasks and tests into smaller time increments.
- Reduce written tasks and use hands-on activities.
- Use alternatives to written instruction.
- Use alternatives to written instruction.
- Allow students to respond orally or to choose the mode of communication.
- Provide snacks, etc. when testing for "large" volume tests (e.g., CRT, NRT, CAT, LEEP).
- Use field experiences within the community.
- Have guest speakers or mentors.
- Use props, costumes, puppets, story boards, flannel boards, etc. (Use age-appropriate activities.
- Use test-taking strategies.
- Allow students to respond by typing answers into computers.
- Post strategies/steps of classroom on a cue card or the desk, etc.
- Use anecdotal stories (relating life experiences to learning).
- Change the environment. (Go outside.)
- Use grouping or cooperative learning.

ACCOMMODATIONS

- Provide auditory/visual outline.
- Provide print outline of videos.
- Use close captioning.
- Provide interpreting/transliterating of videos.
- Provide/use descriptive videos.

ACQUISITION
Recommendation #9 – <u>Use set routines.</u>

TEACHING/LEARNING STRATEGIES

- Use consistent methods to instruct/present, assess, review, and discipline students in the educational setting.
- Presentation/instruction:
  - Use the same method in a consistent manner to key students to the activities (example: a verbal or physical prompt, manual signs, visual reminders such as pictures, printed schedules of activities daily for task, posted routines in classrooms).
  - Write assignments on the board each day.
  - Provide weekly/monthly calendar of events.
  - Set an established place for storing materials.
  - Keep the classroom arranged in the same manner.
  - Provide seating charts.
  - Use clock faces to show classroom routine times.
  - Give a rationale for learning.
  - Teach strategies for studying/learning including, outline, questions and answers, and awareness of learning.
- Assessment
  - Use the same verbal/visual/physical prompting for test time. (Example: "Clear your desk; sharpen pencils. This is a test.") Establish a pre-testing routine for the environment.
  - Establish a routine for turning in work.
  - Establish a routine for missed assignments.
  - Establish a routine for what to do when finished with work.
  - Establish a routine for asking questions, requesting assistance.
  - Teach Prepare to Succeed **(PASS)**.
    <u>P</u>ut name on paper.
    <u>A</u>llot time and order.
    <u>S</u>ay something positive (affirmations).
    <u>S</u>tart within two minutes.
- Discipline
  - Post rules and consequences.
  - Be specific and clear, simple and to the point.
  - Make sure program is designed appropriately to meet student need.

ACCOMMODATIONS

ACQUISITION
Recommendation #10 – <u>Differentiate assignments for students.</u>

TEACHING/LEARNING STRATEGIES

- Match assignments to students' level/ability of performance and give different assignments, using:
  - Oral/signed cued versus written
  - Reduced or altered – require less academic output on tasks that require lengthy reading or paper-pencil tasks
  - Cooperative groups (Be sure student has skills to work in a group effort.)
  - Peer assistant
  - Adaptive technological aids
  - Historical timelines, graphs, and charts
  - Dramatizations of events
  - Allow shorter written assignments
  - Graphic organizers
  - Art/Music
  - Dioramas/Maps
  - Real-life situations applied to content areas (i.e., community experiences, worksite experiences, life-based skills practice)

ACCOMMODATIONS

- Reduce or alter assignments; require less output on tasks that require lengthy reading or paper-pencil tasks.
- Allow oral/signed/cued speech versus written tasks.
- Use software.
- Provide a peer facilitator.
- Allow shorter written assignments.
- For students with sensory/language/motor impairments, provide
  - Braille
  - Sign language/Cued Speech
  - Augmentative communication devices
- Use parallel texts.

ACQUISITION
Recommendation #11 – Provide intermittent tutoring/support.

TEACHING/LEARNING STRATEGIES

- Provide written or tape-recorded notes/lectures to use as a review.
- Use supplemental software and adaptive technology.
- Use a game format for teaching/review.
- Utilize cross-grade and cross-course tutoring.
- Assign a study buddy.
- Use cooperative learning group activities.
- Provide study guides.
- Provide opportunities for modeling and shadowing.
- Involve parents.
- Develop self-tutoring materials.
  - Flash cards
  - Self-checking devices
  - Programmed instruction
- Provide a partial outline and teach notetaking.
- Put the outline on note cards or colored paper.

ACCOMMODATIONS

- Assign a peer tutor.
- Provide notetakers, duplication, and advanced organizers.
- Provide an auditory/written outline.

ACQUISITION
Recommendation #12 – <u>Provide directions orally, in writing, by signing, or by cueing.</u>

TEACHING/LEARNING STRATEGIES

- List directions in numerical order rather than in a paragraph style.
- Have the students orally repeat/sign directions after they are given.
- Color code sequenced/routine tasks.
- Highlight key activities or clue words.
- Provide a written assignment sheet.
- Post directions on the board.
- Provide visual cues through photos or illustrations.
- Model instructions/directions.
- Provide a completed project or finished example.
- Provide a project checklist.
- Present directions in terminology or medium appropriate to the learner's needs (example: sign language, communication board, ESL).
- Provide timelines to check and review and redirect.
- Allow another student to rephrase or reteach directions.

ACCOMMODATIONS

- Present directions in terminology or medium appropriate to the learner's needs.
  - Sign language/Cued Speech
  - Communication board
  - Augmentative device
  - Taped direction
  - Braille or large print

ACQUISITION
Recommendation #13 – <u>Show a model of expected end product.</u>

TEACHING/LEARNING STRATEGIES

- Provide a step-by-step process through illustration, oral explanation, modeling, demonstration, and support, using task analysis.
- Provide variations of materials that still produce the end product: e.g., thicker paper, different colors.
- Allow an elimination of steps (manipulations or partially completed outline.)
- Allow students to work from the finished product back.
- Allow a practice run and let students resubmit their work for a grade.
- Provide an example for all required written work.
- Provide practice for real-life experiences.
- Provide opportunities for modeling and shadowing.
  - Job interviews
  - Conflict resolution
  - Social skills
- Use verbal, tactual, and visual examples.
  - Read aloud
  - Shared reading
  - Shared writing
- Model the process of thinking and problem solving; model how to solve a problem to complete a task, model metacognitive thinking.
- Present more than one example. Be aware of learning styles.
  - Student models
  - Interactive teaching
  - Choral reading
  - Real-life application (e.g., job interviews, conflict resolution, social skills, consumer applications, shadowing)

ACCOMMODATIONS

ACQUISITION
Recommendation #14 – <u>Use visualization with verbalization.</u>

TEACHING/LEARNING STRATEGIES

- Allow student to illustrate or construct projects along with verbal/signed/cued speech presentation.
- Provide a model or an example.
- Use films and multimedia techniques.
- Emphasize or augment with sign language or signals.
- Use maps, graphs, and charts.
- Use posters, collages, overhead projector.
- Dramatize events or key concepts.
- Provide timelines, flow charts, or story maps (webbing).
- Use manipulatives such as story chains.
- Use colors to key important concepts – to include colored chalk.
- Use Content Enhancement Routines (e.g., Concept Anchoring, Concept Mastery).
- Use decision-making table.
- Use definition table.
- Read aloud (flash cards, text, literature selection).

ACCOMMODATIONS

- Emphasis or augment with sign language, signals or student's method of communication.

ACQUISITION
Recommendation #15 – <u>Label objects.</u>

TEACHING/LEARNING STRATEGIES

- Coordinate home and school labels.
- Use pictures as well as words.
- Use codes, such as colors or symbols.
- Use functional labels from the environment.
- Use rebuses/symbols.
- Use mnemonics on labels.
- Use a variety of materials as labels:
  - Post-its
  - Tabs
  - Colored folders
  - Colored ink
  - Highlighters
- Label functional areas to cue where to find materials.
- Use an overhead projector to present visually and auditorily simultaneously.

ACCOMMODATIONS

- Use an appropriate medium for the student:
  - Sign language interpreter/transliterator
  - Cued speech transliterator
  - Language (ESL)
  - Textures
  - Braille/large print
  - Taped direction

ACQUISITION
Recommendation #16 – <u>Ask focused questions.</u>

TEACHING/LEARNING STRATEGIES

- Ask the students to restate given information into question form.
- Use the who?/, what?/, why?/, when?/, where?/, how?/ method.
- Eliminate all unnecessary information.
- Break down the amount of material covered (section vs. whole chapters).
- Use verbal/signed/cued as well as written questions.
- Ask questions so that the student has a good chance of answering the questions successfully, use prompts.
- Use daily and/or weekly summative evaluation.
- Use vocabulary concepts that are familiar to the student.
- Use anticipatory cues to alert students to prepare for questions.
- Pose questions and answer them to model appropriate responses.
- Choose types of questions to ask particular students so that the pupil has a good chance of answering the question successfully.

ACCOMMODATIONS

- Use anticipatory cues at key/frequent intervals during a selection to focus the student to the intent of what is read.

ACQUISITION
Recommendation #17 – <u>Provide options for the students to obtain class and lecture notes.</u>

TEACHING/LEARNING STRATEGIES

- Allow the students to copy the notes of other students with their approval.
- Make a copy of another student's notes with his/her approval.
- Allow students to check one another's notes to be sure that the information has been recorded correctly.
- Have the designated note taker use carbon or NCR paper and give a copy of the notes to the student.
- Provide a copy of the teacher's notes.
- Maintain a resource notebook of class notes.
- Have one student read his/her notes into a tape recorder for other students.
- Teach a note-taking strategy.

ACCOMMODATIONS

- Assign a designated peer note taker.

ACQUISITION
Recommendation #18 – Use multi-modality materials—accommodate learning styles by using a variety of materials and presentations.

TEACHING/LEARNING STRATEGIES

- Use charts, graphs, maps, globes, semantic maps, graphic organizers.
- Provide music, software, filmstrips, videos, dramatizations.
- Utilize hands-on materials.
- Use textures, colors, models.
- Allow tape recorders.
- Use alternative texts.
- Provide individual chalkboards/dry erase.
- Ask students to design bulletin boards.
- Allow/provide diagrams.
- Make task cards.
- Use raised line techniques such as cane and rope to feel lines and angles.
- Consider turning sound off during the viewing of a video.
  - Provide content appropriate for student.
  - Tape record your own script.
  - Use the tape as a creative writing tool.
- Use real objects.
- For blind students, allow them to feel shapes and compare spatial relations through feeling.

ACCOMMODATIONS

- For the blind student, use audio descriptive videos.
- Allow the student to feel shapes and objects and to compare spatial relations through touch.
- For the hearing impaired student, use closed-captioned videos when appropriate.
- Use communication and/or bulletin boards.
- Use adaptive technology.

ACQUISITION
Recommendation #19 – <u>Talk through model letter formation and numeral formation</u>.

TEACHING/LEARNING STRATEGIES

- Use a multi sensory approach to handwriting.
- Use raised line techniques such as cane and rope to feel lines and angles.
- Consider turning sound off during the viewing of a video and using a multi sensory approach to handwriting.
  - Skywriting
  - Texture writing
  - Sand trays
  - Shaving cream
  - Sculpting gel in plastic bag
  - Kinesthetic techniques
- Select materials/methods from various programs to meet individual needs of the students.
  - Teach handwriting strategies
- Use cursive ghost writing
- Talk through and model techniques. (Say and then Do).
- Begin with six-foot formations on floor, move to 24 inch, to 6-8 inches, and finally to ruled paper.
- Allow the student's to use print or cursive handwriting. Utilize the style the students are most comfortable with or which are most legible. Talk through and model techniques. (Say and then Do.)
- Use number rhymes.
- Use the Fernald method.
- Consult OT/PT for classroom activities to develop necessary motor functions.

ACCOMMODATIONS

- Consult an occupational therapist for classroom activities to develop necessary fine motor functions.
- Explore different methods and adaptations to hold a pencil.

ACQUISITION
Recommendation #20 – <u>Use cooperative learning strategies</u>.

TEACHING/LEARNING STRATEGIES

- Implement cooperative learning activities and strategies in the regular classroom.
- Change instructional groups.
- Vary groups to match the student's needs according to.
    - Group size
    - Members
    - Skill levels
    - Gender
    - Tasks
- Change partners periodically.
- Allow students a choice in partnerships.
- Vary groups to match student needs.
- Evaluate effectiveness.

ACCOMMODATIONS

- Provide alternative sites for cooperative groups, for appropriate acoustics.

ACQUISITION
Recommendation #21 – Provide copy of lecture notes and print outline of videos.

TEACHING/LEARNING STRATEGIES

- Provide a partial outline and study questions.
- Outline key ideas and concepts.
- Color code or highlight key ideas.
- Use color coded paper to organize concepts.
- Use timelines to present ideas.
- Provide taped notes.
- Pair up with buddy to check note taking.
- Provide a copy of another student's notes.
- Use alternative method of presenting notes (example: on note cards rather than 8½ x 11 paper).
- Break down notes into categories by providing questions relevant to subject area.
- Provide notes on computer disk.
- Arrange outline in sequential order.
- Highlight key ideas
- Pose questions and answer them.
- Provide a partial outline and teach note taking.
- Put the outline on note cards, colored paper, etc.

ACCOMMODATIONS

- Use overhead projector for class and lab notes.
- Use story maps.

ACQUISITION
Recommendation #22 – Allow use of calculator/math grid in instruction/testing.

TEACHING/LEARNING STRATEGIES

- Use overhead calculator for group instruction.
- Highlight reciprocals on math grid for easy access and reinforcement.
- Provide partially filled math grid and allow student to complete it.
- Laminate grids to encourage use and reuse.
- Use large sized keys on calculator for students with motor impairments.
- Superimpose textures or Braille, etc. on keys.
- Have written or illustrated directions on how to use the calculator (operations).

ACCOMMODATIONS

- Use "talking calculator" or computer program.
- Use calculators to check work.

ACQUISITION
Recommendation #23 – <u>Encourage visual imagery.</u>

TEACHING/LEARNING STRATEGIES

- Use mnemonics.
- Develop visual/verbal cues.
- Encourage pupils to visualize in their minds.

ACCOMMODATIONS

ACQUISITION
Recommendation #24 – <u>Use large print.</u>

TEACHING/LEARNING STRATEGIES

- Enlarge the print on the copy machine.
- Acquire large print materials.

ACCOMMODATIONS

- For students with visual impairments, this modification should always be used.

Manipulation: the process of applying, using, or altering information
LIST OF RECOMMENDATIONS FOR MANIPULATION

PAGE

MANIPULATION
Recommendation #1 – <u>Utilize classroom design</u>.

TEACHING/LEARNING STRATEGIES

- Use individualized instruction.
- Group students by cross-ability.
- Provide study carrels.
- Use room dividers.
- Provide headsets to muffle noise.
- Seat the students away from doors/windows.
- Seat the students near the model.
- Rearrange student groups.
- Use the overhead projector for models, directions, notes, etc.
- Reduce environmental distractions.
  - Air conditioner noise
  - Florescent light buzz
  - Glare
  - Outside noise

ACCOMMODATIONS

- Provide alternative sites for cooperative groups, for appropriate acoustics.

MANIPULATION
Recommendation #2 – <u>Help students to use information effectively</u>.

TEACHING/LEARNING STRATEGIES

- Use generalization cards.
- Practice predicting outcomes.
- Use self evaluation.
- Formulate summaries.
- Encourage applications of new learning.
- Use proofreading skills.
- Use miscue analysis.
- Use concept diagrams, semantic mapping.
- Use paraphrasing.
- Highlight or bullet key points.
- Summarize for note-taking.
- Allow students to make and use flash cards to recall important information.
- Use the Circle Map to define an object or idea in context. (From the Thinking Maps Program)
- Use the Bubble Map to describe qualities of an object or idea. (From the Thinking Maps Program)
- Use the Double Bubble Map for comparing and contrasting. (From the Thinking Maps Program)
- Use Multi-Flow for cause and effect. (From the Thinking Maps Program)

ACCOMMODATIONS

- Highlight most frequently used words.
- Use reinforcement.

MANIPULATION
Recommendation #3 – Teach students to apply information.

TEACHING/LEARNING STRATEGIES

- Develop problem-solving strategies.
- Use self-directed questioning strategy.
- Use Hypothesis Strategy.
- Use Modified Reciprocal Teaching.
- Use **POSSE** Strategy.
  - **P**redict what ideas are in the story
  - **O**rganize your thoughts
  - **S**earch for the structure
  - **S**ummarize
  - **E**valuate, compare, clarify and predict
- Use classification.
- Set up problems.
- Use self-monitoring homework.
- Use the Double Bubble Map for comparing and contrasting. (From the Thinking Maps Program)
- Use the Tree Map for classifying objects or ideas. (From the Thinking Maps Program)
- Use the Brace Map for part-whole relationships. (From the Thinking Maps Program)
- Use the Flow Map for sequencing. (From the Thinking Maps Program)

ACCOMMODATIONS

MANIPULATION
Recommendation #4 – <u>Enable altering information</u>.

TEACHING/LEARNING STRATEGIES

- Use analogies.
- Use Modified Reciprocal Teaching.
- Encourage visual imagery and imagining.
- Utilize problem-solving and reasoning skills.
- Teach summarization skills.
- Use paraphrasing to state key ideas, main ideas, events, etc.
- Transform the abstract to real-life application.
- Teach separating needed/useful information from extraneous information.
- Use strategies for formulating and supporting opinions.

ACCOMMODATIONS

- Simplify the problem.

Organization: structuring information i.e., categorizing, sequencing.
LIST OF RECOMMENDATIONS FOR ORGANIZATION

PAGE

ORGANIZATION
Recommendation #1 – <u>Provide graphic organizers</u>.

TEACHING/LEARNING STRATEGIES

- Use webbing (examples: story maps, flow charts, outlines, diagrams, etc.).
- Use graphs/charts.
- Use icons or pictures to illustrate key topics.
- Cross reference pictures on tabs to match books and notes.
- Provide a picture (photo) of the finished product.
- Pair the picture with vocabulary words; phase this activity out as students become more focused on the word.
- Cluster groups by attribute (example: names of generals under pictures of soldiers).
- Place mnemonic/remembering reminders on walls or desks (example: **COPS**).
- Place cued strips at desk as needed (examples: ABC's, number line, Touch Math).
- Provide a model or example of parts to the whole (example: Steps of scientific inquiry).
- Create concrete examples of abstract concepts using pictures, photos, objects, etc.
- Teach chunking techniques.
- Use semantic mapping.
- Use cognitive mapping.
- Use the Flow Map for sequencing. (From the Thinking Maps Program)
- Use the Tree Map for classifying objects or ideas. (From the Thinking Maps Program)

ACCOMMODATIONS

ORGANIZATION
Recommendation #2 – <u>Post assignments</u>.

TEACHING/LEARNING STRATEGIES

- Develop an individualized checklist for self monitoring.
- Use post-it notes to individualize assignments, and to give specific feedback.
- Use the same classroom routine, daily and weekly, on the board to serve both as a reminder or as a planning aid.
- Provide homework assignment sheets.
- Break down tasks into steps and post them in the room or on individual desks.
- Use clocks or time frames to prioritize tasks and to help manage each activity.
- Give the students a list of topics for that day.
- Provide a copy of a calendar to teach long range planning.
- Review assignments periodically and ask students to repeat to verify their understanding.
- Complete two or three steps and check before continuing.
- Post a materials list.
- Make sure students are a part of setting goals

ACCOMMODATIONS

ORGANIZATION
Recommendation #3 – <u>Give concise, clear directions</u>.

TEACHING/LEARNING STRATEGIES

- Simplify vocabulary and explanations.
- Break down/write instructions in simple steps.
- Ask students to repeat each step aloud, or ask students to sing/say/cue each step.
- Provide a copy of your directions for students to follow as you speak.
- Use webbing or flow chart.
- Summarize and review often.
- Use an overhead projector when presenting directions.
- Number directions or list directions rather than present them in a paragraph.
- Provide directions more than one time for a long task or page.
- Provide examples following written directions.

ACCOMMODATIONS

- Shorten the length of sentences.
- Provide peer tutor or buddy system to clarify directions, as needed.
- Allow a tape recorder for directions.

ORGANIZATION
Recommendation #4 – <u>Ask probing questions</u>.

TEACHING/LEARNING STRATEGIES

- Provide wait time for processing information/questions.
- Pre-teach critical vocabulary.
- Enhance vocabulary by using in context.
- Have students formulate their own questions to use later for class discussions.
- Pre-formulate their own questions to use later for class discussion.
- Use prompts to ensure success.
- Ask students to elaborate.
- Ask one student to summarize what another student has said and allow for clarification (written or verbal).
- Provide a copy of the questions to be asked.
- Teach students specific strategies (example: Execute strategy—a. Preview, review, predict; b. Ask and answer; c. Summarize and synthesize).
- Have students work in cooperative groups to answer questions.
- Ask open-ended questions.
- Use the **KWL** Strategy.
    Know - What do I already know about the topic?
    What – What do I want to learn?
    Learn – What have I learned about the topic?

ACCOMMODATIONS

ORGANIZATION
Recommendation #5 – Set a daily routine.

TEACHING/LEARNING STRATEGIES

- Post the schedule on walls in a manner consistent with the students' abilities.
- Post daily and weekly assignments.
- Review the schedule orally at specific intervals.
- Use assignment sheets or notebook.
- Brief students on key issues for the day.
- Alternate activities students enjoy a great deal with those they enjoy less.
- Post rules and review them often.
- Avoid unnecessary revisions in the schedule because they reduce students' ability to predict when enjoyable activities will occur.
- Provide a desk copy of the routines.
- Provide clear directions for changes in daily routine and give prior warning (example: assemblies, substitutes, etc.).
- Establish routines for such activities as handing work in, heading papers, etc.
- Use cues consistently when changing from one activity to another to assure a smooth transition.

ACCOMMODATIONS

ORGANIZATION
Recommendation #6 – <u>Color code folders/overhead/print</u>.

TEACHING/LEARNING STRATEGIES

- Color code key issues (example: all vocabulary in green, definitions in pink, facts in yellow).
- Code all answers to check-up questions and review in yellow: write page number for these next to the questions.
- Color code folders by subject.
- Highlight key facts in text in yellow.
- Use colored small post-it notes to correspond to key issues in the book.
- Be consistent with all materials, routines and written work format in all classes.
- Use a color overlay to correspond with the subjects when giving notes, etc.
- Attach color tabs to textbook edges to correspond to subjects: (example, key issues, review, etc.)
- Highlight the most frequent words and new vocabulary.
- Color code the place value.

ACCOMMODATIONS

- Use kinesthetic means to code folders.
- Staple construction paper with a "window" to a stick and use to highlight words on overhead.

ORGANIZATION
Recommendation #7 – <u>Provide checklists for activities</u>.

TEACHING/LEARNING STRATEGIES

- Provide classroom and homework assignment sheets daily.
- Teach self-regulation procedures.
- Use reciprocal peer revision strategies.
- Provide and follow model/samples.
- Encourage the students to participate in goal setting.
- Provide written, oral, signed or cued directions/explanations of assignments.
- Provide directions on the level of the student.
- Allow use of self-correcting materials.
- Utilize rebuses/pictures.
- Follow a set routine for homework tracking.

ACCOMMODATIONS

ORGANIZATION
Recommendation #8 – <u>Provide a time frame for long term assignments with interim dates</u>.

TEACHING/LEARNING STRATEGIES

- Break long assignments into smaller sequenced steps.
- Provide additional time to learn.
- Provide students and the parents with a calendar of the assignment and the date due; provide students an "agenda."
- Work in cooperative groups to complete smaller assignments.
- Use a peer tutor/buddy system to work on assignments.
- Provide frequent feedback for each completed step.
- Provide a checklist of the sequential steps.
- Use timers to allocate time.

ACCOMMODATIONS

- Allow the student to make a draft copy before the completed assignment.
- Allow the student to use alternative assignments.
- Modify assignments and dates as needed.

ORGANIZATION
Recommendation #9 – <u>Use small, sequential steps</u>.

TEACHING/LEARNING STRATEGIES

- Simplify vocabulary and explanations.
- Keep directions clear, precise, concrete and succinct.
- Break down instructions into simple steps.
- Provide wait-time in discussion and question-and-answer periods so that students can process information and sequence the answer.
- Prioritize steps.
- Provide sequential directions; first, second, third….
- Provide models or completed steps and completed project.
- Reinforce mastery of each step.

ACCOMMODATIONS

- Modify number of steps for the student to do with the teacher providing a completed model.

ORGANIZATION
Recommendation #10 – <u>Reduce visual and auditory distractions</u>.

TEACHING/LEARNING STRATEGIES

- Provide study carrels.
- Use room dividers.
- Provide headsets to muffle noise.
- Seat students away from doors/windows.
- Seat students near the model.
- Rearrange student groups.
- Highlight relevant words/features.
- Use an overhead projector for models, directions, notes, etc.
- Change far-point to near-point material for copying or review.
- Provide copies of key information, directions, etc.
- Provide black lined paper rather than ditto paper.
- Reduce environmental distractions:
  - Air conditioner noise
  - Florescent light buzz
  - Glare
  - Outside noise
- Write clearly.
- Have students clear the work area and keep their desks uncluttered.

ACCOMMODATIONS

ORGANIZATION
Recommendation #11 – <u>Use effective study guides and techniques</u>.

TEACHING/LEARNING STRATEGIES

- Provide a list of critical vocabulary words for content material.
- Provide an essential-fact list.
- Provide discussion questions before student reading.
- Use key direction words.
- Use partially completed notes.
- Provide mnemonic devices.
- Use graph paper (for place value) and arrows to indicate direction; ask the students to explain the problem and estimate the answer.
- Use self-correcting materials.
- Provide a peer-tutor/buddy system for note taking (example: use of carbon paper or NCR paper).
- Allow computer software for guided practice.
- Use games to learn/reinforce content, and for studying.
- Use cooperative group activities.
- Use *The Classroom Notetaker* by Jimmie Joan Wilson.
- Use Paired Associates Strategy **(LISTS)**:
  Look for clues. Highlight words of importance.
  Investigate the items. Students identify pairs or small groups of information that they need to recall.
  Select and design a one mnemonic device from **CRAM** to help recall information.
  > **C**reate a mental image.
  > **R**elate to familiar.
  > **A**rrange boxes around.
  > **M**ake a code.

  Transfer the information to a study card. Create an appropriate mnemonic device.
  Self-test – Use a self-testing technique to master the information.
- Allow students to correct homework together.
- Use guided practice.
- Use the 4MAT philosophy.
- Use problem integrations.

ACCOMMODATIONS

ORGANIZATION
Recommendation #12 – <u>Modify and/or use varied formats</u>.

TEACHING/LEARNING STRATEGIES

- Break down assignments into short segments. Assign a due date per assignment.
- Provide real-life experiences which relate to the content.
- Provide additional examples.
- Use rebuses (pictured) directions.
- Highlight relevant words/features.
- Provide sequential directions (first, second, third, etc.).
- Provide more practice trials.
- Increase the allotted time.
- Provide an error drill.
- Increase reinforcement frequency.
- Tape record student responses.
- Choose which type of question to ask a particular student so that the student has a good chance of answering the question successfully.
- Modify the demands of the class as necessary.
- Modify assignments as needed (example: limiting spelling requirements, varying length, or limiting items.)
- Do every other problem.
- Reduce workload.
- Provide functional tasks.

ACCOMMODATIONS

- Have a scribe write notes.
- Change the response format (example: from verbal to physical; from saying to pointing.)
- Allow every other problem to be done.
- Reduce the student's work load.

ORGANIZATION
Recommendation #13 – <u>Use organization techniques and advanced organizers</u>.

TEACHING/LEARNING STRATEGIES

- Circle the mathematics computation sign.
- Provide content/lecture structure.
- Provide a copy of the notes for students to follow along as the teacher speaks.
- Provide a daily/weekly assignment sheet.
- Give students a list of the topics for that day.
- Devise semantic maps.
- Create graphic organizers.
- Outline notes and key sections of the text to emphasize the main ideas.
- Provide study questions.
- Provide a sample of the completed project.
- Use verbal cueing strategies to alert students to key ideas.

ACCOMMODATIONS

ORGANIZATION
Recommendation #14 – Provide abundant models, samples.

TEACHING/LEARNING STRATEGIES

- Make samples of each completed step in the process of getting to the end of the product.
- Provide samples of end products across all content areas to serve as models.
- Use choral reading to reinforce and provide a model of written information.
- Use an overhead projector and/or board to model processes.
- Provide more than one example for review and test.
- Talk through the thinking process as to how a problem is solved so that students can learn how to problem-solve
- Use metacognition; think aloud how a good learner solves a problem or completes a task.
- Use concrete objects.
- When assigning an assignment, have samples of the end products that the students can use as a guide.

ACCOMMODATIONS

- Provide models across content areas.

ORGANIZATION
Recommendation #15 – <u>Use advanced and post organizers</u>.

TEACHING/LEARNING STRATEGIES

- State the expectation.
- Set goals.
- Gain the students' attention.
- Review previous learning.
- Personalize the lesson.
- Explain the learning goal.
- Connect the lesson with previous learning.
- Review the content of the lesson.
- Cue the students to check progress, ask questions, summarize.

ACCOMMODATIONS

Storage: adding information to existing information.
LIST OF RECOMMENDATIONS FOR STORAGE

STORAGE
Recommendation #1 – <u>Provide frequent review, repetition, reflection</u>.

TEACHING/LEARNING STRATEGIES

- Use visual and tactile flash cards.
- Allow study buddies/group study.
- Provide frequent review of material. Incorporate review time into the daily schedule.
- Review with games (examples: *Jeopardy, Memory, Wheel of Fortune, etc.*)
- Use visual aids posted on walls, desktops, pencil toppers, etc.
- Make use of those 3-5 minute transitional interval times between classes to review.
- Provide taped reviews/listen with headphones, etc.
- Provide computer programs that review materials.
- Use "Cloze Procedure" activities with material from the text.
- Encourage dramatization.
- Use rereading.
- Allow students as teachers.
- Utilize reflective journals.
  - Video
  - Audio
  - Written
  - Pictures/illustrations
- Allow reading of the text aloud.
- Allow verbalizations.
- Use Content Enhancement Procedures for review.
- Use study guides.

ACCOMMODATIONS

STORAGE
Recommendation #2 – <u>Provide cumulative reviews; connect new information to prior knowledge</u>.

TEACHING/LEARNING STRATEGIES

- Incorporate the KWL (what I know, what I want to know, what I learned) charts into all academic areas.
- Use linking words/concepts to build upon concepts previously learned.
- Begin each lesson with a review of previously learned material. Connect it to new material.
- Include past material on tests and worksheets for extra credit.
- Incorporate materials for review in a game (example: *Jeopardy*, *Wheel of Fortune, Hangman,* etc.).
- Make use of those 3-5 minute transitional interval times between classes to review.
- Assess to make certain students know all components of the new skill (example: can student add, subtract, divide, etc.).
- Use KWL (what I know, what I want to know, what I learned) to assess.
- Relate materials to students' environment.
- Use examples from students to complement explanations.
- Brainstorm and write down new material evoked by students.
- Use multi-media technology to assist in the review.
- Provide opportunity for review.
- Use the Concept Anchoring Routine.
- Use the Bubble Map to describe qualities of an object or idea. (From the Thinking Maps Program)

ACCOMMODATIONS

STORAGE
Recommendation #3 – <u>Provide directions, redirection and support.</u>

TEACHING/LEARNING STRATEGIES

- Establish verbal cueing or prompts to redirect. Use gestures or signal alerts.
- Pair icons or graphics with the subject matter.
- Teach the students to apply what has been learned.
- Use probing questions to re-establish focus.
- Teach "key" words in relation to the material.
- Give specific questions prior to the students' reading the material.
- Show the paragraph or line where the material is located (highlighting).
- Relate materials, vocabulary and content to the students' environment.
- Provide prompting with clues and hints.
- Use a peer buddy to assist in redirection.
- Establish direct eye-contact before signing/transliterating directions.
- Use flow charts.
- Teach to "overlearn."

ACCOMMODATIONS

STORAGE
Recommendation #4 – <u>Present written material in different formats</u>.

TEACHING/LEARNING STRATEGIES

- Type material and provide readable copies.
- Keep directions simple and short.
- Increase readability of questions as needed.
- Use shorter sentences.
- Teach "key" words in relation to the material.
- Give specific questions prior to the students' reading the material.
- Show the paragraph or line where the material is located.
- Relate materials to students' environment.
- Problems to watch for and avoid:
  - Overcrowding of materials
  - Lack of white space
  - Handwritten or poorly typewritten materials
  - Single-spaced typing
  - Lack of organizational flow
  - Small or indefinite answer areas
  - Confusing diagrams
  - Overly detailed maps
  - Too many different activities on a page
  - Overwhelming volume of materials
  - Lack of examples
  - Lengthy or unclear instructions
  - Visual distractions
  - Transferring within the page or from page to page
  - Quality of copy (black vs. purple, camera ready copies)
- Tape material.
- Use computer technology.
- Provide challenging vocabulary within the text with a description in parenthesis.

STORAGE
Recommendation #4. – <u>Present written material in different formats</u>. CONTINUED...

TEACHING/LEARNING STRATEGIES

- Storage of content information:
  - Use think-out-loud method
  - Use SQ3R methods
  - Use Multi Pass Strategy
  - Use check off systems
  - Teach instructional scaffolding
  - Use visual imagery strategy
  - Use Cornell Method
  - Teach self-regulation procedures
  - Locate italicized words and phrases
  - Present material through different media (example: overhead projector, computer, etc.)

ACCOMMODATIONS

- Provide materials in the appropriate reading media.

Retrieval: locating or recalling stored information.
LIST OF RECOMMENDATIONS FOR RETRIEVAL

RETRIEVAL
Recommendation #1 – <u>Allow the use of a calculator/mathematics grid</u>.

TEACHING/LEARNING STRATEGIES

- With an overhead calculator, teach/practice correct usage of the calculator.
- Color code keys for various functions.
- Use a calculator with raised keys .
- Have a flow chart on the wall and on the desk, indicating steps used to perform functions.
- Teach the *Touch Math* concept for calculating addition and subtraction.
- Have multiples chart for use in multiplication and division with *Touch Math*.
- Highlight pertinent parts of the mathematics grid to facilitate grid usage.
- Cut colored paper strips and place them on transparencies.
- Incorporate calculators into daily work and tests.
- After students have exhibited proficiency with a mathematics skill, incorporate a calculator for accuracy.
- Use graph paper for place value.

ACCOMMODATIONS

- Use talking calculators.
- Use braille calculators.

RETRIEVAL
Recommendation #2 – <u>Evaluate the mastery of the material</u>.

TEACHING/LEARNING STRATEGIES

- Test at the end of each unit/chapter.
- Test only the material covered by the teacher.
- Give broad-based questions (example: "Tell me what you know about…").
- Give a group oral test.
- Give an individual oral test.

ACCOMMODATIONS

- Allow extended (double) time for testing; customize the time and length of tests to meet the needs of individual students.
- Test on one topic at a time; give shorter tests that cover only one topic.
- Grade only what the student is able to finish with diligent effort, provided the concepts taught have been covered.
- Allow the student to take an exam in the classroom during the regular time and an oral exam at a later time, with adaptations. 1) Average the two grades. 2) Choose the better of two grades.
- Break tests into several sections; give one section each day; review the section prior to testing.
- Have a scribe write down the student's answers for him to refer to for future reference.
- Allow the student to use an external memory aid sheet and to write down vocabulary words or formulas for the test. Allow the student to take them to the test.
- Record test questions on a tape recorder and allow the student to use a headset.
- Allow the student to record written answers on the computer.
- Give credit for a correct answer; disregard spelling errors, if not critical.

RETRIEVAL
RETRIEVAL Recommendation #3 – <u>Provide assistance for retrieval</u>.

TEACHING/LEARNING STRATEGIES

- Provide a variety of formats.
  - Visual
  - Auditory
  - Combination
  - Kinesthetic
- Provide repetition/practice in game fashion; construct jeopardy-type games.
- Incorporate lots of repetition but do so in a structured organized way. Students need to know what is expected in the way of daily practice.
- Decrease amounts of written repetition in traditional paper/pencil fashion; use wipe-off boards, magic slates, stamps and ink pad, manipulatives, chalkboard, etc.
- Use the drill sandwich approach; "sandwich" new information, words, or concepts between well-known material needed to be reviewed.
- Upon beginning a daily lesson; review material previously learned. Use something fun; give extra credit for known material.
- Use key word or linking method. (example: Given a list of words to remember, repeat the list several times; then picture the first word in your mind, link the first word to the second word; and imagine a picture that links the words.)
  - Car   • House   • River   • Church   • Elephant

  A huge car is on top of a house that is floating down a big river; the river flows through a small church where 10 elephants are sitting inside.
- Use mnemonics.
  - Acronyms
  - Acrostics (puzzles)
- Provide a thorough review several days before the test; use a small group review, study buddies, question and answer periods.
- Relate items to familiar information.
- Use the Bridge Map for analogies. (From the Thinking Maps Program)

ACCOMMODATIONS

RETRIEVAL
Recommendation #4 – <u>Provide students opportunities to express what has been learned</u>.

TEACHING/LEARNING STRATEGIES

- Allow and use oral interviews.
- Use tape recorders and other technological devices for spelling, mathematics, and all subject matters.
- Use a tape recorder with color-coded labels for each topic; have the students refer to the textbook and notes and read appropriate material into a recorder. (A peer helper could help organize material into an outline form.)
- Develop and use an organized format for students to follow.

ACCOMMODATIONS

- Have the scribe write down/organize material for the student to refer.
- Use assistive technology.

NOTE: Be sure the scribe is willing and trained prior to the activities. He/She must have a legible handwriting and understand the communication mode of the student.

RETRIEVAL
Recommendation #5 – <u>Alert students to change in mathematics operations.</u>

TEACHING/LEARNING STRATEGIES

- Highlight problems of one operation in one color, those with another operation in another color.
- Use graph paper in multi-step problems; alert students to change with pre-highlighted areas (example: long division).
- Circle problems with one operation for younger children.
- Teach remembering devices to help in sequencing steps.
- Examples:

Please	➜Parenthesis	Dirty	➜-Divide
Excuse	➜Exponents	Monkeys	➜-Multiply
My	➜Multiplication	Smell	➜Subtract
Dear	➜Division	Bad	➜Bring down
Aunt	➜Addition		
Sally	➜Subtraction		

- Provide visuals on the wall, desktop, and on papers to remind students of the sequence of activities and changes within problems.
- Use a study buddy.
- List operations in correct order in the margin.

ACCOMMODATIONS

RETRIEVAL
Recommendation #6 – <u>Use varied testing methods.</u>

TEACHING/LEARNING STRATEGIES

- Change fill-in-blank questions to multiple choice questions.
- Eliminate one of the choices in multiple choice questions; choose from three choices instead of four.
- Use pre/post test to give points for progress.
- Open book and open notes test; highlight pertinent information for the students.
- Give take home test.
- Give group tests or pairs test.
- Give tests on tape.
- Require a project in place of the test.
- Allow students to make up test questions.
- Allow students to retake tests and give credit for improvement.
- Use **PIRATES** test taking strategy.
  Prepare to succeed (**PASS**)
    Put name on paper
    Allot time and order
    Say something positive (affirmations)
    Start within two minutes
  Investigate the items (run); read directions; underline what; note special directions; where to do it.
  Read, remember, review
  Answer or abandon
  Turn/back
  Estimate
  Survey test
- Use a dramatization.
- Use oral testing.
- Use true/false tests.
- Provide a "word bank" for fill-in-the-blank format.
- Allow manipulatives during testing.

ACCOMMODATIONS

- Scan the test into a computer for the student's use with keyboard, mouse, etc.

RETRIEVAL
Recommendation #7 – <u>Provide word banks with tests.</u> (A <u>word bank</u> is a collection of words relating to a topic. A word bank consists of words needed to fill in the blanks on an assignment.)

TEACHING/LEARNING STRATEGIES

- Color code words as to parts of speech (example: nouns in blue, verbs in red, etc.)
- Eliminate ambiguous words that could fill in more than one bank.
- Include the first letter of correct words or include a word shape puzzle to aid in selecting the correct word.
- Instruct students in marking out used words; teach the process of elimination.
- Review words prior to the test.
- Provide a rebus where applicable, with word bank words.
- Read questions aloud to the students and have them answer to themselves prior to reading the word bank.
- Teach students to use imagery and context clues.
- If words are used more than once from the word bank, include the word the same number of times.
- For your lower level functioning students, include the first letter of the correct word, or include a word shape puzzle to aid in selecting the correct word.

ACCOMMODATIONS

- Reduce the number of words (example: limit to five words or five sentences.)
- Program a communication device with a word bank that will allow the student to give an appropriate verbal or written response.

RETRIEVAL
Recommendation #8 – <u>Provide alternative methods of note taking.</u>

TEACHING/LEARNING STRATEGIES

- Use pictures, computer graphics, or other visual representations in place of written information.
- Use keyboarding.
- Make copies of the teacher's notes.
- Use **uKWL** charts with scribe-post in the classroom.
  uKWL: What I **K**now/What I **W**ant to Know/What I **L**earned

ACCOMMODATIONS

- Allow use of a scribe. (A <u>scribe</u> is a person that writes for another person).
- On essay tests, have the scribe write down the student's response; give the student a chance to organize material and the scribe rewrites it for clarity.
- Utilize the scribe for note taking; use NCR paper or make a copy of the student's notes.
- Have the scribe record all the answers on tests.
- Use braille.
- Use tape recorder.

NOTE: Be sure the scribe is willing and trained prior to the activities. The scribe must have a legible handwriting and understand the communication mode of the student.

RETRIEVAL
Recommendation #9 – <u>Use multisensory (visual and motor) approach within oral presentations.</u>

TEACHING/LEARNING STRATEGIES

- Use the computer to retrieve pictures, graphs, and other illustrations to accompany the students' produced presentations.
- Use a taped oral presentation of the students' reports; this tape will be played while the students demonstrate.
- Use plays with props, choral reading, singing and raps; students will illustrate concepts with student-created posters, murals, etc.
- Use a video recorder to create a video to accompany the students' oral presentations.
- Create student drawn slides with fine tipped permanent markers, clear contact paper, and slide frames; put the frames to music and add the student narration.
- Ask students to construct models.
- Ask students to reenact events.
- Ask students to illustrate abstract concepts using their bodies, objects, and pictures.
- Use graphic organizers.
- Use advanced organizers.
- Use content enhancement procedures.

ACCOMMODATIONS

- Use an interpreter or transliterator.

RETRIEVAL
Recommendation #10 – <u>Eliminate anxiety during class discussions.</u>

TEACHING/LEARNING STRATEGIES

- Alert students to questions prior to asking the students questions.
- If the procedure works for the students, be consistent with the same discussion/test style throughout the year.
- Give questions, etc., as group work; let students discuss and give responses as a group.
- Provide wait-time in discussion and question-and-answer periods so students can process information and sequence the answer.
- Give two tests on the same topic and use or accept the better grade.

ACCOMMODATIONS

- Provide extended time for response.
- Record test answers on a tape.
- Have a scribe write down or record answers for the student's future use.

Note: Be sure the scribe is willing and trained prior to activities. The scribe must have a legible handwriting and understand the communication mode of the student.

TEACHING/LEARNING STRATEGIES

- Make use of visual cues –- poster charts, graphs--in the classroom; make desktop copies when applicable; let students use cues for daily work and tests; prompt students to use cues.
- Provide study guides prior to tests.
- Make use of acrostics, acronyms, and remembering mnemonic devices as aids to learning.
- Use story maps and word webs/maps to summarize concepts.
- Use pictorial clues.
- Read class materials orally.
- Show photos.

ACCOMMODATIONS

- Use consistent touch cues throughout all environments.
- Use visual schedules.
- Use concrete objects or tangible symbols.
- Simplify tasks.
- uWord Webs: use of word association skills with graphic representation. Example:

Apple

Fruit   Citrus

Lemon

RETRIEVAL
Recommendation #12 – <u>Provide time frames for assignments.</u>

TEACHING/LEARNING STRATEGIES

- Use assignment folder agendas for writing down assignments. Have parents sign the agendas.
- Post the due dates on the board and refer to them daily.
- Break down assignments into shorter segments; assign a due date to each segment.
- List steps for assignments.
- Use the Quality Time Assignment Strategy; the teacher and the students decide jointly on quality assignments.

ACCOMMODATIONS

- Decrease the type and amount of homework.
- Use pictorial schedules.
- Use calendar boxes.

RETRIEVAL
Recommendation #13 – <u>Have the students repeat the directions.</u>

TEACHING/LEARNING STRATEGIES

- Give directions using concise, consistent vocabulary.
- Provide choices within certain boundarie (example: give six choices. The student then chooses two to do. Anything more is extra credit.)
- Ask students to reenact events, maps to summarize concepts.
- Ask students to draw pictures.
- Ask students to verbalize what they have learned.
- Ask students to repeat each step aloud.

ACCOMMODATIONS

- Limit the number of directions given at one time; repeat instructions/provide more detailed directions.
    - Begin with 1-step directions; gradually progress to multi-step directions.
- Have the student repeat directions and have the scribe write them down, using the student's language.

RETRIEVAL
Recommendation #14 – <u>Ask higher level (graduated) questions.</u>

TEACHING/LEARNING STRATEGIES

- Use Bloom's Taxonomy to formulate questions.
- Ask questions so that one links to another.
- Use mapping and word webs to link concepts together.
- Use "wh" questions (who, what when, where, why).
- Use "if – then" strategy.
- Use simple to complex questions.
- Begin with questions students can answer so the students can experience success.
- Ask focused questions.

ACCOMMODATIONS

RETRIEVAL
Recommendation #15 – <u>Allow ample time for all assignments, tests and responses.</u>

TEACHING/LEARNING STRATEGIES

- Eliminate timed tests.
- Allow breaks during testing.
- Allow extended time during testing.
- Alert the student to questions prior to the test.
- Be consistent with the same test style throughout the year.
- Break the test into small sections (example: matching one day, fill-in-the-blank another, etc.)
- Give questions, etc. as a group work. Let students discuss and give responses as a group.
- Give pre- and post-exams to determine progress.
- Provide uwait-time in discussion and question-and-answer periods so students can process information and sequence the answer.
- Allow ample time for all assignments and tests.

ACCOMMODATIONS

- uWait-time: a longer than traditional time to elicit a response-at least 60 seconds (at the teacher's discretion). The teacher should use this time to observe the student's body language.
- Students with disabilities do not function well in a pressure situation. Test facts or concepts, not how fast one can accomplish a task.

RETRIEVAL
Recommendation #16 – <u>Provide oral tests.</u>

TEACHING/LEARNING STRATEGIES

- Have scribe write down student's answers for him to refer to for future reference.
- Give broad-based questions (example: "Tell me what you know about…").
- Record test questions on tape.
- Give group oral tests.

ACCOMMODATIONS

- Allow students to use an external memory aid sheet. Write down vocabulary words or formulas for the test, and allow the student to bring them to the test.

Expression: communicating information.
LIST OF RECOMMENDATIONS FOR EXPRESSION

EXPRESSION

Recommendation #1 – Provide opportunities for students to use alternative strategies for classwork and/or homework.

TEACHING/LEARNING STRATEGIES

- Allow students to utilize maps, webs and outlines.
- Allow students to tape record answers. Use a tape recorder to spell words rather than the traditional test with dictation.
- Record students retelling a story (summary). Have the class listen for differences and add to the story.
- Let students tape record a report instead of preparing a written report.
- The teacher can prepare cards or tape on which answers are provided so that the material is self-checking.
- Use homework only as a means to practice a skill already learned.
- Allow students to use the word processor with spell checker, grammar checker, dictionary and thesaurus.
- Shorten or break down assignments based on key concepts.
- Use the Language Master with double-sided tape cards. Have students listen to the Language Master.
- Involve parents.
- Break assignments down into smaller segments based on key concepts.
- Identify the key concepts and identify assignments under each concept.
- Give shorter assignments based on key concepts.

ACCOMMODATIONS

- Do not lock the student into conventional means of doing homework. Classroom strategies and tools can be utilized to do homework as well. Examples:
  - Tape recorder
  - Joint assignments
  - Alternative ways to express ideas: projects, posters, models, artwork.
- Differentiate the homework assignment.
- Ensure that the student has all supplemental and supportive aides needed for doing the homework.
- Use a tape recorder to spell words rather than the traditional test with dictation.

EXPRESSION
Recommendation #2 – <u>Teach test-taking strategies.</u>

TEACHING/LEARNING STRATEGIES

- Teach **PIRATES**
  Prepare to succeed **(PASS)**
     Put name on paper
     Allot time and order
     Say something positive (affirmations)
     Start within two minutes
  Investigate the items (run); read directions; underline what; note special directions; where to do it.
  Read, remember, review
  Answer/or abandon
  Turn/back
  Estimate
  Survey test

ACCOMMODATIONS

EXPRESSION
Recommendation #3 – <u>Provide options for students to use alternative strategies when being tested.</u>

TEACHING/LEARNING STRATEGIES

- Put a flow chart at the top of the page to provide organizational steps required to solve problems.
- Mathematics tests need to be large enough for students to work the problems directly on the test. Provide graphic aids and columns to organize numbers neatly. Provide scratch paper if needed.
- Give students a highlighter or a colored marker to indicate final answers.
- Use non-traditional spelling tests; have students choose correct spelling from three choices. Example: Don't _____ at your sister!
                              a.) shot   b.) shoute   c.) shout
- Use oral testing.
- Allow open book tests.
- Break tests into smaller segments. Example: 20 multiple choice test is broken into four smaller sections.
- Give group oral tests.
- Illustrate concepts through pictures rather than writing meanings. Verbalize meanings to teacher, aide, or peer.
- Place the test questions in the same order as the text material.
- Highlight pertinent subtopics, information and vocabulary for reference.
- Write the main idea of each subtopic. Prior to the test, have students use written subtopics with the main idea as a reference point.
- Color code vocabulary, definitions, and important facts in different colors.
- Give page numbers beside questions.
- Provide students with examples of the test format beforehand.
- Allow students to use tapes with advanced organizers.
- Allow the use of graphs, charts, and maps on tests.
- Give formative tests before you give summative tests.

EXPRESSION

Recommendation #3 – <u>Provide options for students to use alternative strategies when being tested.</u>   CONTINUED…

ACCOMMODATIONS

- Give students highlighter or colored marker to indicate final answers.
- Copy tests to enable the student to indicate correct answers instead of bubbling.
- Enlarge the font if the print is too small.
- The student has a written copy of the test and the teacher/peer reads the questions on tape as well. The student replies and the answer is recorded. A good addition to this would be a recorder for the student who posts all answers on chart paper. If student becomes stumped on a question, the recorder reads the previous answer.
- Allow extended/unlimited time.
- Allow the student to re-test or grade on improvement.
- The student has a written copy of test; interpreter/transliterator signs/cues test to the student.
- Allow the student to take tests with small groups or in pairs.

EXPRESSION

Recommendation #4 – <u>Present tests in different formats.</u>

TEACHING/LEARNING STRATEGIES

- Ensure that the test print is large, clear and well spaced.
- Ensure ample white space.
- Ensure that the flow of tests is logical and sequential.
- Block matching questions.
- Avoid:
  - Overcrowding
  - Handwritten or poorly typed materials
  - Single-spaced typing
  - Small or indefinite answer areas
  - Confusing diagrams
  - Overly detailed maps
  - Too many different activities on a page
  - Lack of examples
  - Lengthy or unclear instructions
  - Visual distractions
  - Transferring on the same page or to another page.
- Avoid excessive use of fillers, negatives and, "all the above," "none of the above," or "all except."
- Use shorter sentences, reduce readability level of questions.
- Test what was actually presented/taught.
- Measure content mastery, not reading ability.
- Begin with easy questions and move on to more difficult questions.
- Be sure students know the meaning of clue words, such as compare and contrast, etc.
- Arrange questions and answer choices vertically on the page rather than horizontally.
- Provide enough information in the question to facilitate recall.
- Ensure that the students know vocabulary such as *compare* and *contrast*.
- Allow students to omit or choose between essay questions.
- Provide alternatives to answering written essay questions.
- Use oral testing.
- Allow for signal responses for tests.
- Tests are copied and students can write directly on test, answers can be transferred to bubble sheets if necessary.
- Build objectivity into testing process so that fairness is not questioned.

ACCOMMODATIONS

- Form and test style should be consistent throughout the year.
- Reduce readability level of questions.
- Allow the student to circle the correct answers on the test.
- Provide word banks for the test and list a word as many times as it is used in the test.
- Use other testing formats other than conventional written forms.
- Students are informally assessed on how their eyes track. Call out four related words: *apple, banana, orange, lemon*. Ask students how they saw the words. The test can be arranged in the way students visualized the words.

EXPRESSION
Recommendation #5 – <u>Provide alternatives to written and oral assignments.</u>

TEACHING/LEARNING STRATEGIES

- Read class materials orally.
- Incorporate several modalities by using visual, auditory and tactile, and kinesthetic techniques in lessons.
- Use art/illustrations/graphics for projects.
- Use maps, webs and outlines.
- Use dialogue journals.
- Provide a copy of written questions ahead of time.
- Allow students to construct models, projects.
- Allow students to verbalize what they've learned.
- Utilize photos, posters, models.
- Ask students to re-enact events (use skits).
- Use hands-on activities, manipulatives.
- Accept computer generated projects.
- Utilize other forms of written expression other than handwritten.
  - Computer
  - Word processor
  - Typewriter
- Allow students to utilize
  - Peer helpers
  - Buddy system
  - Cooperative grouping
  - Pupil talks into the tape recorder and the scribe writes down what the pupil says.
- Set up on site activities.

ACCOMMODATIONS

- Use a recorder to write down the student's responses. The student gains affirmation of material he has verbalized. A scribe may be used.
- Allow oral responses to questions.
- Use sign language or technological aids such as Braille for spoken or written language.
- Use speech synthesizers.
- Use augmentative communication devices.

EXPRESSION
Recommendation #6 – <u>Provide story element training.</u>

TEACHING/LEARNING STRATEGIES

- Use semantics and story graphing to make elements visual.
- Verbalize story elements while drawing visual clues.
- Use cloze activity paragraph to describe characters, setting, and plot.
  Our story is about _____. _____ *is important because* _____ *and* _____.
- Use art illustrations and graphs for projects. (*Project Read* is a good source.)
- Ask student to compose character sketches.
- Explain story elements (characters, beginning, middle and end, theme, setting).

ACCOMMODATIONS

- Allow use of captioned videos and dramatization.

EXPRESSION
Recommendation #7 – Coach letter/number formation and emphasize written legibility.

TEACHING/LEARNING STRATEGIES

- Give verbal cues as to directionality: "*a*" around, down, close, monkey tail.
- The students walk on letters and verbalize the letter as they walk it.
- Use computers or word processors.
- Color code the beginning, ending and directionality of letters/numbers.
- Create box letters to train shape recognition of letters.
- Use raised line paper or taped lines. Use masking tape on the board and have the student write between the lines.
- Use a multisensory approach to handwriting.
  - Skywrite
  - Texture writing
  - Sand trays
  - Shaving cream, etc.
  - Sculpting gel in plastic bag
  - Use kinesthetic techniques
- Select materials/methods from various programs to meet individual needs.
  - Teach handwriting strategies.
- Use cursive ghost writing.
- Talk through and model techniques. (Say and then do)
- Begin with six foot formations on floor; move to 24 inches; to 6-8 inches; and finally to ruled paper.
- Allow students to use print or cursive handwriting: the style with which each student is most comfortable or most legible.
- Use number rhymes while forming numerals.
  - 0-around we go to make zero.
  - 1-one is fun.
  - 2-around and back on the railroad track.
  - 3-around a tree and around a tree, that's the way to make a three.
  - 4-down and over and down some more, that's the way to make a four.
  - 5-down and around, put a hat on top.
  - 6-roll a hoop and make a loop.
  - 7-across the sky and down from heaven, that's the way to make a seven.
  - 8-make an S but do not wait, that's the way to make an eight.
  - 9-a hoop and a line, that makes a nine.
- Use the Fernald method.

EXPRESSION
Recommendation #7 – <u>Coach letter/number formation and written legibility.</u> CONTINUED…

ACCOMMODATIONS

- The student uses large, wipe off boards/markers, sand, shaving cream, wipe off slates.
- Allow a word processor/computer or special pens/pencils/paper to help the student with handwriting difficulties.
- Students are encouraged to develop a handwriting style suited to their disability. One particular style is not preferential.
- The student uses appropriate sized lined paper for child's developmental age, not chronological age/grade.

EXPRESSION
Recommendation #8 – <u>Express/edit thoughts through written expression.</u>

TEACHING/LEARNING STRATEGIES

- Teach the use of on-line or computer dictionary, thesaurus, spell checkers and grammar checker.
- Teach **STOP** strategy for the opinion essay.
    - **S**uspend judgment.
    - **T**ake a side.
    - **O**rganize ideas.
    - **P**lan more as you write.
- Teach **TREE** strategy for the opinion essay.
    - **T**opic sentence
    - **R**eason to support premise
    - **E**xamine soundness of reason
    - **E**nding for paper
- Teach **COPS**.
    - **C**apitalize
    - **O**verall appearance
    - **P**unctuation
    - **S**pelling
- Teach typing/word processing skills.
- Teach spelling through singing.
- Teach semantic mapping.
- Teach editing, prioritizing and list making.
- Teach the Cognitive Strategy in writing for expository composition.
- Teach the Error Monitoring Strategy.

ACCOMMODATIONS

- Use computer-assisted writing technology.
- Allow inventive spelling.
- Eliminate copying from boards or books to paper.
- Allow wide ruled paper.
- Skip lines between items, words.
- Double space when typing.
- Have the student dictate his thoughts to a student scribe for a rough draft.
- Allow the student to read the written format aloud to identify written errors (grammar, punctuation, etc.).

EXPRESSION
Recommendation #9 – <u>Allow tools needed for written expression.</u>

TEACHING/LEARNING STRATEGIES

- Use various cues to indicate beginning and ending points (color base on writing paper, color dots, checks, etc).
- Use paper spaces to create margins and spacing guides for neater, more legible papers.
- Use cues to indicate beginnings, endings, and paragraphs (stickers, stars, color dots).
- Highlights operations, key words, place value.
- Highlight or color code handwriting paper.
- Teach word processing skills.
- Teach the use of spell checkers, grammar checkers, dictionary, and thesaurus.
- Allow skipping every other line and skipping lines between items, words, etc..
- Double space when typing.
- Use wide ruled paper instead of small college ruled paper when needed.

ACCOMMODATIONS

- Allow the student to use whatever paper/pencil/pen to facilitate written expression.
  - Paper/line size
  - Pencil size/pencil grip
  - Type of pen/varying colors
  - Raised line paper
  - Word processor/computer/typewriter
  - Colored paper
  - Print or cursive writing
  - Braille
- Use colored glue to make raised lines for handwriting.

EXPRESSION
Recommendation #10 – <u>Allow aides for expression.</u>

TEACHING/LEARNING STRATEGIES

- Mathematics:
  - Teach the correct use of the calculator.
  - Post calculator usage rules on index cards to which students can refer.
  - Allow students the use of calculators to work and check problems.
  - Use a graphing calculator.
  - Use an overhead calculator.
- Notetaking:
  - Allow the use of notes/cards when giving an oral presentation.
  - Highlight important facts for the students to focus.
  - Use flash cards for vocabulary definitions and important facts.
  - Use notes/cards as a reference guide when giving information.
  - When students give oral presentations, allow the use of notes/cards.
  - Teach note-taking skills.

ACCOMMODATIONS

- Use talking calculators.
- Allow the use of notes/cards on tests.

EXPRESSION
Recommendation #11 – <u>Use collaborative practice.</u>

TEACHING/LEARNING STRATEGIES

- Students work together on joint assignments.
- Students are offered a chance for supervised practice.
- Encourage peer tutors to go beyond the academic setting: eating lunch together, going to recess, meeting buses, and "hanging out" will enhance the relationship with special needs students.

ACCOMMODATIONS

- The student uses a peer tutor to repeat directions, steps involved in problem solving, summarizing materials.

EXPRESSION
Recommendation #12 – <u>Allow use of a calculator.</u>

TEACHING/LEARNING STRATEGIES

- Calculators are used for checking problems.
- Post calculator usage rules on index card for pupil to refer to.
- Use talking calculators.
- Use overhead calculator.

ACCOMMODATIONS

- Correct usage of calculators is taught.