

# Using Digital Tools to Support a Diverse Student Body

---

Different learning styles, literacy levels and language  
proficiency

# Goals for this session

---

- Explore general strategies for working with diverse learners such as using graphic organizers and cooperative learning structures
- Explore digital resources for teaching in multiple intelligences
- Look at digital tools for improving vocabulary
- Make reading more accessible through leveled readers and audio books
- Review the needs of English Learners and how technology can support them

# About your students...

---

- In what ways are the students in your class diverse?
- How do you get to know about the students in your class?

# Adult learners

---

- Self-concept: independent and self-directed
- Experience: library of life experiences to draw on as a resource
- Readiness to learn: knowledge or skill needed for a job or role
- Orientation to learn: expect to immediately apply new knowledge
- Motivation to learn: motivated by internal rather than external factors

Malcolm Knowles, 1984

[https://teal.ed.gov/sites/default/files/Fact-Sheets/11 %20TEAL Adult Learning Theory.pdf](https://teal.ed.gov/sites/default/files/Fact-Sheets/11%20TEAL%20Adult%20Learning%20Theory.pdf)

# For any type of learning challenges

---

- Predictability, high structure
- Clarity: lesson objective/learning target, success criteria, expectations
- Focus on understanding and concepts over memorizing facts
- Use of focal and positive language, i.e. “this is important, make sure this is in your notes”
- Use student’s name and use proximity to help focus
- Talk less: keep instructions brief, explicit
- Check for understanding: repeat, paraphrase, summarize periodically
- Model and provide guided practice

# Digital supports

---

- Predictability, high structure
  - Use a learning platform such as Blackboard or Schoology to post important course documents such as the syllabus and assignments <https://www.schoology.com/>
- Clarity: lesson objective/learning target, success criteria, expectations
  - Use your interactive white board to display the learning target and revisit it during the lesson and to display models, exemplars, anchors or rubric to define quality work
- Check for understanding: repeat, paraphrase, summarize periodically
  - Use classroom clickers (such as PollEverywhere) to periodically check for understanding. Have students use a chat feature to ask questions, paraphrase or summarize <https://www.polleverywhere.com/>
- Model and provide guided practice
  - Learning platform or blog <https://www.google.com/docs/about/>

# Assessing prior knowledge

---

- Hard to make assumptions about what adult learners may (or may not) already know
- Types of screening tools
  - K-W-L/S (know, what to learn, learned/source) Google Docs <https://www.google.com/docs/about/>
  - Curriculum-based (Quizlet) <https://quizlet.com/>
  - Think-pair-share or turn and talk (chat) <https://www.google.com/docs/about/>
  - Brainstorming (Google Docs) <https://www.google.com/docs/about/>
- Use some sort of pre-assessment to
  - Get a baseline for instruction (clickers) <https://www.polleverywhere.com/>
  - Identify students who are “experts” in the content
  - Identify misconceptions or gaps in background knowledge that need to be addressed

# Graphic organizers

---

- Lots of sites to download helpful organizers, not all are unlimited/free
- <http://www.studenthandouts.com/graphic-organizers/> , <http://www.teacherprintables.net/free-printable-organizers.html>
- Common organizers
  - Venn diagram (compare/contrast)
  - Concept maps (main/supporting ideas)
  - Fishbone (multiple/complex ideas, inter-related ideas)
  - Chain of events (sequence)
  - Plus/minus/interesting (evaluate options)
- Helpful chart for selecting the right organizer: <http://www.enchantedlearning.com/graphicorganizers/-scroll> down for decision-making flow chart



# Cooperative learning structures

---

- Cooperative learning allows students of different abilities to collaborate, to make meaning and support each other's learning.
- Low-risk and can help address gaps in background knowledge
- Quiz:
  - Familiarity with common structures
  - Appropriate use

# Common cooperative learning structures

---

- Jigsaw
- Roundtable/roundtable brainstorm
- Line up/value line
- Numbered heads together
- Think-pair-share
- Gallery walk
- Group discussion with talking chips
- Quick write/ marathon write

Great websites for explanations of cooperative learning:

[http://www2.gsu.edu/~mstjrh/cooperative\\_learning\\_struct.htm](http://www2.gsu.edu/~mstjrh/cooperative_learning_struct.htm), <http://www.literacynet.org/icans/chapter01/overview.html>

# Learning styles/multiple intelligences

---

- **Linguistic intelligence** ("word smart")
- **Logical-mathematical intelligence** ("number/reasoning smart")
- **Spatial intelligence** ("picture smart")
- **Bodily-Kinesthetic intelligence** ("body smart")
- **Musical intelligence** ("music smart")
- **Interpersonal intelligence** ("people smart")
- **Intrapersonal intelligence** ("self smart")
- **Naturalist intelligence** ("nature smart")

Thomas Armstrong, [http://www.institute4learning.com/multiple\\_intelligences.php](http://www.institute4learning.com/multiple_intelligences.php)

- Online "Find Your Strengths" inventory: <http://www.literacynet.org/mi/assessment/findyourstrengths.html>

# Using the intelligences to maximize learning

---

- Students need experience in multiple instructional mediums, not just preferred one.
- Sometimes appropriate to group students with those of the same MI category; sometimes purposely mix groups.
- Being aware of the intelligences can help mix up the choice of activities or strategies to help motivation and engagement.
- Encourage students to know their own strengths even if not part of the class design.

# Activities that match intelligences

---

- Supporting Linguistic learners with technology
  - Outline or guided notes on a PowerPoint or Prezi <https://prezi.com/>
  - Books on tape, text to speech, speech to text software
  - <http://www.openculture.com/freeaudiobooks> , <https://librivox.org/> ,  
<http://www.digitaltrends.com/web/best-websites-for-free-audiobooks/>
- Logical/Mathematical
  - Graphic organizers (fish bone, cause-effect)
  - Virtual manipulatives: National Library of Virtual Manipulatives  
<http://nlvm.usu.edu/en/nav/vlibrary.html>

# Intelligence-activity match

---

- Spatial
  - Inspiration concept mapping software <http://www.inspiration.com/> , <https://www.mindmeister.com/>
  - Google images <https://www.google.com/imghp>
- Bodily-kinesthetic
  - Life science topics: Apple Watches, Fitbit, other monitors
  - Reader's Theatre <http://abspd.appstate.edu/teaching-resources> , <http://www.freereaderstheater.com/free-readers-theater-stories-and-scripts>
  - Skits <http://abspd.appstate.edu/teaching-resources>

# Intelligence-activity match

---

- Musical
  - Garage band
  - iTunes
  - Youtube: Educationrap- <https://www.youtube.com/user/educationalrap>
  - Links to multiple music tools: <http://cooltoolsforschools.wikispaces.com/Music+Tools>

# Intelligence-activity match

---

- Interpersonal
  - Blogs: WordPress; <http://thenextweb.com/businessapps/2015/05/11/the-18-best-blogging-and-publishing-platforms-on-the-internet-today/2/> ; Edmodo: <https://www.edmodo.com/>
  - Wikis (using Google) <http://www.howtogeek.com/howto/34248/how-to-create-a-wiki-without-any-technical-know-how-using-google-sites/>
  - Collaboration software: Wiggio [https://wiggio.com/#tpl=home\\_0](https://wiggio.com/#tpl=home_0) , <http://cooltoolsforschools.wikispaces.com/Collaborative+Tools>
- Intrapersonal
  - Journaling
  - Penzu: <https://penzu.com/> personal journal and online diary
- Naturalist
  - Get outside with your digital camera!



# Help! My students lack vocabulary and word attack skills.

---

- Visual Thesaurus <http://www.visualthesaurus.com/> includes a word web of synonyms and antonyms
- Software that organizes key vocabulary and related concepts in a visual way
  - Wordle: <http://www.wordle.net/> creates word clouds
  - Vocabgrabber: <https://www.visualthesaurus.com/vocabgrabber/>
- Text-to-speech: <http://www.naturalreaders.com/index.html> (free)
- Picture dictionaries: <http://www.visualdictionaryonline.com/> organized by themes, stronger in science content-words, pictures, will pronounce terms

# Students reading at various levels

---

- Newsela: <https://newsela.com/> articles organized by themes and text sets, mapped to ELA anchor standards, many available in Spanish. Can select article in 5 Lexile levels. Each article has a quiz and writing activity (have to be a member to submit for scoring)
- Also consider online audiobooks
  - Librivox: <https://librivox.org/> free online audiobooks searchable by author, title, subject/genre and language
  - A treasure trove of free audio books <http://www.techsupportalert.com/free-books-audio>

# English Learners

---

- Many of the previously mentioned resources for vocabulary, work attack and reading level are appropriate for English Learners who are trying to improve language proficiency/skills and acquire academic language/skills at the same time.
- Take advantage of bi-lingual resources such as SpanishGED365: <https://www.spanishged365.com/>
- Caution! A lot of sites have translation options but not all render accurate or dialect sensitive renditions. Still, a good starting place for newcomers/low-proficiency students.
- Suggestions from Visilearn Company on teaching computer skills to EL students:
  - Hands-on labs
  - Simple, step-by-step instructions
  - Lots of large graphics
  - Information presented in small chunks
  - Real-world exercises

<http://www.colorincolorado.org/article/preparing-ells-be-21st-century-learners>

# Aspects of culture

---

- Country Culture Cards: <http://www.southernct.edu/groups/tat/files/Teacher-Resources-Country-Cultur-Cards.pdf>
- Sense of self and space
- Communication and language
- Time and time-consciousness
- Relationships, family, friends
- Work habits and practices

CALI: Culturally Responsive Education, Howe & Traverso, 2012.

# Favorite sites for EL resources

---

- Colorin Colorado: <http://www.colorincolorado.org/teaching-english-language-learners>
- CAPELL (CT Administrators of Programs for English Language Learners)  
<http://www.capellct.org/>

# Assessment options

---

- Not all students perform to their potential on a traditional test, but most adult education summative assessments are online and traditional
- Give students the chance to experience the testing platform in class
  - GED Ready® Practice Test Vouchers  
<http://www.gedtestingservice.com/educators/gedreadyvouchers>
  - NEDP Sample Performance Task <https://www.casas.org/docs/default-source/ned/download-an-nedp-sample-performance-task.pdf?sfvrsn=12?Status=Master>
  - <https://my.uscis.gov/prep/test/civics>

# Alternate assessments

---

- For class projects, allow some flexibility in how students demonstrate their knowledge
- Projects with checklists and/or rubrics
- Role plays, interviews or demonstrations
- Designs, diagrams, models or drawings
- Notebooks or journals
- Some great ideas at [http://www.emtech.net/Alternative\\_Assessment.html](http://www.emtech.net/Alternative_Assessment.html)

# Questions and feedback

---

- Please take a few minutes to provide feedback on this session:  
<https://www.surveymonkey.com/r/ECAAdultEd1516>
- For additional questions, contact
  - Sue Domanico, [domanico@educationconnection.org](mailto:domanico@educationconnection.org) 860-567-0863 x186
  - Tony Sebastiano, [tonys@educationconnection.org](mailto:tonys@educationconnection.org) 860-567-0863 x132