SECTION 18

Resources: Inclusive Education, Sensory and Universal Design for Learning (UDL)
Resources: Inclusive Education

1. Family and Community Resource Center – Resources on Inclusive Education in the Center: http://www.ssdmo.org/cool_tools/fcrc.html

2. Inclusion Matters! – working document by the staff of Special School District of St. Louis County to serve as a tool to help educators and parents plan and implement inclusive education for students with disabilities: http://www.ssdmo.org/cool_tools/inclusive.html


4. SSD Positive Behavioral Interventions and Supports (PBIS) – http://pbiscompendium.ssd.k12.mo.us/contact
   The SSD Positive Behavioral Interventions and Support Team partners with district and school teams in developing, implementing, and sustaining a culturally relevant multi-tiered model of prevention and intervention for the academic, behavioral and social-emotional success of all students and their families
   
   **Area Coordinator:** Trish Diebold - tadiebold@ssdmo.org

5. SSD Technical Assistance Teams (TATS) –
   **Area Coordinators:**
   - Tina Maksche - tmaksche@ssdmo.org
   - Tina Payne - tapayne@ssdmo.org
   - Trish Diebold - tadiebold@ssdmo.org

6. Parent Education and Diversity Awareness: The Parent Education & Diversity Awareness program champions meaningful inclusion & family engagement through supporting and working with everyone who touches the student's life.
   
   **Administrators:** Michelle Levi Perez – mleviperez@ssdmo.org
   - Debra Fiasco – dmfiasco@ssdmo.org
   - Pam Russell – jnoll@ssdmo.org

7. SSD Parent Education workshops
   https://www.ssdmo.org/cool_tools/workshops.html
   314-989-8108
Resources: Inclusive Education

National Websites on Inclusive Education

CAST: produces educational research and works to promote and expand learning opportunities through Universal Design for Learning. http://www.cast.org/


Inclusive Schools Network: a web-based educational resource for families, schools and communities that promotes inclusive educational practices. http://inclusiveschools.org/

The IRIS Center: works nationally to provide resources for educators and professional development providers about students with disabilities. http://iris.peabody.vanderbilt.edu/


Maryland Coalition for Inclusive Education: a nonprofit organization dedicated to the inclusion of students with disabilities in their neighborhood schools. http://www.mcie.org/

The National Center on Universal Design for Learning: works to cultivate and enhance the field of UDL. http://www.udlcenter.org/


Paula Kluth: works with educators and schools to create and promote inclusive schooling through environments, lessons, and experiences that are inclusive, respectful, and accessible for all learners. http://www.paulakluth.com/

Peak Parent Center: provides services to families and professionals to help all people with disabilities live rich, active lives participating as full members of their schools and communities. http://www.peakparent.org

Swift is a national K-8 center that provides academic and behavioral support to promote the learning and academic achievement of all students, including those with the most extensive needs. http://www.swiftschools.org/

TASH: advocates for the full inclusion of individuals with disabilities through research, professional development, and policy. It provides information and resources for parents, families and self-advocates. http://tash.org/
## Resources: Sensory

**FOR READING**
- Place child in a corner.
- Allow child to read in a comfortable position.
- Provide visual aids and oral instructions.
- Use tactile books.
- Use audio books.
- Use pictures to help understand text.
- Use a magnifying glass.
- Use a lighted magnifying glass.
- Use a video magnifier.
- Use a talking book.
- Use a Braille book.
- Use a Braille display.
- Use a Braille embosser.
- Use a Braille transcriber.
- Use a Braille writer.
- Use a Braille keyboard.
- Use a Braille Brailler.
- Use a Braille printer.
- Use a Braille typewriter.
- Use a Braille reader.
- Use a Braille alphabet.
- Use a Braille code.
- Use a Braille dictionary.
- Use a Braille thesaurus.
- Use a Braille encyclopedia.
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Sensory Diet

Calming Activities:
A. body sock with bean bag chair
B. weighted blanket
C. listen to music
D. ______________
E. ______________
F. ______________

Focusing Activities:
G. brain gym/ cross crawls
H. carry heavy weight
I. chair push-ups
J. exercise bands
K. rocker board
L. ______________

Arousing Activities:
M. ______________
N. ______________
O. ______________
P. ______________
Q. ______________
R. ______________

Strategies utilized (use letter codes above)
Engine Speed After- use an up, To denote higher engine speed and a down, to denote calmer or lower engine speed.

<table>
<thead>
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<th>Time</th>
<th>Circle current engine speed</th>
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<td></td>
<td>high=H, low= L just right= JR</td>
</tr>
<tr>
<td>Arrival</td>
<td>M</td>
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<tr>
<td>H</td>
<td>L</td>
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Adapted from Hardin, J., Smith, M. & Wooster, D. by Pemberton, K. 2007

For additional information on Sensory, please visit the Inclusive Education page on the SSD website.

224. Inclusion Matters!
Resources: Universal Design For Learning (UDL)

Universal Design for Learning (UDL) is a set of principles for curriculum development that allows everyone equal opportunities to learn.

UDL provides multiple means of:

- representation
- action and expression
- engagement

For further information please see the following websites:

http://www.cast.org/udl/
http://www.udlcenter.org/aboutudl/whatisudl
http://lessonbuilder.cast.org/

Everyone Can Learn through Universal Design for Learning (UDL)

Universal Design involves the widest range of people’s abilities, to the greatest extent possible.

Universal Design for Learning (UDL) is the design of instruction for all student use, without need for adaptation or specialized design. Teachers designing UDL classrooms should consider products and environments with a variety of characteristics that enhance all students’ learning. UDL promotes a strong, yet flexible, foundation to meet a broader range of diverse abilities, disabilities, ethnicities, language skills and learning styles.

The Center for Applied Special Technology (CAST) develops innovative technology based on the principles of UDL. CAST’s web site offers a variety of information, products and resources including: Curriculum Self-Check, Lesson Builder and Book Builder. Teachers can access Lesson Builder to create and adapt lesson plans that increase all students’ access and participation. To help develop reading skills, CAST offers Book Builder which offers tools to create, read and share digital books. The universally designed digital books engage and support diverse students according to their individual needs, interests and skills. For more information, visit their web site at www.cast.org

See more at: http://www.cedwvu.org/publications/everyonecanlearn/udl.php#sthash.ei9WsO2f.dpuf
WHAT IS UNIVERSAL DESIGN FOR LEARNING?

Universal Design for Learning (UDL) is a set of principles to develop learning environments that give all individuals equal opportunities to learn.

UDL proposes not a single, one-size-fits-all solution but rather a set of flexible scaffolds and supports that can meet individual needs. Individual learners are very different from one another and may require different methods and means to reach a common goal. These differences—both seen and unseen—may be shaped by brain development, learned and innate skills, cultural and social experience, and a host of other factors.

The UDL framework encourages creating flexible designs from the start that have customizable options, which allow all learners to progress in the curriculum. The options for accomplishing this are varied and robust enough to provide effective instruction to all learners.

FRAMEWORK AND PRINCIPLES

Affective Networks
The “why” of learning

How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.

- Stimulate interest and motivation for learning
- Provide Multiple Means of Engagement

Strategic Networks
The “how” of learning

Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.

- Differentiate the ways students can express what they know
- Provide Multiple Means of Action & Expression

Recognition Networks
The “what” of learning

How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author’s style are recognition tasks.

- Present information and content in different ways
- Provide Multiple Means of Representation

http://www.cast.org
What is Universal Design for Learning?
Universal Design for Learning (UDL) is a framework that provides ALL students equal opportunities to learn. It encourages teachers to design flexible curricula that meet the needs of all learners. Using UDL principles in general education classrooms makes curriculum and instruction accessible and engaging. Curriculum barriers are reduced; learning is supported; students gain knowledge, skills, and enthusiasm for learning; and their learning is validly assessed.

What are the benefits of UDL?
Students come to the classroom with a variety of needs, skills, talents, interests and experiences. For many learners, typical curricula are littered with barriers and roadblocks, while offering little support. UDL turns this scenario around by encouraging the design of flexible, supportive curricula that are responsive to individual student variability.

UDL improves educational outcomes for ALL students by ensuring meaningful access to the curriculum within an inclusive learning environment. In addition, UDL complements existing school reform initiatives, such as Response to Intervention (RTI) and Understanding by Design (UbD).

What are the principles of UDL?
- Provide multiple means of representation to give students various ways of acquiring, processing, and integrating information and knowledge.
- Provide multiple means of action and expression to provide students with options for navigating and demonstrating learning.
- Provide multiple means of engagement to tap individual learners’ interests, challenge them appropriately, and motivate them to learn.

Using the three principles of UDL, teachers can create goals that promote high expectations for all learners, use flexible methods and materials, and accurately assess student progress.

What is being done to promote the implementation of UDL?
The National UDL Task Force works to incorporate the principles of UDL into federal policy and practice initiatives. Recommendations of the Task Force on teacher and faculty preparation to use UDL strategies were incorporated into the recently passed Higher Education Opportunity Act. Recommendations have been made for the reauthorization of ESEA (NCLB) and will also be made for IDEA. In addition, the Task Force seeks increased dissemination of information about UDL by the U.S. Department of Education and other federal agencies. See the UDL Toolkit at www.osepideasthatwork.org/udl/.

The National UDL Task Force is comprised of more than forty education and disability organizations. A complete list can be found at www.udlcenter.org/aboutudlcenter/partnerships/taskforce.
Q&A for Common Core Standards

Is UDL included in the common core?
UDL is included in the section of the Common Core Standards called “application to students with disabilities”. In this section the authors referred to the definition laid out in the Higher Education Opportunity Act of 2008 (PL 110-135). The reference to UDL in this section may give the impression that UDL is just for students with disabilities. However, UDL not only applies to students with disabilities, it applies to all other learners as well. All students can benefit from the types of instruction used to reach learners “on the margins,” as the learning needs of all individuals vary a great deal. As such, UDL should be used within inclusive general education classrooms.

Although this is the only specific mention of UDL, there are many concepts embedded throughout the Common Core Standards that are aligned with the UDL framework.

What aligns with UDL?
There are many ways in which the Common Core Standards align with the UDL framework. Curricula (goals, methods, materials, and assessments) designed using UDL put an emphasis on creating effective, flexible goals, and the Common Core Standards provide an important framework for thinking about what goals will be most effective.

UDL emphasizes that an effective goal must be flexible enough to allow learners multiple ways to successfully meet it. To do this, the standard must not embed the means (the how) with the goal (the what). What do we mean by this? One good example is from the Mathematics standards: “apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.” (Common Core State Standards for Mathematics, Grade 7, The Number System, 7.NS, item 2, p.48) This standard is flexible enough that all learners can meet this goal because it does not specify how it must be done.

What might not align with UDL?
Unfortunately there are also areas of the Common Core Standards that do not align with UDL, or would not be very good goals for a UDL curriculum unless certain terms (e.g. writing, listening, speaking and explaining) are interpreted in their broadest sense to make the standards flexible enough to remove barriers for certain students. Previously we mentioned that the teachers should not confuse the means and the goals. There are certain standards that do just that.

For example: “Tell and write time in hours and half-hours using analog and digital clocks” (Common Core State Standards for Mathematics, Grade 1, Measurement and Data, 1.MD, item 3, p.16). The problem with this standard is that it requires students to write time. This presents some learners with a barrier because the act of writing is difficult for them. In this case, “express” would be more appropriate than “write”, as it allows flexibility and avoids confounding the expectation with tasks that are superfluous to the actual goal. Or, the standard would align with UDL if “write” were interpreted to permit other forms of expression.

Where can I find more information?
Please visit our website at www.udl4allstudents.com or contact Ricki Sabia at rsabia@ndss.org.

The National Center for Universal Design for Learning also contains information about UDL, resources for UDL implementation, and research. It also includes a community section.
Section 18 – Resources: Inclusive Education, Sensory and Universal Design for Learning (UDL)

3: Provide options for comprehension
3.1 Activate or supply background knowledge
3.2 Highlight patterns, critical features, big ideas, and relationships
3.3 Guide information processing, visualization, and manipulation
3.4 Maximize transfer and generalization

9: Provide options for self-regulation
9.1 Promote expectations and beliefs that optimize motivation
9.2 Facilitate personal coping skills and strategies
9.3 Develop self-assessment and reflection
9.4 Provide options for self-regulation

6: Provide options for executive functions
6.1 Guide appropriate goal-setting
6.2 Support planning and strategy development
6.3 Facilitate managing information and resources
6.4 Enhance capacity for monitoring progress

Universal Design for Learning Guidelines

I. Provide Multiple Means of Representation
1: Provide options for perception
1.1 Offer ways of customizing the display of information
1.2 Offer alternatives for auditory information
1.3 Offer alternatives for visual information

2: Provide options for language, mathematical expressions, and symbols
2.1 Clarify vocabulary and symbols
2.2 Clarify syntax and structure
2.3 Support decoding of text, mathematical notation, and symbols
2.4 Promote understanding across languages
2.5 Illustrate through multiple media

3: Provide options for perception
3.1 Activate or supply background knowledge
3.2 Highlight patterns, critical features, big ideas, and relationships
3.3 Actively or simply develop knowledge

4: Provide options for physical action
4.1 Vary the methods for response and navigation
4.2 Optimize access to tools and assistive technologies

5: Provide options for expression and communication
5.1 Use multiple media for communication
5.2 Use multiple tools for construction and composition
5.3 Build fluencies with graduated levels of support for writing
5.4 Enhance capacity for monitoring progress

6: Provide options for executive functions
6.1 Guide appropriate goal-setting
6.2 Support planning and strategy development
6.3 Facilitate managing information and resources
6.4 Enhance capacity for monitoring progress

7: Provide options for recruiting interest
7.1 Optimize individual choice and autonomy
7.2 Optimize access to tools and assistive technologies
7.3 Minimize threats and distractions

8: Enhance capacity for monitoring progress
8.1 Develop self-assessment and reflection
8.2 Provide options for self-regulation
8.3 Enhance capacity for monitoring progress

9: Provide options for self-regulation
9.1 Promote expectations and beliefs that optimize motivation
9.2 Facilitate personal coping skills and strategies
9.3 Develop self-assessment and reflection
9.4 Provide options for self-regulation

10: Provide options for perception
10.1 Optimize access to tools and assistive technologies
10.2 Offer features for managing information and resources
10.3 Offer ways of customizing the display of information
10.4 Enhance capacity for monitoring progress

Resourceful, knowledgeable learners
Strategic, goal-directed learners
Purposeful, motivated learners

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Universal Design for Learning for Learning Guidelines
### I. Provide Multiple Means of Representation

- **Examples:**
  - Make text available in a variety of formats: e-Text reader, audio, MS PowerPoint.
  - Offer a variety of media to access information using, for example, ToonDoo, Animoto, Xtranormal, Voicethread, blogs, and wikis.
  - Embedding diagrams, productions, creating charts, graphs and illustrations.
  - Other examples: audio recording.

- **Additional examples:**
  - Providing project-based learning opportunities to provide opportunities for problem-solving and to help guide effective goal-setting.
  - Support diverse learners by providing alternative tools, resources and media for teaching and learning.
  - Guide students to understand personal learning needs so they can make good choices of tools, technology, and learning environments and topic.
  - Encourage and authentically the learning experience to provide alternatives to provide opportunities for effective goal-setting.

### II. Provide Multiple Means of Action & Expression

- **Examples:**
  - Provide a “technology toolkit” on a class wiki with reviews of available tools and resources.
  - Offer choices of tools, technology, medium, work environments and topic.
  - Implement project-based learning opportunities to provide options for individual choice and enhance the relevance and authenticity of the learning experience.

- **Additional examples:**
  - Tools like blogs, boards, manipulatives, Smartboards, podcasts, audio.
  - Present learners with choices of tools, technology, medium, work environments and topic.
  - Implement project-based learning to provide opportunities for problem-solving and to help guide effective goal-setting.

### III. Provide Multiple Means of Engagement

- **Examples:**
  - Provide a variety of choices for participation, for example, standing during a lesson.
  - Provide opportunities for independent practice.

- **Additional examples:**
  - Provide a variety of choices for participation, for example, standing during a lesson.
  - Present learners with choices of tools, technology, medium, work environments and topic.
  - Guide students to understand personal learning needs so they can make good choices of tools, technology, and learning environments and topic.
  - Encourage and authentically the learning experience to provide alternatives to provide opportunities for effective goal-setting.
As a framework, UDL requires educators to think proactively about the variability of all learners. In consideration of the UDL Critical Elements, educators implementing UDL should use a backwards design instructional process that incorporates the following five steps.

### Step 1: Establish Clear Outcomes
Establish a clear understanding of the goal(s) of the lesson (or unit) and specific learner outcomes relate to:

- The desired outcomes and essential student understandings and performance for every learner. (What will learning look like? What will students be able to do or demonstrate?)
- The desired big ideas and their alignment to the established standards within the program of study that learners should understand.
- The potential misunderstandings, misconceptions, and areas where learners may meet barriers to learning.
- How will goals be clearly communicated to the learners, in ways that are understandable to all learners.

### Step 2: Anticipate Learner Variability
Prior to planning the instructional experience teachers should have a clear understanding of the barriers associated with the curriculum as it related to learner variability within their environment. Understandings should minimally include:

- Curriculum barriers (e.g., physical, social, cultural, or ability-level) that could limit the accessibility to instruction and instructional materials.
- Learner strengths and weaknesses specific to lesson/unit goals.
- Learner background knowledge for scaffolding new learning.
- Learner preferences for representation, expression, and engagement.
- Learner language preferences.
- Cultural relevance and understanding.

### Step 3: Measurable Outcomes and Assessment Plan
Prior to planning the instructional experience, establish how learning is going to be measured. Considerations should include:

- Previously established lesson goals and learner needs.
- Embedding checkpoints to ensure all learners are successfully meeting their desired outcomes.
- Providing learners multiple ways and options to authentically engage in the process, take action, and demonstrate understanding.
- Supporting higher-order skills and encouraging a deeper connection with the content.
Step 4: Instructional Experience
Establish the instructional sequence of events. At minimal plans should include:

- Intentional and proactive ways to address the established goals, learner variability, and the assessment plan.
- Establish a plan for how instructional materials and strategies will be used to overcome barriers and support learner understanding.
- A plan that ensures high-expectations for all learners and that the needs of the learners in the margins (i.e., struggling and advanced), anticipating that a broader range of learners will benefit.
- Integrate an assessment plan to provide necessary data.

Considerations should be made for how to support multiple means of:

- **Engagement**: A variety of methods are used to engage students (e.g., provide choice, address student interest) and promote their ability to monitor their own learning (e.g., goal setting, self-assessment, and reflection)
- **Representation**: Teacher purposefully uses a variety of strategies, instructional tools, and methods to present information and content to anticipate student needs and preferences
- **Expression & Action**: Student uses a variety of strategies, instructional tools, and methods to demonstrate new understandings.

Step 5: Reflection and New Understandings
Establish checkpoints for teacher reflection and new understandings.

Considerations should include:

- Whether the learners obtained the big ideas and obtained the desired outcomes. (What data support your inference?)
- What instructional strategies worked well? How can instructional strategies be improved?
- What tools worked well? How could the use of tools be improved?
- What strategies and tools provided for multiple means of representation, action/expression, and engagement?
- What additional tools would have been beneficial to have access to and why?
- Overall, how might you improve this lesson?