Reading and Vocabulary in Career Technical Education

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Today, we will...

• Identify five reading comprehension skills
• Describe the benefits of think-alouds
• Explain how to teach students the summarizing process
• Identify two strategies to teach vocabulary
What is the role of a CTE teacher in teaching reading comprehension skills? Vocabulary strategies?

A Point to Ponder...

- Many students can read on grade level in elementary school. However, if those same students do not receive *explicit instruction* in reading comprehension skills and vocabulary development, they will not be able to read the complex subject area texts in secondary schools.

  *Adapted from the research of Pressley and Block*
### Comprehension Skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summarizing</td>
<td>Identifying the major points and ideas from a selection</td>
</tr>
<tr>
<td>Predicting</td>
<td>Using available information to make an educated guess about what might happen next</td>
</tr>
<tr>
<td>Inferring</td>
<td>“Reading between the lines” to understand implied information</td>
</tr>
<tr>
<td>Clarifying</td>
<td>Noticing when comprehension is lost and applying strategies to regain meaning</td>
</tr>
<tr>
<td>Questioning</td>
<td>Maintaining inquiry focus before, during, and after reading</td>
</tr>
</tbody>
</table>
A Health Science example...

When you are reading, what is happening in your mind?
How does reading comprehension happen?

• Think-alouds help readers think about how they make meaning.
  ▫ Think-alouds are a metacognitive process that builds independence in reading.

Think-Aloud Self Assessment
How can we teach students to use think-alouds?

• Model thinking aloud
  ◦ Tell students that as you read a passage aloud, you will be stopping to think through what you are reading.
  ◦ As you read, stop frequently to talk about how you are analyzing what happened in the text.
  ◦ Give students a verbal or visual cue that you’re switching from reading the text to thinking aloud.
  ◦ Jot down your comments for students to see
• After you’ve modeled it for students, have them try it out!

Do your students find it easy to summarize what they have just read? Why or why not?

How can we help our students become more effective summarizers?
A Health Science example...
### Basic Signal Words

<table>
<thead>
<tr>
<th>Who or what the text is about.</th>
<th>Subject of sentence (usually not a person)</th>
<th>Location on, above, over, under, up, here, there, school, house, supermarket, USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Francis, Susan, Peter, she, he, rabbit</td>
<td>Ball, turtle, sunshine, it, riding, writing, flying</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Reason/Rationale</td>
<td>Process/Procedure</td>
</tr>
<tr>
<td>Before, after, while, tomorrow, earlier, soon, now, once</td>
<td>Because, that, due, as, so, for, on account, for this reason</td>
<td>First, second, then, finally, as a result of, in other words</td>
</tr>
</tbody>
</table>

### Basic Signal Words Graphic Organizer

- **Who** (subject)
- **What** (action)
- **When** (time)
- **Where** (location)
- **Why** (reason)
- **How** (process)
How important is it that students learn the vocabulary associated with your content?

Traxoline

It is very important that you learn about traxoline. Traxoline is a new form of zionter. It is montilled in Ceristanna. The Ceristannians gristerate large amounts of fevon and then bracter it to quasel traxoline. Traxoline may well be one of our most lukized snezlaus in the future because of our zionter lescelidge.
Effective or Ineffective

- Memorization of definitions
- Multiple exposures to words in context
- Explicit instruction of words
- Copying definitions from glossary and writing a sentence
- Instruction of new vocabulary begins with words in isolation
- Discussing synonyms and antonyms

Teaching Vocabulary

- Activities that extend the use of word beyond the classroom significantly increase vocabulary growth.
- Repetition and multiple exposures of vocabulary words often and in various ways, can have a significant effect.
  - It takes 24 times (or 24 correct practices) to get 80% mastery.
- Pre-teaching of vocabulary words and repeated exposure in different contexts were found to improve vocabulary and comprehension.
• Create a list of ten words that students must know by the end of the school year
  ▪ Select words of varying difficulty (easiest for students to mastery to most difficult for students to master)

<table>
<thead>
<tr>
<th>Word</th>
<th>Sentence you found with word</th>
<th>What you think it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biotechnology</td>
<td>The use of bio-technology has greatly increased profit for individual farms.</td>
<td>Noun Bio-Technology  The use of genetically engineered crops in agriculture and DNA manipulation in livestock in order to increase production.</td>
</tr>
<tr>
<td>Duty Cycle</td>
<td>Dynasty® 350 TIG unit can deliver 300 amps of welding output at a 60 percent duty cycle.</td>
<td>Noun Duty cycle is the number of minutes out of a 10-minute period a welder can operate.</td>
</tr>
<tr>
<td>Kiln</td>
<td>The wood was placed into the kiln to ensure that it wouldn’t warp after construction.</td>
<td>Noun A heated chamber for drying lumber where the air flow, heat and relative humidity can be controlled.</td>
</tr>
</tbody>
</table>
Vocabulary Strategies

• Read the strategy and begin thinking about what it would look like in your classroom.
• Locate your colleagues that have the same strategy
• Discuss the strategy and share how it could be used in your classroom
• Identify a spokesperson to share the strategy with the entire group

Vocabulary Strategies

• Vocabulary Rubric
• Classifying Terms
• The Frayer Model
• Talk a Mile a Minute
• Solving Analogy Problems
Comprehension Characteristics of Proficient Readers

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Strategy</th>
</tr>
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<tbody>
<tr>
<td>Make Connections to Prior Knowledge</td>
<td>Anticipation Guide</td>
</tr>
<tr>
<td>Generate Questions</td>
<td>Question-Answer Relationship (QAR)</td>
</tr>
<tr>
<td>Visualize and Create Mental Images</td>
<td>Guided Imagery</td>
</tr>
<tr>
<td>Make Inferences</td>
<td>Double-Entry Diary</td>
</tr>
<tr>
<td>Determine Importance</td>
<td>Magnet Summaries</td>
</tr>
<tr>
<td>Synthesize</td>
<td>Interactive Reading Guide</td>
</tr>
</tbody>
</table>

Comprehension Strategies

- With a partner, complete the Interactive Reading Guide.
- Be prepared to share your strategy with another pair.
High Five!

• Trace your hand on a colored sheet of paper.
• With a partner, discuss the things you learned today.
• Choose the five most important pieces of learning and write one on each finger and the thumb.
• Be prepared to share whole group.

Questions? Thank you!

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