Learning in Two Worlds
Meeting the Need of Students for Whom
English is a Second Language

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Educating English Language Learners

- Second language (L2) acquisition theory
- Academic language
  - Functions
  - Academic vocabulary
  - Grammar
- Teaching and learning practices
  - Listening
  - Speaking
  - Reading
  - Writing
First Language Acquisition Theories

♦ **Nativist:** Children are born with specific abilities that facilitate language learning.
  ♦ **Noam Chomsky** – *Universal Grammar*
  ♦ **Eric Lenneberg** – *Critical Period for language acquisition*
  ♦ **Kenji Hakuta** – *L1 skills facilitate L2 acquisition*

♦ **Interactionist:** Children’s general cognitive abilities enable them to learn language through interactions with their environment and other people.
  ♦ **Catherine Snow; Elizabeth Bates; Michael Tomasello**
    
    *Language learning results from general cognitive abilities and the interactions between the learner and his/her environment*
Second Language Acquisition

Factors that affect L2 development:

- Age of first contact with new language (L2)
- Proficiency in first language (L1)
- Language-learning ability
- Intensity of instruction and opportunities to learn
Second Language Acquisition

- **Basic Interpersonal Communication Skills (BICS):**
  Daily conversational face to face interactions where meaning is supported by contextual cues. Paralinguistic cues (i.e. physical gestures, facial expressions and intonation etc.) are also used in conversational situations. Language is context embedded, and speaker has not yet developed the cognitive skills necessary to succeed in an academic setting. Between six months and two years to acquire.

- **Cognitive-Academic Language Proficiency Skills (CALPS):**
  The language of academic subjects that involves more vocabulary and concepts. The student demonstrates the ability to draw complex meanings in oral and/or written language, without paralinguistic cues, and the information is context reduced. It takes five to seven years to acquire.

*Cummins (1991, 1994)*
Second Language Acquisition: 5 Stages

- **Pre-production (silent period)**
  Survival vocabulary, passive vocabulary (words that students recognize, but cannot use yet), and respond to things non verbally.

- **Early Production**
  Understands the main idea of what is communicated, but may not understand every word, begin to respond in small word groupings and answer yes / no and cognitively undemanding questions.

- **Speech Emergence**
  Shift of emphasis from reception to production. The student begins using simple sentences, improving pronunciation and intonation, and demonstrating and expanding vocabulary.

- **Intermediate Fluency**
  Developing academic vocabulary, beginning to think in the new language instead of translating from the native language; beginning to use longer sentences and more elaborate speech patterns though they may continue to make errors in the use of new vocabulary and complex grammatical structures; understands academic presentations accompanied by visuals and demonstrations.

- **Advanced Fluency**
  Understands most (but not all) academic presentations often without visuals or demonstrations, makes formal oral presentations, uses higher level reading comprehension skills including inferential and critical reading; grammar instruction is especially effective at this stage.

Krashen & Terrell (1983)
Second language learners do twice the cognitive work of native speakers during reading instruction because they are acquiring new literacy concepts and skills and attending to the sounds, meanings, and structures of a new language.

Some languages are easier to learn than others, depending on the complexity of their symbol system and their degree of transferability.
The idea that letters and letter patterns represent the sounds of spoken language

- **Transparent Orthographies** (e.g., Spanish) and allow a few or just one association between symbols and sounds.
- **Opaque Orthographies** (e.g., English) and allow many ways—including combinations of symbols—of associating symbols and sounds.
Spanish: A Transparent Orthography

There is generally a 1:1 correspondence between letters and sounds in Spanish.

- /p/ /a/ /s/ /e/ /o/  
  *paseo*

- /a/ /s/ /i/ /a/  
  *Asia*
English: An Opaque Orthography

English may use many combinations of symbols for a given sound or phoneme.

- “f” “ph” & “gh” in fantasy, pharmacy, tough
- “ee,” “ei,” and “ea” in need, receive, and read
- “u” for umbrella or Utah
- “sh” “s” “ch” “t” in shoe, sure, machine, lecture

But language learning must also take into account the purposes for learning and using the language.
Consider the difference between the following two sentences. In your opinion, which sentence is written in academic English and which is written in a more everyday conversational style? What reasons do you have for your choice?

1. The prevailing literary opinion is that Macbeth loses everything because of his misguided choices.

2. I think Macbeth is just a big loser. He does stupid things.
What is Academic Language?

*a general definition*

Language used in the learning of academic subject matter in a formal schooling context; aspects of language strongly associated with literacy and academic achievement, including specific academic terms or technical language, and speech registers related to each field of study.

*TESOL ESL Standards for Pre-K – 12 Students*
What is Academic Language?

another definition:

Language that stands in contrast to the everyday informal speech that students use outside the classroom environment. AEL [academic English language] can be distinguished from English in other settings on at least three key levels: the lexical or academic vocabulary level, the grammatical or syntactic level, and the discourse or organizational level.

[Bailey and Butler (2003)]

To learn academic English requires purposeful, extensive practice within a discourse community.
The Litany of Fun

...and then we got on the bus and then we all had treats and then we sang songs and then we played games and then Billy and Kenny got into a fight over a Ninja and then we got off the bus and then we had a snack and then we stood in line and then we got tickets and then we went into the zoo and then we saw the Wild Africa exhibit and then we got back in line and then we saw the Hall of Bats exhibit and then we were talking and laughing and then we got back in line and then Mrs. Hudson got mad at us and then we got quieter and then we marched to the picnic tables and then we sat down and then some of us got hot dogs at the concession stand and then some of us got burgers with cheese and some of us got burgers without cheese and then we ate lunch and then we got back in line and then we went to the Wild World of Monkeys and then we went to Our Undersea Friends and then Mrs. Hudson yelled at us some more and then we had a snack under a tree and then we got back in line and then we went to the souvenir shop and then we bought monkey stickers or erasers that had bat heads or T-shirts that said "I've Been to Herkimer Zoo" or key chains with little whales hanging from them and then we walked back to Parking Lot B and then we got on the bus and then Mr. Jones drove us home and here I am.
What Constitutes Academic Language?

- Vocabulary knowledge
  - Breadth: knowing the meanings of many words, including multiple words for the same, or related, concepts
  - Depth: knowing multiple meanings, both common and uncommon, for a given word; recognizing nuance

- Understanding complex sentence structures and syntax

- Recognizing written vocabulary as distinct from oral vocabulary

- Understanding the structure of argument, academic discourse, and expository texts

Adapted from Rivera, Moughamian, Francis: Center on Instruction, 2009
Academic Language Functions

Academic language functions are part of the discourse structure of language, the language performance associated with academic tasks and purposes. Embedded within the “science as inquiry” national standards for grades 5-8, for example, is the expectation that students can “interpret, summarize and describe data; report on inquiries by writing, drawing, and graphing; communicate scientific explanations; describe and explain findings” (Bailey & Butler, 2007).

Adapted from DiCerbo & Anstrom (2009)
<table>
<thead>
<tr>
<th>Academic Language Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Say or write what someone or something (object, phenomenon) is like; or what measurements and materials will be used.</td>
</tr>
<tr>
<td><strong>Explaination</strong></td>
</tr>
<tr>
<td>Offer reasons for a cause, or a scientific reason for results.</td>
</tr>
</tbody>
</table>

Describe the process of photosynthesis in plant cells.

Explain how natural selection affects the evolution of a species, according to Darwin’s theory of evolution.
# Academic Language Functions

<table>
<thead>
<tr>
<th>Science</th>
<th>Science</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification</td>
<td>Prediction</td>
<td>Analogy</td>
</tr>
<tr>
<td>Labeling</td>
<td>Generalization</td>
<td>Exemplification</td>
</tr>
<tr>
<td>Enumeration</td>
<td>Inference</td>
<td>Synthesis</td>
</tr>
<tr>
<td>Classification</td>
<td>Hypothesis</td>
<td>Labeling</td>
</tr>
<tr>
<td>Sequencing</td>
<td>Retelling</td>
<td>Enumeration</td>
</tr>
<tr>
<td>Organization</td>
<td>Summarization</td>
<td>Classification</td>
</tr>
<tr>
<td>Definition</td>
<td>Analysis</td>
<td>Sequencing</td>
</tr>
<tr>
<td>Interpretation</td>
<td>Synthesis</td>
<td>Organization</td>
</tr>
<tr>
<td>Comparison/contrast</td>
<td>Argumentation</td>
<td>Definition</td>
</tr>
<tr>
<td>Explanation</td>
<td>Negotiation</td>
<td>Comparison/contrast</td>
</tr>
<tr>
<td>Description</td>
<td>Persuasion</td>
<td>Explanation</td>
</tr>
<tr>
<td>Inquiry</td>
<td>Critique</td>
<td>Description</td>
</tr>
</tbody>
</table>

*Adapted from DiCerbo & Anstrom (2009)*
Vocabulary and Comprehension

- Native English speakers often depend on background knowledge and inferential skills when reading text.
- ELLs seem to rely more on their vocabulary knowledge when reading the same texts.
Academic Vocabulary

**Academic vocabulary** consists of words students must *comprehend* in order to access the concepts associated with a particular discipline, and subsequently *use* in order to display their acquisition of these concepts. Two types of academic vocabulary:

1) **specialized or discipline-specific vocabulary** unique to a specific content area, e.g., biotic, and

2) **general or cross-discipline vocabulary**, e.g., procedure, communicate.

*Adapted from DiCerbo & Anstrom (2009)*
In most ecosystems, feeding relationships are more complex than can be shown in a food chain. Consider relationships in a salt marsh. Although some—including marsh grass and other salt-tolerant plants—are eaten by water birds, grasshoppers, and other herbivores, most producers complete their life cycles, then die and decompose. Decomposers convert the dead plant matter to detritus, which is eaten by detritivores, such as sandhoppers. The detritivores are in turn eaten by smelt and other small fish. Some of those consumers will also eat detritus directly. Add mice, larger fish, and hawks to the scenario, and the feeding relationships can get very confusing! (Prentice Hall Biology, p. 70)
Considerations in teaching vocabulary

- New word represents a known concept
- New word represents a new concept
- New word provides more information about a known concept
- Known word represents a different meaning
Grammar

GRAMMARIAN

WOOF
WOOF'S
WOOFING
WOOFED

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Grammar refers to the arrangement of words in phrases, sentences, and within written discourse that communicates ideas and concepts. Instruction should identify the characteristics of grammar that are prevalent in academic expository text and that pose difficulties for ELLs.
Grammar

- Compound and Complex Sentences
- Passive Voice
- Nominalization
- Long Noun Phrases
- Long or Multiple Prepositional Phrases
- Modals

Adapted from DiCerbo & Anstrom (2009)
Research-based Effective Practices to Support Academic Literacy

- Integrate all 4 language modalities into lessons
  - Listening
  - Speaking
  - Reading
  - Writing
- Establish language-rich classroom environments
- Focus on vocabulary development
- Teach the structure of academic discourse (oral and print) for the discipline
**Listening: Student**

Teachers can help students comprehend information presented orally.

- Use visuals
- Demonstrate meaning
- Use multiple opportunities to support comprehension as students listen to presentations. Supports include
  - preview of information
  - guided notes
  - sentence starters
  - key questions
  - cloze passages
  - written summaries of key points
Listening: Teacher

- Take opportunities to listen to students
- Promote interactivity in lessons
- Allow for material to be actively “processed” (which means making presentations interactive or allowing for students to build understanding)
Speaking: Student

Allow for active verbal processing of information during the lesson or outside the lesson. In class examples include:

- turn and talk;
- open ended processing questions (whole group, small group, or pairs);
- student presentations of content (along with accountable listening measures for student listeners).

Out of class examples:

- small group assignments
- Blackboard “conversations”
## Speaking: Students

<table>
<thead>
<tr>
<th>Discussion features</th>
<th>Prompts teacher or students can use for the feature</th>
<th>Prompts for to use in responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarify and elaborate</td>
<td>Can you tell me more about...?</td>
<td>This part is really saying...</td>
</tr>
<tr>
<td></td>
<td>What do you mean by...?</td>
<td>I think it means...</td>
</tr>
<tr>
<td></td>
<td>What makes you think that?</td>
<td>One reason why I think...</td>
</tr>
<tr>
<td>Support ideas with examples</td>
<td>Can you be more specific?</td>
<td>In the text, it said...</td>
</tr>
<tr>
<td></td>
<td>Can you give me an example?</td>
<td>For example...</td>
</tr>
<tr>
<td></td>
<td>Can you show me where it says that?</td>
<td></td>
</tr>
<tr>
<td>Build on or challenge another’s idea</td>
<td>Why do you think...?</td>
<td>My point is...</td>
</tr>
<tr>
<td></td>
<td>What do you think about ...?</td>
<td>I also think ...</td>
</tr>
<tr>
<td>Apply and connect</td>
<td>How does this relate to our lives?</td>
<td>In my life...</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It can teach us...</td>
</tr>
<tr>
<td>Paraphrase and summarize</td>
<td>What have we learned so far?</td>
<td>The main point/theme is...</td>
</tr>
</tbody>
</table>

*Adapted from DiCerbo & Anstrom (2009)*
Techniques for delivering lectures

- Guided notes
- Scaffold lectures
- Providing examples and support material
- Visuals, multimedia

What are some advantages and disadvantages to lecturing?
Lecturing: Advantages

- Lecturing is an efficient use of the instructor’s time.
- Lecturing is versatile – it can be used with large or small groups, for any curriculum area, and can last from a few minutes to several hours.
- The instructor has complete control of course content.
- Lecturing enables coverage of content not available in published form.
- The lecture method can be used to supplement or elaborate course content (e.g., text-, web-, or field-based activities).
- The lecture method provides flexibility. The instructor can probe students’ understanding and make on-the-spot adjustments to the lecture if warranted.
- Lectures can be motivating to students.
Lecturing: Disadvantages

- Course content is often presented via lecture in unorganized and uneven fashion.

- Students can be passive observers. The typical lecture does not require students to actively participate. (One of the most consistent and important educational research findings is that students who make frequent, relevant responses during a lesson learn more than students who are passive observers).

- Many college students do not know how to take effective notes.

- The listening and language difficulties of ELLs make it difficult for them to identify important lecture content and write it down correctly and quickly enough during a lecture.

- Instructors sometimes get off-track from the primary objectives of the lecture.
Speaking: Teacher

- Paraphrase
- Reinforcing contextual definitions (embedding the definition or example in the sentence)
- Check for understanding
  - Stop work periodically and ask clarifying questions
  - Engage students in quick comprehension check (think-pair-share; read back notes; ask for paraphrase; etc.)
Tips for Writing Guided Notes:

- Examine existing lecture outlines (or create them as necessary) to identify the most important course content (less can be more)
- Delete the key facts, concepts, and relationships from the lecture outline; leave the remaining information to provide structure and context for note taking
- Insert formatting cues such as asterisks, lines, and bullets to show students where, when, and how many facts or concepts to write
- Use PowerPoint slides to project key content
- Leave ample space for students to write
- Enhance GN with supporting information and resources (diagrams, illustrations, photos)
- Make GN available to students via course website and/or photocopied course packets
Reading: Student

- Alternative readings
- Pre-reading guidance
  - Guiding questions
- During reading guidance
  - Guiding notes
  - Outline of text
  - Margin notes
- Native language resources
- Graphic organizers for reading
Reading: Student

**Story Map 2**
Write notes in each section.

**Setting:**
- Where:
- When:

**Major Characters:**
- Minor Characters:

**Plot/Problem:**
- Event 1:
- Event 2:
- Event 3:

**Outcome:**

**Cluster/Word Web 1**
Write your topic in the center circle and details in the smaller circles. Add circles as needed.

**Topic**
Reading: Student

Venn Diagram
Write details that tell how the subjects are different in the outer circles. Write details that tell how the subjects are the same in the circles overlapping.

Name __________________________ Date ____________

Five W's Chart
Fill in each row with details that answer the question.

What happened?

Who was there?

Why did it happen?

When did it happen?

Where did it happen?
Context clues

Some clues may provide a **definition**, **restatement**, **example**, **comparison or contrast**, **description**, **synonym** or **antonym**. Expository, non-fiction text (e.g., school textbooks) tends to offer more context clues than narrative story text.

**Example:** Prince Henry started a school for sea captains. These captains were taught the science of **navigation**. That is, they were taught how to figure out a ship’s location and the direction and distance that it travels.

*Adapted from Beck, McKeown & Kucan (2002)*
Context clues

Sometimes the context provides some information about a new word, but not enough for the student to be certain of its meaning:

- **Example:** In order to gain active immunity to a disease, one of two things must occur – either you come down with the disease, or you receive a vaccination.

Sometimes the context can actually lead to a misunderstanding, referred to as a “misdirective.”:

- **Example:** Sandra had won the dance contest, and the audience’s cheers brought her to the stage for an encore. “Every step she takes is so perfect and graceful,” Ginny said grudgingly as she watched Sandra dance.

*Adapted from Beck, McKeown, & Kucan (2002)*
Writing: Student

Provide many opportunities to write:

- Learning logs/journals
- Criteria for responses
- Online discussions
- “Writing process”
Writing/Speaking: Student

Blooms Taxonomy: Classification of levels of intellectual behavior important in learning. Bloom found that over 95% of the test questions students encounter require them to think only at the lowest possible level...the recall of information.
Writing/Speaking: Student

- **Knowledge**: arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.

- **Comprehension**: classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select.

- **Application**: apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, sketch, solve, use, write.

- **Analysis**: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.

- **Synthesis**: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.

- **Evaluation**: appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, select, support, value, evaluate.

*Adapted from Anderson and Krathwohl (2001)*
References


