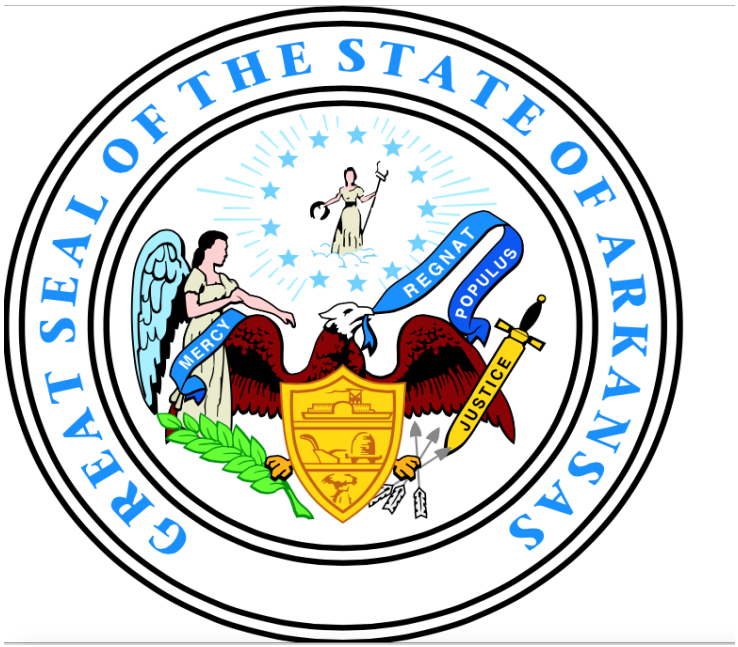
ARKANSAS

Adult Career Pathways: Institute 4



Contextualized Teaching Workbook

August 3, 2016

Michelle Carson & Libby Livings-Eassa

The basis for this workshop lies in two important documents: 1) The principles supporting the Department of Labor's six core elements, and 2) the U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE)'s *Programs of Study (POS) Design Framework*, 10 components to promote consistency in implementation of career pathways programs at state and local levels.

DOLETA: Career Pathways Toolkit

6 Key Elements for Success

Principles are interdependent and progressive:

- *Element 1*: Build Cross-Agency Partnerships & Clarify Roles
- *Element 2*: Identify Sector or Industry and Engage Employers
- *Element 3:* Design Education and Training Programs
- *Element 4*: Identify Funding Needs and Sources
- *Element 5*: Align Policies and Programs
- *Element 6:* Measure System Change & Performance

OCTAE Design Framework:

To promote consistency in implementation, a Design Framework was developed by OCTAE to define 10 components, each with one or more subcomponents, of high-quality career pathways systems.

- Legislation and Policies
- Partnerships
- Professional Development
- Accountability and Evaluation Systems
- College and Career Readiness Standards
- Course Sequences
- Credit Transfer Agreements
- Guidance Counseling and Academic Advisement
- Teaching and Learning Strategies
- Technical Skills Assessments

Welcome workshop participant! Here's how to make this a terrific workshop.

1. ***Engage and enjoy.*** This will be an enjoyable and worthwhile activity. Enjoy it!

2. ***Give this workshop 100% of your attention***. The more you are able to focus on this workshop, the more you will get out of it. Use the "parking lot" to park those issues/concerns while you are here. Please be courteous to other participants by leaving cell phones off during the workshop.

3. ***Participate and ask questions***. Please keep your questions fairly generic so that others in the room can benefit from them. Use the Post-It note "parking lot" for specific questions. If a question is not answered to your satisfaction, please talk to the trainer at a break. Sometimes the question may require more detail than what the group can afford so the trainer may appear to be brief.

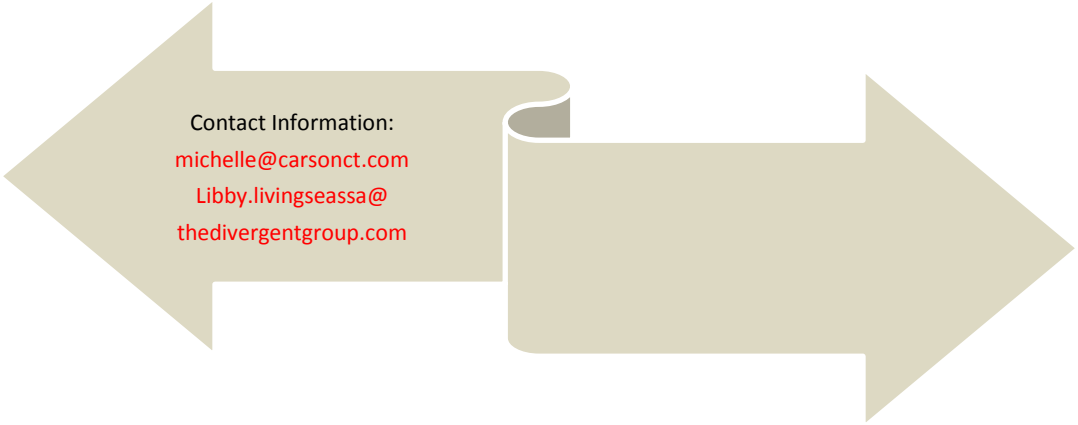
4. ***Take notes*** and write down any ideas that you learn.

5. ***Socialize*** and learn from others. Use team time, table time, down time to network

6. ***Think outside the box.*** You will experience a variety of contextual learning and brain-compatible learning strategies, some of which may not match your style or may seem foreign to you at first. We may include in this workshop: teaming; individual efforts; down time (*more content per hour is not always better than less*); use of movement, walks, and games; interaction time; processing time; visual thinking; and mind mapping.

7. ***Take care of yourself***. If you need to move around, stand up, go to the restroom --- then do it! Just let your table know and avoid disturbing the session.

8. ***Follow-up*** with your colleagues and the trainer about ideas you learned in the workshop.



Teamwork: From the following, self-select a role you would like to play on the team

Leader – keeps the conversation moving and team members on task
Recorder –records the conversation and thought process, illustrates the materials to be communicated by the Reporter in the large group
Reporter – presents the teams' solution in front of the large group
Timekeeper – is aware of the time constraints and reminds Leader of remaining time
Researcher(s) – using resources available in the room, investigate questions team members have

Organizing critical thinking

Facts	Assumptions	Questions	Resources

Contextual learning as a learner: Your team has 25 minutes to provide a solution to your sample scenario.

Sample Scenario 1 (Scenario Based) - *The importance of proper dosage of medication was dramatically brought to the public's attention in November of 2007. Dennis Quaid, a well-known screen actor, and his wife had two-week old twins that were suffering from an infection. The twins were in the pediatric ward at Cedars-Sinai Hospital and were treated with intravenous medications. Heparin, a blood thinner used to prevent clotting in intravenous tubes, was administered to both babies at dosages that were 1,000 times stronger than what was prescribed. Using the resources available to you in the room, research the ramifications of a Heparin overdose on infants, determine the course of action to reverse the overdose and identify a course of action to prevent such an overdose in the future.*

Sample Scenario 2 (Project/Problem Based)- *You work at a grocery store in Benton Harbor, Michigan. Recently, it has come to your manager's attention that customers want to purchase more locally grown produce. This reflects shoppers' desire to get the freshest food possible and also to support local farmers. The storage facility for your company is in Aurora, IL. Currently you are getting apples from Wellington, New Zealand where they are shipped by sea to Los Angeles then by air to Chicago and by truck to Aurora. Using the resources you have available in the room, research the possibility of utilizing local orchards as apple suppliers for your store, determine a profitable margin for the produce, and craft a marketing strategy to communicate the locally purchased produce is now available at your store.*

Sample Scenario 3 (Service Learning) – *Your local Habitat for Humanity received a generous donation of $350,000 to rehabilitate seven (7) existing homes in your community. While Habitat has seven families ready to move in, they are having a difficult time securing volunteers to assist with the rehabilitation efforts. Identify a marketing strategy that will appeal to those in your community to assist with the rehabilitation efforts alongside the future homeowners.*

Consider the local, state and federal regulations surrounding volunteerism and labor laws. (Use YOUR community or state)

Self-reflection and guided discussion
Individually, using the scenario you were presented with and the basic knowledge you have, answer the following:

1. What academic course objectives were addressed in this experience?
2. What CTE course objectives were addressed in this experience?
3. What employability skills were addressed in this experience?

Career pathways illustrated:	**Academic content that could be covered:**	**Technical content that could be covered:**	**Possible integrated project/activity ideas:**

Contextual Teaching: What does the research say?

Convergence of intelligence and learning theories suggest similar methods for effective teaching and learning:

- David Kolb: Individuals have a natural ability to learn through a _____ of methods.
- Caine & Caine: Striving for _____
- Howard Gardner: The mind's capacity for learning is broader than assumed.

Learn This! Activity (Caine & Caine):

Howard Gardner's Multiple Intelligences

1. Linguistic Intelligence: the capacity to use language to express what's on your mind and to understand other people. Any kind of writer, orator, speaker, lawyer, or other person for whom language is an important stock in trade has great linguistic intelligence.

2. Logical/Mathematical Intelligence: the capacity to understand the underlying principles of some kind of causal system, the way a scientist or a logician does; or to manipulate numbers, quantities, and operations, the way a mathematician does.

3. Musical Rhythmic Intelligence: the capacity to think in music; to be able to hear patterns, recognize them, and perhaps manipulate them. People who have strong musical intelligence don't just remember music easily, they can't get it out of their minds, and it's so omnipresent.

4. Bodily/Kinesthetic Intelligence: the capacity to use your whole body or parts of your body (your hands, your fingers, your arms) to solve a problem, make something, or put on some kind of production. The most evident examples are people in athletics or the performing arts, particularly dancing or acting.

5. Spatial Intelligence: the ability to represent the spatial world internally in your mind -- the way a sailor or airplane pilot navigates the large spatial world, or the way a chess player or sculptor represents a more circumscribed spatial world. Spatial intelligence can be used in the arts or in the sciences.

6. Naturalist Intelligence: the ability to discriminate among living things (plants, animals) and sensitivity to other features of the natural world (clouds, rock configurations). This ability was clearly of value in our evolutionary past as hunters, gatherers, and farmers; it continues to be central in such roles as botanist or chef.

7. Intrapersonal Intelligence: having an understanding of yourself; knowing who you are, what you can do, what you want to do, how you react to things, which things to avoid, and which things to gravitate toward. We are drawn to people who have a good understanding of themselves. They tend to know what they can and can't do, and to know where to go if they need help.

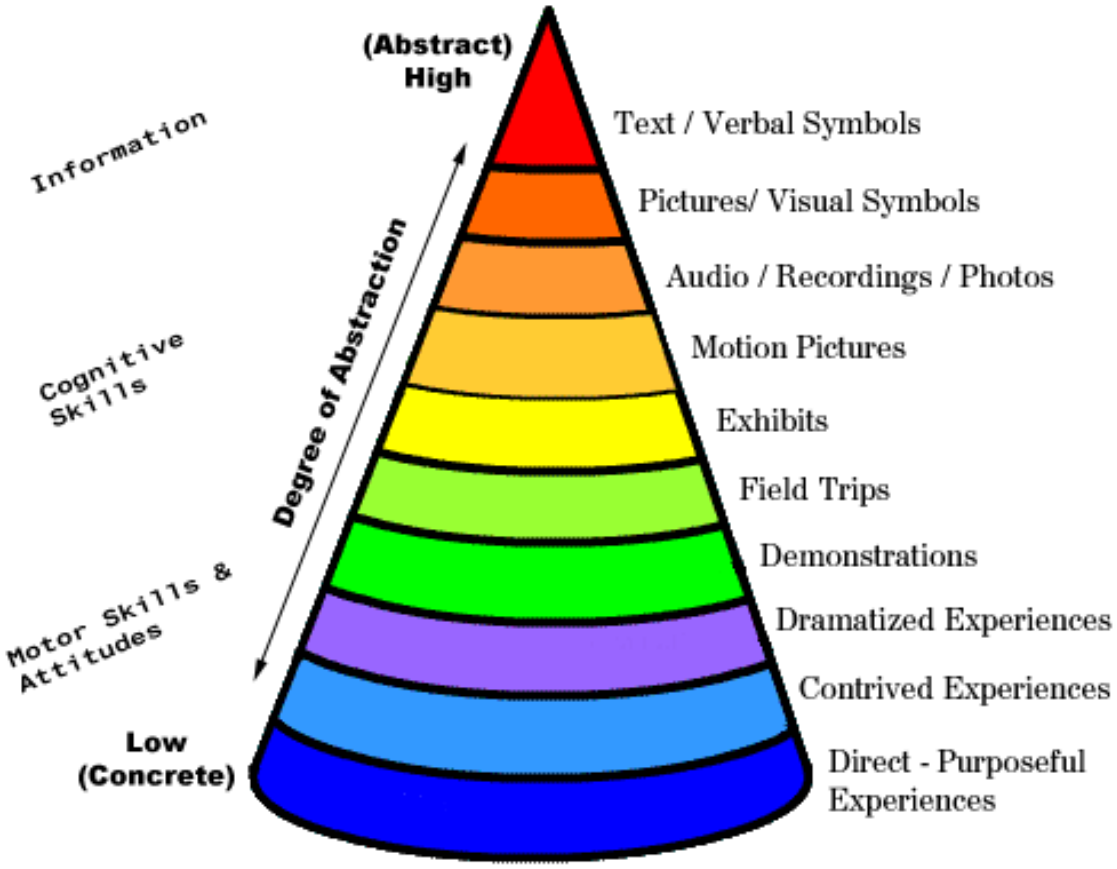
8. Interpersonal Intelligence: the ability to understand other people. It's an ability we all need, but is especially important for teachers, clinicians, salespersons, or politicians -- anybody who deals with other people.

9. Existential Intelligence: the ability and proclivity to pose (and ponder) questions about life, death, and ultimate realities

ACTIVITY: Multiple Intelligences as it relates to me	
I believe these are my strong intelligences	I believe these intelligences are NOT as strong in me

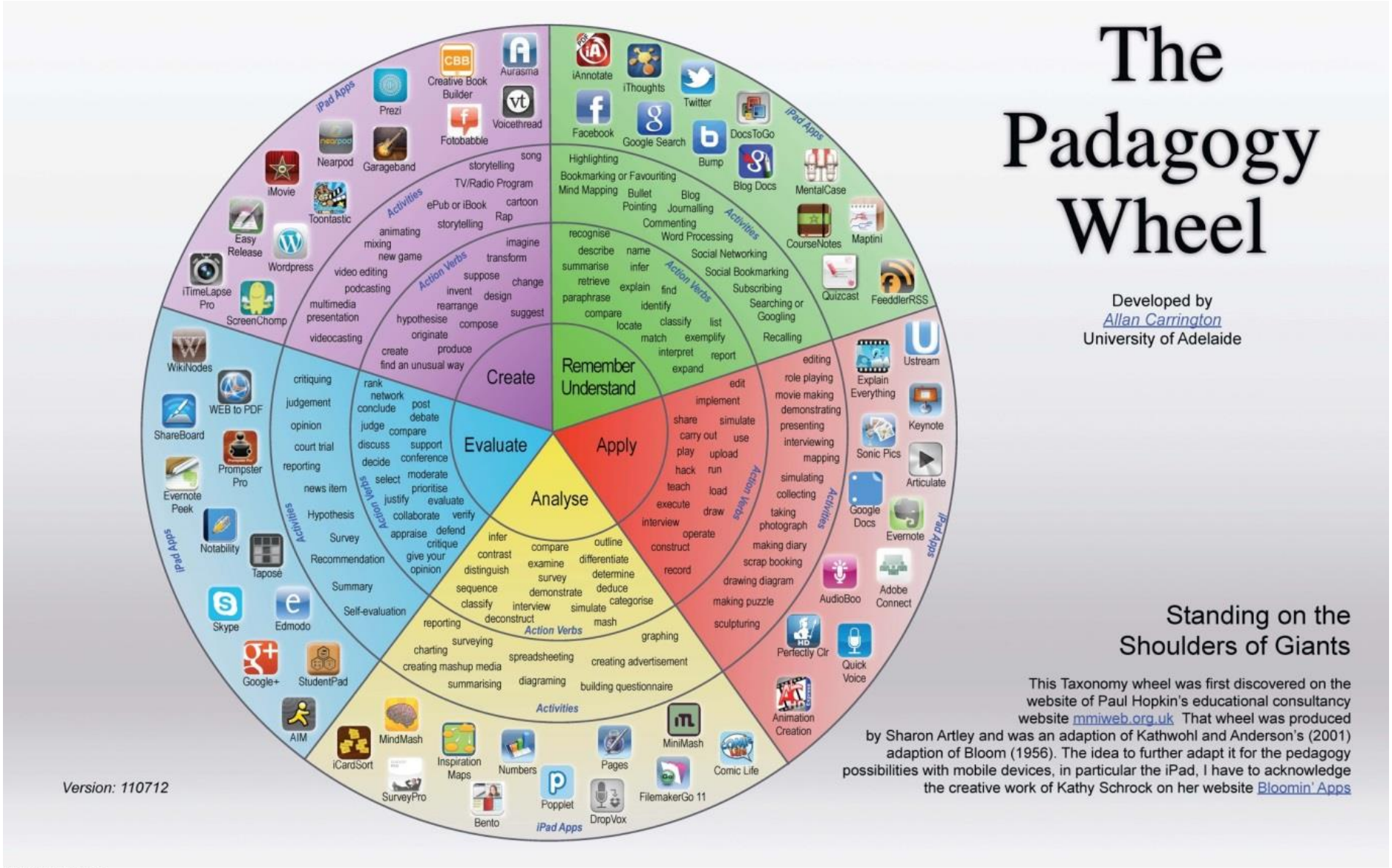
Contextual Teaching: What does the research say?

Edgar Dale's Cone of Experience

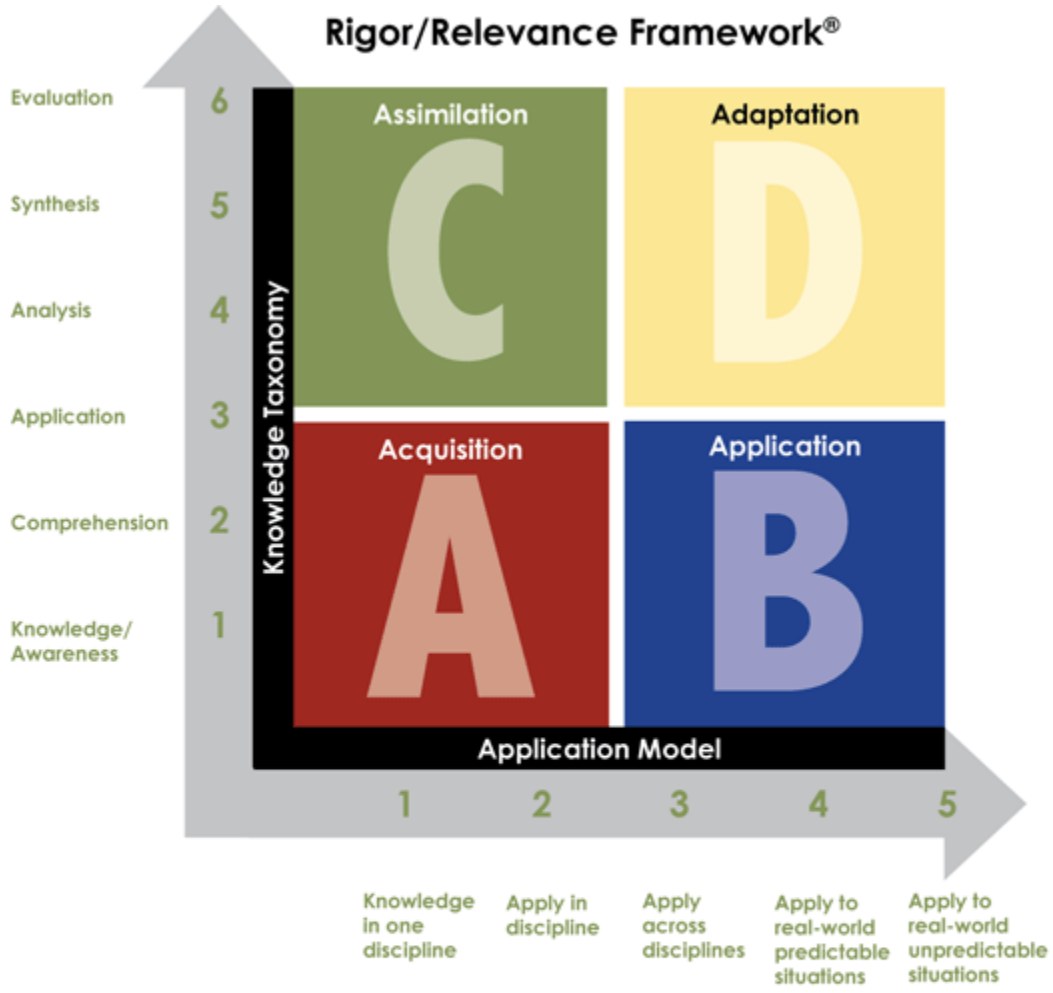


Graphic courtesy of Edward L. Counts, Jr.

Blooms Taxonomy in Technology (i-padagogy)



Rigor and Relevance Framework: http://www.leadered.com/rrr.html

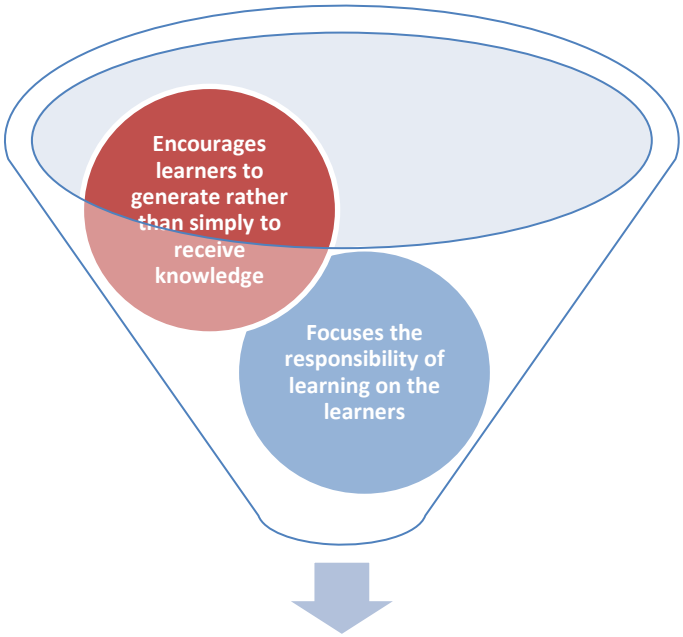


A	B	C	D
Students gather and store bits of knowledge and information. Students are primarily expected to remember or understand this knowledge.	Students use acquired knowledge to solve problems, design solutions, and complete work. The highest level of application is to apply knowledge to new and unpredictable situations.	Students extend and refine their acquired knowledge to be able to use that knowledge automatically and routinely to analyze and solve problems and create solutions.	Students have the competence to think in complex ways and to apply their knowledge and skills. Even when confronted with perplexing unknowns, students are able to use extensive knowledge and skill to create solutions and take action that further develops their skills and knowledge.

Webb's Depth of Knowledge

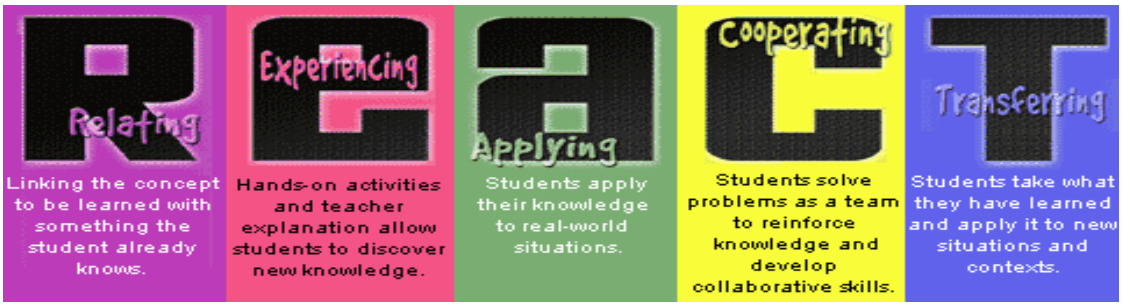
Recall	•Recall of a fact, information or procedure •Focus is on students to work with specific facts, definitions. •Items only require students to have a shallow understanding of text.
Skill/Concept	•Use information or conceptual knowledge, two or more steps, etc. •Students are required to apply skills and concepts. •They must comprehend and process portions of a text; main ideas are stressed.
Strategic Thinking	•Requires reasoning, developing a plan or sequence of steps, some complexity, more than one possible answer •Students are required to use complex and abstract thinking. •They are encouraged to go beyond the text—to explain, generalize and connect ideas.
Extended Thinking	•Requires an investigation, time to think and process multiple conditions of the problem •Students are required to use higher order thinking. •They are asked take material from one content area and apply it to another.


Level One
(Recall)
Level Two
(Skill/ Concept)
Level Three
(Strategic Thinking)
Level Four
(Extended Thinking)
Describe
Explain
Interpret
Draw
Identify
List
Define
Label
Memorize
Calculate
Illustrate
Who, What, When, Where, Why
Arrange
Measure
State
Name
Repeat
Tabulate
Report
Tell
Use
Recall
Quote
Recognize
Recite
Match
Design
Connect
Synthesize
Apply Concepts
Critique
Analyze
Create
Prove
Infer
Categorize
Collect and Display
Identify Patterns
Graph
Organize
Classify
Construct
Separate
Modify
Cause/Effect
Predict
Estimate
Interpret
Compare
Distinguish
Relate
Use Context Cues
Make Observations
Summarize
Show
Revise
Assess
Develop a Logical Argument
Apprise
Construct
Use Concepts to Solve Non-Routine Problems
Critique
Compare
Explain Phenomena in Terms of Concepts
Formulate
Investigate
Draw Conclusions
Hypothesize
Differentiate
Cite Evidence



Active Learning

The teacher role	
Traditional	***Contextual***
• Information provider • Source of all knowledge and answers • "Sage on the stage"	• Coach • Director • Empowers students • "Guide on the side"
The student role	
• Passive recipient of knowledge • Remain seated in desks • Generally not motivated to ask questions	• Discoverer and user of knowledge • Fits together the pieces of the puzzle • Eager to ask questions that lead to deeper understanding
Classroom methods	
• Rote learning • Skill drill • Memorization • "Practice makes perfect" • Multiple-choice tests	• Cooperative learning groups • Peer mentoring • Students gather data to solve problems • Alternative assessments • Hands-on, activity-based learning



Contextual learning: Sometimes described by theorists as "scientific constructivism," this contextual learning approach incorporates the five teaching strategies embodied in the R.E.A.C.T. acronym.

R.E.A.C.T. - Relating, Experiencing, Applying, Cooperating, and Transferring
RELATING: Learning in the context of life experience, or relating, is the kind of contextual learning that typically occurs with very young children. As children grow older, however, providing this meaningful context for learning becomes more difficult. The curriculum that attempts to place learning in the context of life experiences must, first, call the student's attention to everyday sights, events, and conditions. It must then relate those everyday situations to new information to be absorbed or a problem to be solved.
EXPERIENCING: Learning in the context of exploration, discovery, and invention—is the heart of contextual learning. However motivated or tuned-in students may become as a result of other instructional strategies such as video, narrative, or text-based activities, these remain relatively passive forms of learning. And learning appears to "take" far more quickly when students are able to manipulate equipment and materials and to do other forms of active research.
APPLYING: Applying concepts and information in a useful context often projects students into an imagined future (a possible career) or into an unfamiliar location (a workplace). In contextual learning courses, applications are often based on occupational activities. This happens most commonly through text, video, labs, and activities. Although, in many schools, these contextual learning experiences will be followed up with firsthand experiences such as plant tours, mentoring arrangements, and internships.
COOPERATING: Learning in the context of sharing, responding, and communicating with other learners—is a primary instructional strategy in contextual teaching. The experience of cooperating not only helps the majority of students learn the material; it also is consistent with the real-world focus of contextual teaching. Employers espouse that employees who can communicate effectively, who share information freely, and who can work comfortably in a team setting are highly valued in the workplace. We have ample reason, therefore, to encourage students to develop these cooperative skills while they are still in the classroom.
TRANSFERRING: Learning in the context of existing knowledge, or transferring, uses and builds upon what the student already knows. Such an approach is similar to relating, in that it calls upon the familiar. Most traditionally taught high school students, however, rarely have the luxury of avoiding new learning situations; they are confronted

with them every day. We can help them retain their sense of dignity and develop confidence if we make a point of building new learning experiences on what they already know.

Promising practices in contextual learning

Problem-Based Learning

Project-Based Learning

Service Learning

Cooperative Learning

Work-Based Learning

- ***Mentorship***

School-Based Enterprise

Integrated Academic & CTE

Small Learning Communities

Career Academies

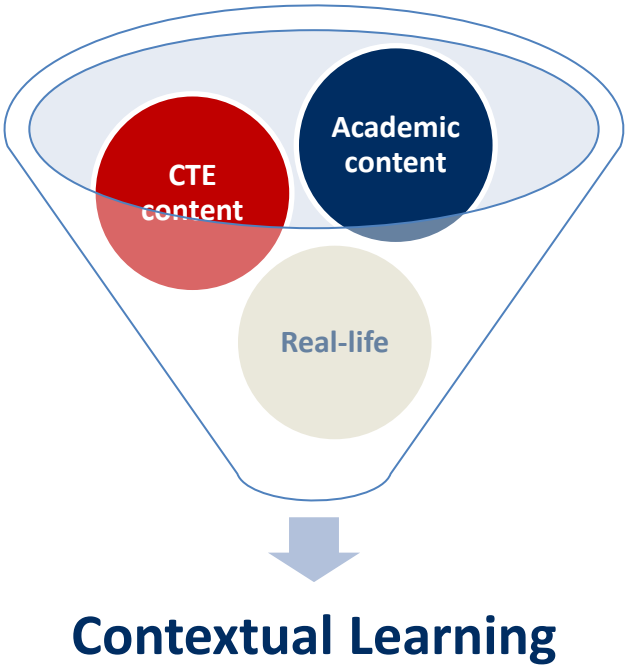
Academic and Career Technical Education integration as a model for ACP contextualized teaching

Models or structures for integration:

- CTE courses
- Academic courses
- Integrated/Hybrid/Blended courses
- Linked courses
- Clustered courses
    - Smaller learning communities
    - Career academies

Contextualizing components

- Identify and prioritize student learning objectives or competencies for academic subjects (math, science, social studies, English) and CTE courses
- Identify concepts that are difficult for students to master
- Look for overlap between academic and CTE objectives/competencies
    - Where can concepts from one course be reinforced in another course? (i.e., math applications in automotive technology taught in both math course and automotive course)
- Formulate a project idea and write a real-world scenario—often a problem—using the CTE content area as the context for integration



Real-world assignments

Identify how you can integrate one or more of these activities into your contextual lesson.

- Reading and writing technical material
- Conducting research
- Evaluating resources
- Creating and giving presentations
- Collecting, analyzing, and explaining data
- Troubleshooting and problem-solving
- Evaluating their own and peers' work
- Working collaboratively

Contextual learning reminders

Multiple Styles	•Remember multiple intelligences and multiple learning style preferences
Hands-On	•Combine hands-on and minds-on activities
Scaffolding	•Create mental scaffolding that helps concepts stick
Menu	•Allow students to select from a menu of options for gathering, organizing or expressing new knowledge

Authentic assessments

- Display of working model
- Completion and explanation of multi-step process
- Presentation/poster session
- Technical skills demonstration
- Website, video, or portfolio
- Written report or other product
- Case study analysis, discussion and debate

Creating a contextual lesson plan

Using the lesson plan brought with you today, contextualize it.

Lesson/Unit Title: *(create a fun and engaging title)*

Duration of lesson *(number of days or weeks):*

Career Technical course standards/objectives: *(identify the CTE standards to be met by completing this lesson)*

Academic standards/objectives: (identify the academic standards to be met by completing this lesson)

Employability/soft-skills standards/objectives: *(identify the employability standards to be met by completing this lesson)*

Business/industry and/or external partner connection: *(identify the business or community partner which will make the lesson relevant and meaningful)*

Outline/Narrate the real-life experience students will have to address *(using the business/community partner information and/or experiences, narrate the situation students will have to address)*

Resources: *(library, community leaders, journals, online, etc.) students should be exposed to during the investigation process*

Integrated technology: Using the Padogogy Wheel **on page 8** **and/or the list of suggested technology apps** **on Page 22** *(Identify the media, such as web 2.0 applications, video, audio, Skype, etc. provided to students during the lesson and what students are permitted to use.)*

Lesson extension: Story board how it looks visually *(if you have the skills and time, create a video of the situation instead of having it in text)*

Apply the contextual learning theories to your lesson:

R.E.A.C.T. Utilizing the R.E.A.C.T. model, apply the lesson in these areas:

Relate-*Example of real-world connection or discussion of preconceptions:*

Experience-*Activity or procedure for experiencing the skill or standard:*

Apply-*Activity or procedure for using the skill or standard:*

Cooperate-*How students will interact:*

Identify transfer of learning strategy -*wrap-up and new or unique situation application:*

Rigor: *using the three learning theories choose **one** to measure the rigor of the lesson*

Blooms Taxonomy *(identify the levels of thinking students are expected perform during the lesson)*

Webb's Depth of Knowledge

Rigor and Relevance Framework

Gardner's Multiple Intelligence(s): *(Identify how Howard Gardner's Multiple Intelligences will be fostered in this experience.)*

Special needs adaptation: *(Identify one disability (dyslexia, blind, hearing impaired, etc.) and how you will modify the lesson to accommodate the student)*

Assessment strategies: *(Determine how the student's will be assessed to the CTE, academic and employability/soft skills standards throughout and at the end of the lesson. Remember to use authentic assessments as outlined in the workshop)*

Evaluation method: *(Identify how the business/community partner will be engaged in the final evaluation of the contextual learning experience. Will they have the opportunity to hear presentations of outcomes, vote on the best solution, evaluate the results, etc.?)*

Pair Share and Notes: *Pair with a colleague and provide the peer with your newly developed lesson plan. Allow 10 - 15 minutes for independent review utilizing the chart below, then discuss how to enhance the student experience and outcomes.*

Grading a lesson: How contextual is it?

	"Emerging" lesson (minimal)	"World class" lesson (good)	Grade
RELATING	• Emphasizes facts, definitions, theorems, etc. previously taught • Recalls past info via print (textbook, handouts) • Little or no relation to real-life, or linkage to previously learned knowledge or experiences	• Reference to examples/activities familiar to students • Links new knowledge or problems to life experiences outside of classroom • Continuity of learning • Accomplishes this with multiple media (e.g., text, video, speech, activity, Internet)	
EXPERIENCING	• Students sitting in desks; Teacher-centered • Memorizing new facts • Reading, copying, working problems from a book • Students asked to imagine doing something • Lots of lecture/effort to engage students in discussion • Students expected to listen and learn • "Activity" limited to paper/pencil handouts	• Students out of desks; Student-centered • Practice new facts in a tangible way • Following a suggested procedure • Guided/unguided discovery • Modeling a real-world process • Students manipulating hands-on supplies; equipment • Students ownership of data (often by measurement) • Opportunities to construct knowledge	
APPLYING	• Primarily "skill drill"; repetitive practice • Single-step problems • Does not include units of measure (where applicable) • Problems solved have little or no practical use (in eyes of students)	• Connected to situations outside the classroom • Makes decisions with real-world problems • Confronts real-life situations, often includes need for deriving data (multi-step problems) • Involves precision, driven by nature of the problem and measurement • Often encounters real-world obstacles/non-integer results • Often linked to occupational problems (terminology, illustrations, video, etc.) • Includes units of measure	
COOPERATTING	• Individual work; no cheating! • No talking! Everybody keep quiet! • Emphasis on individual work • Expects passive learning • Grade is dependent on student's own work • Strong students expected to do well; weak students will not do well • No opportunity for sharing of ideas • Students report to teacher	• Students work/perform in teams/groups, and share/report results to class (not teacher) • Encourages stronger students to assist weaker • Division of labor (assigned roles/tasks) • Individual responsibility/accountability • Acknowledges teamwork • Encourages decision-making skills • Acknowledges diversity of students • Sharing of resources/information freely • Teacher is roaming facilitator • Grade is given to group	

	"Emerging" lesson (minimal)	"World class" lesson (good)	Grade
TRANSFERRING	• Students learn present topic only • "Challenges" are just more difficult problems • Stays focused on the subject matter at hand • Students not encouraged to think about other subjects or application areas • Practices many problems of the same kind • No effort to transfer present concept beyond the subject being taught	• Challenges students with more "wide-open" thinking • Bridges to new subject matter/areas • Encourages "what-if" thinking • Uses knowledge in a new situation • Proposes "parallel" thinking • Pushes students to begin thinking about the next topic	

Teaching technology

Games, simulations and technology tools can help any educator motivate and engage learners. Here are a few popular tools:

- Edmodo – allows you to ask questions, share information/experiences/ideas, collaborate, comment on the material/presenter/posts, increases communication between teachers, students, and/or between students and the teacher.
- Socrative – allows assessments, polls, and communication
- Woices – hear native languages, historical tours, cultural differences, etc.
- Wordle & tagxedo – create art with words
- Blabberize – put dialog with any picture
- Glogster & eduglogster – create interactive posters
- Toondoo, toontastic, toon camera – help create cartoons
- Second Life – an interactive virtual world
- Scratch – anyone can easily create a simple game
- Scribble Press – create and share stories by turning them into online books
- MadPad – Remix sounds to create music
- QR code readers & creators – use codes for quick links, audio or video files, pictures or diagrams
- History Pin – combines photography of locations from past and current pictures
- Twitter & Twiducate – can be used for communicating between teachers, students, and students & teachers
- World of Warcraft – a popular game that has its own economics, politics, and critical thinking/problem-solving within groups
- Scavenger Hunt – create your own campus-wide or off-campus scavenger hunt
- Weebly – easily create your website
- Symbaloo – easily create your own social bookmarking website
- Remind 101 – keep in touch with students (and/or parents) using a one-way texting and/or email system without giving up privacy of sharing personal phone numbers and email addresses

Appendix: Examples

Lesson or unit planning with the Multiple Intelligence Theory Example

Lesson/Unit Planning with the Multiple Intelligences: Photosynthesis	
Lesson/Unit Title:	Photosynthesis: Converting sunlight to food
Lesson/Unit Objective(s):	To learn the process of photosynthesis through seven modes
Anticipated Learner Outcome(s):	Students will be able to explain the process of photosynthesis and relate the concept of transformation and change to their own lives.
Environmental Consideration:	Posters of the process displayed, music from William Aura's Lovely Day album
Learning Activities	
• Linguistic	Read textbook section describing photosynthesis and appropriate vocabulary
• Visual/spatial:	With watercolors, markers, etc., illustrate the process of photosynthesis
• Musical:	Compose an original song with lyrics about photosynthesis and change. Play background music
• Mathematical/logical:	Create a timeline of the steps of photosynthesis
• Bodily/kinesthetic	Role play the "characters" involved and the process of photosynthesis
• Interpersonal:	In small groups, discuss the transformative role of chloroplasts and draw parallels to student lives
• Intrapersonal	Write a journal entry that reflects on a personally transformative experience
• Naturalist:	Conduct a lab activity related to photosynthesis activities in different types of plants. Either cover parts of leaves with foil to get light patterns because of reduced chloroplasts or do the starch test: http://www.ehow.com/info_8458993_photosynthesis-experiments-using-geranium-plants.html
Lesson/Unit Sequence:	1. Linguistic activity 2. Mathematical/logical activity 3. Bodily/Kinesthetic activity 4. Visual/Spatial activity 5. Musical Activity 6. Interpersonal activity
Assessment Procedure Examples:	1. Grade mathematical timeline and/or painting 2. Peer evaluation of role plays and/or songs
Materials/Resources Needed:	1. Textbooks 2. Art supplies 3. Student journals 4. Radio/CD player

Webb's Depth of Knowledge Directions: Identify Webb's Depth of Knowledge levels (1 – 4) for each classroom activity.

Activity:	Answer
Describe the physical features of a place	
Specify a problem, identify solution paths, solve the problem, and report the results	
Explain cause-effect of historical events	
Analyze or evaluate the effectiveness of literary elements (plot, setting, conflict, point-of view…)	
Identify and summarize the major events, problem, solution, conflicts in a literary text	
Locate or recall facts found in text	
Solve multi-step problem and provide support with a mathematical explanation that justifies the answer	
Gather, analyze, organize and interpret data from multiple (print and non-print sources) to draft a reasoned report	
Analyze and explain multiple perspectives or issues within or across time periods or events	
Compare desert and tropical areas	
Determine the area of a triangle given a drawing or labels	
Classify plane and three dimensional figures	

Online Resources for Contextual Learning

Gardner's Multiple Intelligences
http://www.pbs.org/wnet/gperf/education/ed_mi_overview.html

Blooms Taxonomy
http://www.youtube.com/watch?v=Qfp3x_qx5IM

Teaching and Learning
http://www.youtube.com/watch?v=YiuPS_p80u4

Project Based Learning
Buck Institute for Education
http://www.youtube.com/watch?v=LMCZvGesRz8&playnext=1&list=PL118674E2DAC984A0
http://www.bie.org/
Resource: Teaching

Edutopia - George Lucas Education Foundation http://www.edutopia.org/project-based-learning
Edutopia – What is Project Based Learning http://www.edutopia.org/project-based-learning-introduction-video

Webb's Depth of Knowledge
PowerPoint video http://www.youtube.com/watch?v=j3RnPUlIV20
Comparison between Bloom's Taxonomy and Webb's Depth of Knowledge
http://www.paffa.state.pa.us/PAAE/Curriculum%20Files/7.%20DOK%20Compared%20with%20Blooms%20Taxonomy.pdf

Problem Based Learning
Making Learning Real www.makinglearningreal.org
Apple: Challenge Based Learning

Service Learning
http://www.servicelearning.org/what-service-learning
http://www.learnandserve.gov/
http://www.servicelearning.org/slice/index.php

Work-based Learning
National Academy Foundation (Internships) http://naf.org/internship-information

Self-Directed Learning
http://selfdirectedlearning.com/teaching-self-directed-learning-tools.html
http://www.selfdirectedlearning.org/sdl-definition-rationale-background-2

Flip Classroom/Team-Based Learning http://flippedlearning.org
K-12 Perspective http://www.knewton.com/flipped-classroom/
Postsecondary Perspective http://www.flippedclassroom.com/
What it is: http://www.good.is/posts/good-video-can-virtual-lectures-improve-student-success
https://flippedlearning.eduvision.tv/Default.aspx?q=X3Y5NcZVhaDSRoIb0AEJRg%253d%253d#.UOsB2wzj4Jo.email
Postsecondary Example: Duke http://cit.duke.edu/flipping-the-classroom/
What Flipped Classroom is and is not http://www.thedailyriff.com/articles/the-flipped-class-conversation-689.php
Article: 7 Things you should know about Flipped Classroom http://net.educause.edu/ir/library/pdf/ELI7081.pdf
Story Board That http://www.storyboardthat.com