Helping Students with Language/Cognitive Impairments Become College/Career Ready

Susan McGarvey Toler, MS, CCC-SLP
Margo Kinzer-Courter, MA, CCC-SLP

Disclosure Statement
Margo Kinzer Courter

I have a financial and/or nonfinancial interest in an organization whose products or services are described, reviewed, evaluated or compared in the presentation.

- Plural Publishing, Inc.
  - Author of: *Here's How Children Learn Speech and Language, A Text on Different Learning Strategies*
- MKC Productions
  - Speech-Language Pathologist & RTI
  - Learning Strategies for Academic Success

Learning Outcomes

At the end of this presentation, our goal is that you will be able to:

1. Describe the impact of language disorders and acquired cognitive deficits have on academic success
2. Describe strategies to enhance language, cognitive, and learning skills
3. Explain ongoing assessments for those with acquired cognitive deficits
• Defines the knowledge and skills students should have within their K-12 education
• Aligns K-12 with expectations in English/language arts and math standards for college and career success
• Consistent standards across all states
• Determined through evidence and research based criteria

Impact on Students with Disabilities
• Goals for IEP must be aligned with the Common Core Standards
• Supports instructional accommodations including change in materials or procedures which do NOT change the standard
• Any supports, accommodations, or modifications must support the rigor and high expectations of the standards

Evidence Based Practices
Language Disorders

80% of students identified as having a learning disability have a language disorder (Reed, 2005)
Children with learning disabilities may have difficulty reading, writing, spelling, reasoning, recalling and/or organizing information ("LD Basics: www.ldonline.com.").

- Children that are late talkers are at greater risk for academic difficulties especially in literacy and reading skills (Lewis 2007).
- Language impairment and reading disorders commonly co-occur with APD (Sharma, Purdy, and Kelly, 2009).
- Childhood Apraxia of Speech (CAS) may present with a comorbid language impairment which leads to a higher risk for learning difficulties such as reading disorders (Lewis, 2007).
Morphology

• Morphological awareness has a significant impact on reading in the early years (Nunes, et al, 2006)
• With regard to spelling in the early elementary years, Nunes, Bryant, and Bindman (2006) found that six-year old children’s inflectional spellings predicted their morphological awareness performance at the ages of seven and eight.

Phonological Awareness

*Includes: phonemic awareness, rhyming, blending, segmenting, and manipulating phonemes*

Powerful predictor of later reading and writing success (Bradley and Bryant, 1980; Lundberg, Olofsson, and Wall, 1983; Torgesen, Wagner, & Rashotte, 1994).

Syntax/Grammar

• Syntactic competence in early preschool was highly predictive of later reading levels at age 8 years (Scarborough, 1990)
• Sentence complexity has a significant effect on struggling readers (Distefano & Valencia, 1980).
Semantics/Vocabulary

• Struggling readers experience a significant “vocabulary gap” that widens over time (Stanovich, 1986).
• By 4th grade, the struggling reader is faced with increasing reading comprehension demands that includes exposure to thousands of unfamiliar words (Nagy & Anderson, 1984).

• Reading becomes the primary mechanism by which students learn social studies, math, and science vocabulary and concepts (Biancarosa & Snow, 2006).
• Other semantic problems include
  – Difficulties understanding complex oral directions (Murray, Feinstein, & Blouin, 1985)
  – Difficulties producing and understanding figurative language such as metaphors, similes, and slang (Nippold, 1998, Roth and Speckman, 1989)

Pragmatics

• The most complex aspect of linguistic functioning, as it requires integration of information across numerous cognitive systems (Martin & McDonald, 2003).
• Pragmatics is an integrative domain combining neurocognitive abilities (i.e., working memory, inference, and world knowledge, attention, and executive functioning) and linguistic knowledge.
Word Finding

• Prevalence of word finding difficulties is high among learners with specific language impairment and learning disabilities (Diane German (1998) and Dockrell (1998).
• Requires both word meaning and retrieval strategies for vocabulary (German, 2007)
• Use of mnemonic cues aides recall (German, 2002)

Visual & Graphic Organizers

• Students with learning disabilities who used semantic organizers demonstrated significantly higher scores on researcher-developed comprehension measures than students in comparison groups.
• Students who used visual aids outperformed those using conventional reading techniques on a reading comprehension test.
• The benefit of using organizers does not diminish based on the grade level.

Fountas and Pinnell (2001) cite that when content is illustrated with diagrams, the information can be maintained by students over a period of time.
• Students with learning difficulties need strategies to help them achieve success in academics. (Gagnon & Maccini, 2000).
3rd Grade through High School

- Relevance
- Preteach/Prelearn
- Peak Curiosity and Creativity
- Multimodality Learning
- Use consistent strategies across teachers and grade levels
- Link to what the student knows

What Strategy Will You Use?

- Highlighting key words in assignments
- Highlighting tape or erasable highlighters in textbooks
- Webs
- Cornell Notes
- Venn Diagrams
- Graph paper for math
- Checklist for math story problems
- Vocabulary strategy
- Book report format

Following Written Directions or Reading Paragraphs

- Highlighting (highlighter tape)
  - Key words in directions
  - Supporting detail for paragraphs and chapters

Example

Read each sentence below. Circle the subject and underline the verb. Then write a prepositional phrase on the line to complete the sentence.

or

Read each sentence below. Circle the subject and underline the verb. Then write a prepositional phrase on the line to complete the sentence.
Semantics (Vocabulary)

- Introduce Vocabulary
  - Provide students with a description, explanation, or example as opposed to a formal definition.
  - Access Prior Knowledge: Build on Prior Knowledge
  - Make the vocabulary relevant to the students

*** This is important for young students as well as they are learning high frequency words. This will aid in reading comprehension and retrieval***

*Great Resource: Tennessee Department of Education*
Tennessee.gov/education/ci/doc/VOCABULARY.pdf

Vocabulary Cards

Diane German (1998) and Dockrell (1998) state that the prevalence word finding difficulties are high among learners with specific language impairment and learning disabilities.

Species

Syllables: Spe cies

Sentence: Lions are a species.
Relationship Building – Concept Circles

doms
windows
chimney
roof
house

Related Words - Making Connections within the Content
Local government
State government
Federal government
United States Government
Executive branch
Legislative branch
Judicial Branch

Connection: Curriculum Based Meaning - Common Language Usage

<table>
<thead>
<tr>
<th>Term/Phrase/Word Factor</th>
<th>Common Use of the Word</th>
<th>Curriculum Based Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>A fact that contributes to a result</td>
<td>Numbers that divide evenly into another number</td>
</tr>
</tbody>
</table>

Sentence Using Terms

- General Use: The rain was a factor in mom's decision to not go.
- Curriculum Use: 2 is a factor of 4

☐ Same
☒ Different
Book Report Format

<table>
<thead>
<tr>
<th>Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
</tr>
<tr>
<td>Main Characters</td>
</tr>
<tr>
<td>Conflict or Central Problem</td>
</tr>
<tr>
<td>Main Idea and 3 Details from Each Chapter</td>
</tr>
<tr>
<td>Resolution of the Conflict</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
<tr>
<td>Your Thoughts</td>
</tr>
</tbody>
</table>

Venn Diagrams

Subject 1  Subject 2

Compare and Contrast Making an Apple Pie to Making a Mud Pie

Cornell Notes

<table>
<thead>
<tr>
<th>Main Idea</th>
<th>Supporting Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td></td>
</tr>
<tr>
<td>Questions</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
</tbody>
</table>
Webs: Organization, Prewriting, & Pragmatics

Decision Making Graph

Math Story Problems

- Read the story problem
- Reread and highlight key words
- Match numbers to words
- What are you solving for?
- Solve
- Recheck
Example: Math Story Problem

Sam bought 8 ball caps, one for each of her eight friends, for $8.95 each. The cashier charged her an additional $12.07 in sales tax. She left the store with a measly $6.28. How much money did Sam start with?

<table>
<thead>
<tr>
<th>Caps = 8</th>
<th>8.95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost= 8.95</td>
<td>x 8</td>
</tr>
<tr>
<td>Sales Tax = 12.07</td>
<td>71.60</td>
</tr>
<tr>
<td>$ Left = 6.28</td>
<td>+ 12.07</td>
</tr>
<tr>
<td>Answer: $89.95</td>
<td>83.67</td>
</tr>
<tr>
<td></td>
<td>+ 6.28</td>
</tr>
<tr>
<td></td>
<td>$89.95</td>
</tr>
</tbody>
</table>

On line Textbooks

- Ebooks
  - Audio, reading help, companion materials, study skills, test taking strategies, self tests, quizzes, additional practice
- Audio Downloads
- Reading help
- Textbook companion
- Study skills & Test taking strategies
- Self tests & Quizzes
- Additional Practice

Americans with Disabilities Act
Amendments Act of 2008: Section 504
Elementary and Secondary

- The Section 504 regulations require a school district to provide a "free appropriate public education" to each qualified student regardless of the nature or severity of the disability to meet the student’s individual educational needs as adequately as the needs of nondisabled students are met.
Post Secondary

The student has considerably more responsibility to request and design their own accommodations. And this responsibility is ongoing. For many students with disabilities, good self-advocacy skills will be key to success, and knowing your rights is one essential element of effective self-advocacy.

Learning is a treasure that will follow its owner everywhere.

~Chinese Proverb