English Language Learner Students in the CTE Classroom

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Common Abbreviations

- ELL
- ESOL
- LEP
- TESOL

- EIL
- SIOP
- CELTA (Not so common)
New: EIL
English as an International Language

Have you seen this?

- In EIL writing one should keep the sentence short, and avoid use of metaphors or colorful expressions
- In EIL speaking there is no third person present tense –s because it doesn’t cause communication problems. (She look pretty.)
WIDA website!
WIDA is a consortium of 22 states dedicated to the design and implementation of high standards and equitable educational opportunities for English language learners.
http://www.wida.us/index.aspx
World Class Instruction Design and Assessment
15.1-38-01. English language learners - Program of instruction. Each school district shall provide a program of instruction for students who are English language learners. The program may be provided by a school district or in conjunction with one or more districts.
15.1-38-01.1. English language learner - Definition. English language learner means a student who:

1. Is at least five years of age but has not reached the age of twenty-two;
2. Is enrolled in a school district in this state;
3. Has a primary language other than English or comes from an environment in which a language other than English significantly impacts the individual's level of English language proficiency; and
4. Has difficulty speaking, reading, writing, and understanding English, as evidenced by a language proficiency test approved by the superintendent of public instruction and aligned to the state English language proficiency standards and the state language proficiency test.
Who are we serving?

Countries?

- Switzerland
- Bhutan

Languages?

- English
- Arabic
- Japanese
What is happening in your classroom?

- What languages?
Supporting Students
Career and Tech Education:

Why It Works for ELL Students

(and other students!)
CTE Strengths

- Concrete

Construction Laborers
CTE Strengths

- Concrete
- Step by Step Directions

Retail Store Managers
CTE Strengths

- Concrete
- Step by Step Instructions
- Career and Life Skills

Career Resource Network,

http://www.nd.gov/cte/crn/

Electrician $47,180 annual (US)

Day Care Provider $24,540 annual
...a hierarchy of educational objectives, which is generally referred to as Bloom's Taxonomy, and which attempts to divide cognitive objectives into subdivisions ranging from the simplest to the most complex.
CTE Strengths

- Concrete
- Step by Step Instructions
- Life Skills
- “Hands on”

Chefs and Head Cooks
$40,090 annual
“Hands on”

“Hands on” and “Muscle Memory” (not just for body builders, athletes and musicians)

kinesthetic memory [kinˈ ɛsthetˈ ɪk] the recollection of movement, weight, resistance, and position of the body or parts of the body.
CTE Strengths

- Concrete
- Step by Step Instructions
- Life Skills
- “Hands On”
- Possible to Scaffold
Strategies that work when teaching concepts (and language):

- Ball
- Yellow ball
- Big ball/Little ball
- Texture/density/properties?
- What can it do?

Pair words to Actions
Ball Joint

Ball and Socket Joint

Ball-Peen Hammer
Welcome to the Visual Dictionary Online, the dictionary with a new point of view.

A quick glance at the index is all it takes to connect words with images.

Explore the 15 major themes to access more than 6,000 images and see words like never before.

With so many fire extinguishers to choose from, selecting the proper one for your home can be a daunting task. Everyone should have at least one fire extinguisher at home, but it's just as important to ensure you have the proper type of fire extinguisher. Fire protection experts recommend one for the kitchen, the garage and workshop.

Fire extinguishers are divided into four categories, based on different types of fires. Each fire extinguisher also has a numerical rating that serves as a guide for the amount of fire the extinguisher can handle. The higher the number, the more fire-fighting power. The following is a quick guide to help choose the right type of extinguisher.

- **Class A** extinguishers are for ordinary combustible materials such as paper, wood, cardboard, and most plastics. The numerical rating on these types of extinguishers indicates the amount of water it holds and the amount of fire it can extinguish.

- **Class B** fires involve flammable or combustible liquids such as gasoline, kerosene, grease and oil. The numerical rating for class B extinguishers indicates the approximate number of square feet of fire it can extinguish.

- **Class C** fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish class C fires - the risk of electrical shock is far too great! Class C extinguishers do not have a numerical rating. The C classification means the extinguishing agent is non-conductive.

- **Class D** fire extinguishers are commonly found in a chemical laboratory. They are for fires that involve combustible metals, such as magnesium, titanium, potassium and sodium. These types of extinguishers also have no numerical rating, nor are they given a multi-purpose rating - they are designed for class D fires only.

http://www.fire-extinguisher101.com/fireprotectionproduct.html
Fire Extinguisher Ratings

http://www.hanford.gov/fire/safety/extingrs.htm#fetypes

US Department of Energy

**Class A Extinguishers** will put out fires in ordinary combustibles, such as wood and paper. The numerical rating for this class of fire extinguisher refers to the amount of water the fire extinguisher holds and the amount of fire it will extinguish.

**Class B Extinguishers** should be used on fires involving flammable liquids, such as grease, gasoline, oil, etc. The numerical rating for this class of fire extinguisher states the approximate number of square feet of a flammable liquid fire that a non-expert person can expect to extinguish.

**Class C Extinguishers** are suitable for use on electrically energized fires. This class of fire extinguishers does not have a numerical rating. The presence of the letter “C” indicates that the extinguishing agent is non-conductive.

**Class D Extinguishers** are designed for use on flammable metals and are often specific for the type of metal in question. There is no picture designator for Class D extinguishers. These extinguishers generally have no rating nor are they given a multi-purpose rating for use on other types of fires.
Scaffolding

• What are the improvements?

1.

2.

3.

4. More?
Places to look:

- Written materials
- Readability
- New student information
- Assumptions
- Achieving Language proficiency
- Brain Based Learning Principles
Written Materials

- Teacher Preparation
- Building Background Knowledge
- Pre-teaching Vocabulary and Concepts
- Pre-reading Strategies to Increase Comprehension
- Introducing the Text
- Reading the Text

- “Helping English Language Learners Understand Content Area Texts”, www.doe.in.gov/englishlanguagelearning
- http://www.doe.in.gov/lmmp/welcome.html
“The camshaft is simply a shaft that has cams. Since the valves of the engine need to be opened at different times, the noses, or high points, of the cams are offset from one another. Most camshafts have twice as many cams as there are cylinders. The reason for this is that there is one cam for each exhaust valve and one cam for each intake valve. However, some overhead camshaft engines are provided with two camshafts for each bank of cylinders: one camshaft for the intake valves and the other for the exhaust valves.

The camshaft is made of steel, and only the surface of each cam is hardened to avoid rapid wear. If the entire camshaft were hardened, it would snap apart, as it would not be able to absorb the twisting motion.

In a four-cycle engine, each valve is opened once for two revolutions of the crankshaft. Therefore, the camshaft turns at one-half the speed of the crankshaft. Since the camshaft runs at a slower speed than the crankshaft, it is not subject to as much wear as the crankshaft.”

Flesch Reading Ease 73.6
Flesch-Kincaid Grade Level 7.5

Toboldt, Johnson, Gauthier, Pg. 96, Goodheart-Willcox Automotive Encyclopedia, 2006
(In your handout: Microsoft Office: Show readability statistics
Office Button to Options to Proofing to Show Readability)
New Students in your Classroom?

Make no assumptions
What is known vocabulary?
Use visuals when possible
Auditory versions of books
Use no slang
Assumptions?

Health Careers
Other Assumptions

Help is On the way!

Camshaft
عمود ال حدبات

http://translate.google.com/translate_t#
Second language learning
It takes 4-7 years to achieve language proficiency, even under good circumstances.
Brain Based Learning Principles


The principles are:
1. The brain is a complex adaptive system.
2. The brain is a social brain.
3. The search for meaning is innate.
4. The search for meaning occurs through patterning.
5. Emotions are critical to patterning.
6. Every brain simultaneously perceives and creates parts and wholes.
7. Learning involves both focused attention and peripheral attention.
8. Learning always involves conscious and unconscious processes.
9. We have at least two ways of organizing memory.
10. Learning is developmental.
11. Complex learning is enhanced by challenge and inhibited by threat.
12. Every brain is uniquely organized.

(In your handout)
We have at least two ways of organizing memory, (spatial and rote). CTE does both.

• Learning is developmental.

Complex learning is enhanced by challenge and inhibited by threat.

Low anxiety environment helps.
Some Ideas

Have you been here?
http://larryferlazzo.edublogs.org/
www.englishcentral.com (beta version)
Records speech with video presentation, replays, highlights, scores verbal output, quiz mode
Measurements

- $\frac{1}{8}$ Cup = 2 Tablespoons

- 1 Cup = 8 Fluid Ounces
Test Questions

• $\frac{1}{2}$ Cup = _______ Tablespoons
  • 6
  • 2
  • 8

• 1 stick of butter = _______ Cup
  • $\frac{1}{2}$
  • 1
  • 2
  • 1 $\frac{1}{2}$
Back to camshafts:

http://auto.howstuffworks.com/camshaft.htm
Building Tests

Adapt

- Fewer Choices
- Other Formats
- Teach Text Words
- Chunking
Why CTE is different:

- Industry Standards
- Safety Instruction
Why CTE is different - Safety

1. **Students make effective use of technology (tools).**
   - 1.E.1 Select the appropriate tools for a task and/or to solve a problem.
   - 1.E.2 Demonstrate knowledge of tool use.
   - 1.E.3 Maintain tools and trouble-shoot when tools are not in working order.
   - **1.E.4 Use proper safety procedures when operating tools.**

2. **Students acquire and use information and manage resources* to accomplish specific tasks.**
   - 2.E.1 Identify and evaluate information to support a specific problem/task.
   - 2.E.2 Identify resources necessary to support a specific problem/task.
   - 2.E.3 Organize resources necessary to support a specific problem/task.
   - 2.E.4 Allocate resources necessary to support a specific problem/task.

*Including but not limited to time, money, materials, and human resources.

3. **Students make preparation for entering the work force.**
   - 3.E.1 Recognize personal strengths and interests.
   - 3.E.2 Identify careers which correlate to personal strengths and interests.
   - 3.E.3 Exhibit knowledge of job seeking skills.
   - 3.E.4 Develop an awareness of diversity in the work force.
   - **3.E.5 Demonstrate proficiency in industry developed performance standards.**

4. **Students operate effectively within organizations.**
   - 4.E.1 Demonstrate responsibility through appropriate management of resources.
   - 4.E.2 Demonstrate ethical behavior.
   - 4.E.3 Identify the characteristics of positive relationships.
   - 4.E.4 Participate collaboratively as a member of a team.
   - 4.E.5 Identify personal leadership skills and use appropriately.
   - 4.E.6 Communicate effectively in a variety of situations.

Career and Technical Education, FPS
Any predictions about the future?

According to the International Association for K-12 Online Learning, “Up to half of classes will be on the Web by 2020.”
## Technology Support for Teaching Industry Standards

<table>
<thead>
<tr>
<th>Build background knowledge</th>
<th>Academic Language</th>
<th>“Hands On”</th>
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</thead>
<tbody>
<tr>
<td>• use of digital text, audio, images, and video</td>
<td>• Develop academic language by creating digital media products.</td>
<td>• Develop “hands on” technical skills</td>
</tr>
<tr>
<td>• Tools to try: iPods, Digital Videos, Digital Photos</td>
<td>• Tools to try: Digital Cameras &amp; Photo Editors, Video Editors, Podcasting Tools</td>
<td>• Scaffold knowledge</td>
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<td>• Videos</td>
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<td>• Models</td>
</tr>
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<td></td>
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<td>• Student-made demonstration videos</td>
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</tbody>
</table>
Complications

- [http://www.worldwidemetric.com/metcal.htm](http://www.worldwidemetric.com/metcal.htm)
- Students’ life experiences? [http://www.careerclusters.org/16clusters.cfm](http://www.careerclusters.org/16clusters.cfm)
- Cursive Writing
- Texting and Twitter
  
  **BestSugarCookies Recipe**
  
  beatLBbut&3Csug+2egg+tvnil&1.5tSalt+5CFlour/into2wrap&chillRoll.25Cut/15m(at)350F

  Twitter Recipes from Martha Stewart, AP, The Forum, pg. B1
Complications

What are you seeing?
What else is important?

Social Aspects
Social Aspects

- Social constructivism extends constructivism into social settings, wherein groups construct knowledge for one another, collaboratively creating a small culture of shared artifacts with shared meanings.  
  
  Lev Vygotsky.
Build Personal Relationships

- What does the student like?
- What strengths does he/she have?
- How many languages?
- Others?
Build Independence

- Help to work through assignments
- Consistent changes
- Thinking skills
- Career possibilities
- College level help
Brain Research

- Building brain connections
Look for the dendrites:
ELL IN THE CTE CLASSROOM: WHAT WORKS!

WORKS CITED

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http://www.delicious.com/nancy.melhorn (Safety websites for CTE)

• Microsoft Clipart
• www.google.com
  English Language Learner Students in the CTE Classroom- Abbreviations you may encounter:
  ESOL- English for Speakers of Other Languages
  ELL- English Language Learners
  Exchange Student
  LEP- Limited English Proficiency
  TESOL- Teacher of English to Speakers of Other Languages  www.tesol.org
  SIOP- Sheltered Instruction, Observation Protocol
  EIL- English as an International Language
  CELTA- Certificate of English Language Teachers of Adults

• ND Department of Public Instruction
  http://www.dpi.state.nd.us/bilingual/index.shtm (Note National links)

• Helping Students with Written Materials “Helping English Language Learners Understand Content Area Texts”, http://www.doe.in.gov/lmmp/welcome.html
ELL in the CTE Classroom: What works!

Works Cited:

- Microsoft Office: Show readability statistics
- ELL Department, FSHS

Google will help you:

- Translate [http://translate.google.com/translate_t#](http://translate.google.com/translate_t#)
- How stuff works [http://auto.howstuffworks.com/camshaft.htm](http://auto.howstuffworks.com/camshaft.htm)
- Conversion Tables [http://www.worldwidemetric.com/metcal.htm](http://www.worldwidemetric.com/metcal.htm)
- Career Clusters [http://www.careerclusters.org/16clusters.cfm](http://www.careerclusters.org/16clusters.cfm)
More ELL in the Classroom

- Microsoft Clipart
- www.google.com
- http://www.tesol.org/s_tesol/index.asp TESOL
- http://www.cambridgeesol.org/exams/teaching-awards/celta.html CELTA
- http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy Bloom’s taxonomy
- Scaffolding
- Microsoft Office: Show readability statistics
  Office Button to Options to Proofin to Show Readability
- ELL Department, FSHS
- Leslie Lemke, CTRE Paraprofessional Gourmet PowerPoint presentation
- Social Aspects – Constructivism and Lev Vygotsky
  http://www.simplypsychology.pwp.blueyonder.co.uk/vygotsky.html
- Career clusters http://www.careerclusters.org/16clusters.cfm
- Brain Research http://www.eduscapes.com/tap/topic70.htm
- Larry Ferlazzo http://larryferlazzo.edublogs.org/