Universal Design for Learning (UDL)

Exploring Universal Design for Learning (UDL): The UDL Guidelines and the Learning Environment
Session Goals for Participants:

- Gain insight on the UDL Framework within BCSC
- Understand the UDL Guidelines and Principles
- Gather knowledge related to evaluating barriers within the learning environment
We know the only thing universal... is variability.
Disability is Contextual

“Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.”

-Albert Einstein
Key Connection

“Don’t try to fix the students, fix ourselves first. The good teacher makes the poor student good and the good student superior. When our students fail, we, as teachers, too, have failed.”

Marva Collins

BCSC believes Universal Design for Learning, Positive Behavior Instructional Strategies & Instructional Consultation Teams create the platforms, framework and resources for teachers evaluate themselves, their instructional practices and their learning environment.
How does BCSC address:

12,000 +/- Students
Speaking 51 Languages
Students with Disabilities: 13.9%
Economically Disadvantaged: 50%
Minority: 16%
English Language Learners: 11%
The Premise for UDL...

CLEARING A PATH
FOR PEOPLE WITH SPECIAL NEEDS
CLEAR THE PATH FOR EVERYONE!
“What is UDL?”

“What” do I know about UDL?

“How” did I learn it?

**UDL tip**: This exercise activates background knowledge and recruits interest.
3 Networks = 3 UDL Principles

Recognition Networks
The "what" of learning

Strategic Networks
The "how" of learning

Affective Networks
The "why" 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.

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

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

Present information and content in different ways

Differentiate the ways that students can express what they know

Stimulate interest and motivation for learning

More ways to provide Multiple Means of Representation

More ways to provide Multiple Means of Action and Expression

More ways to provide Multiple Means of Engagement

UDL tip: This graphic offers information in text, visuals, & color.
Universal Design for Learning (UDL)

UDL Principles: Theory to Application

- Multiple Means of Representation (Recognition)
  - *The WHAT of learning?*

- Multiple Means of Action *and* Expression (Strategic)
  - *The HOW of learning?*

- Multiple Means of Engagement (Affective)
  - *The WHY of learning?*
UDL tip: This video offers information in another medium.

http://www.youtube.com/watch?v=bDvKnY0g6e4
Universal Design for Learning Guidelines

<table>
<thead>
<tr>
<th>I. Provide Multiple Means of Representation</th>
<th>II. Provide Multiple Means of Action and Expression</th>
<th>III. Provide Multiple Means of Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Provide options for perception</td>
<td>4: Provide options for physical action</td>
<td>7: Provide options for recruiting interest</td>
</tr>
<tr>
<td>1.1 Offer ways of customizing the display of information</td>
<td>4.1 Vary the methods for response and navigation</td>
<td>7.1 Optimize individual choice and autonomy</td>
</tr>
<tr>
<td>1.2 Offer alternatives for auditory information</td>
<td>4.2 Optimize access to tools and assistive technologies</td>
<td>7.2 Optimize relevance, value, and authenticity</td>
</tr>
<tr>
<td>1.3 Offer alternatives for visual information</td>
<td>4.3 Ensure that information is presented in multiple modalities</td>
<td>7.3 Minimize threats and distractions</td>
</tr>
<tr>
<td>2: Provide options for language, mathematical expressions, and symbols</td>
<td>5: Provide options for expression and communication</td>
<td>8: Provide options for sustaining effort and persistence</td>
</tr>
<tr>
<td>2.1 Clarify vocabulary and symbols</td>
<td>5.1 Use multiple media for communication</td>
<td>8.1 Heighten salience of goals and objectives</td>
</tr>
<tr>
<td>2.2 Clarify syntax and structure</td>
<td>5.2 Use multiple tools for construction and composition</td>
<td>8.2 Vary demands and resources to optimize challenge</td>
</tr>
<tr>
<td>2.3 Support decoding of text, mathematical notation, and symbols</td>
<td>5.3 Build fluencies with graduated levels of support for practice and performance</td>
<td>8.3 Foster collaboration and community</td>
</tr>
<tr>
<td>2.4 Promote understanding across languages</td>
<td>5.4 Use multimedia to support learning</td>
<td>8.4 Increase mastery-oriented feedback</td>
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<tr>
<td>2.5 Illustrate through multiple media</td>
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<tr>
<td>3.1 Activate or supply background knowledge</td>
<td>6.1 Guide appropriate goal-setting</td>
<td>9.1 Promote expectations and beliefs that optimize motivation</td>
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<tr>
<td>3.2 Highlight patterns, critical features, big ideas, and relationships</td>
<td>6.2 Support planning and strategy development</td>
<td>9.2 Facilitate personal coping skills and strategies</td>
</tr>
<tr>
<td>3.3 Guide information processing, visualization, and manipulation</td>
<td>6.3 Facilitate managing information and resources</td>
<td>9.3 Develop self-assessment and reflection</td>
</tr>
<tr>
<td>3.4 Maximize transfer and generalization</td>
<td>6.4 Enhance capacity for monitoring progress</td>
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Resourceful, knowledgeable learners

Strategic, goal-directed learners

Purposeful, motivated learners

http://www.udlcenter.org/sites/udlcenter.org/files/updateguidelines2_0.pdf
# Universal Design for Learning

**GOAL:** ________________________________________________________________

<table>
<thead>
<tr>
<th>REPRESENTATION</th>
<th>ACTION/EXPRESSION</th>
<th>ENGAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td><strong>Output</strong></td>
<td><strong>Connection</strong></td>
</tr>
<tr>
<td>The “What?” of learning</td>
<td>The “How?” of learning</td>
<td>The “Why?” of learning</td>
</tr>
<tr>
<td>Options to see, hear and perceive information:</td>
<td>Options to do, move and interact:</td>
<td>Options to care, value and find relevance:</td>
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<tr>
<td>Options to decode language, math, symbols:</td>
<td>Options to differentiate expression of knowledge:</td>
<td>Options to vary challenge and/or support:</td>
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<tr>
<td>Options to make sense and understand knowledge:</td>
<td>Options to plan, strategize and initiate action:</td>
<td>Options to set goals and self regulate:</td>
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**Scaffolding: support for understanding**

Bartholomew Consolidated School Corporation 2012
## Universal Design for Learning: *Examples*

### REPRESENTATION

**Input**
The “What?” of learning

- Options to see, hear and perceive information:
  - **EXAMPLES:** Video, Lecture, Demonstration, Diagram, Story, Textbook, Website

- Options to decode language, math, symbols:
  - **EXAMPLES:** Text to speech, Manipulatives, Pictures

- Options to make sense and understand knowledge:
  - **EXAMPLES:** Graphic Organizer, Clues, Prompts, Aided Questions, Models

### ACTION/EXPRESSION

**Output**
The “How?” of learning

- Options to do, move and interact:
  - **EXAMPLES:** Game, Acting/Role playing, Demonstrate, Lab, Speech, Typing, Recording

- Options to differentiate expression of knowledge:
  - **EXAMPLES:** Journaling, Oral expression, Timeline, Worksheet, Exam

- Options to plan, strategize and initiate action:
  - **EXAMPLES:** Project, Portfolio, Create a video

### ENGAGEMENT

**Connection**
The “Why?” of learning

- Options to care, value and find relevance:
  - **EXAMPLES:** Discussion, Guest speaker, Journaling, Video, Experiment

- Options to vary challenge and/or support:
  - **EXAMPLES:** Learning Center, Small Group Activity, Discrepant Event, Worksheet, Internet

- Options to set goals and self regulate:
  - **EXAMPLES:** Interest Inventory, Reflection, Survey, Goal Setting Activity

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Examples and modeling provide scaffolding.
Learning Outcomes & Goals:

GOAL
Purpose
The “Outcome” of learning

Provide clearly developed goal:
- Reflects content/skill(s)
- Means are not embedded
- Clearly defines learning outcome

Options for access/display of goal:
- Goal is clearly communicated
- Students understand the goal
- Allows appropriate challenge & support

Options for content/skill comprehension:
- Fosters “learning how to learn”
- Enables progress monitoring
- Empowers “understanding” and “meaning” of the content/skill

Content standards: provide options
Skill standards: provide scaffolding
Standard: SKILL

Provide Scaffolding
CONTENT Standard: Provide Options

2 < 10

2 + 3 =
2 + 2 =

FONT
COLOR
At BCSC, UDL is no longer a district initiative:

- It IS the framework through which all other initiatives, policies and procedures are filtered, supported and implemented.
Positive Behavior Instructional Supports

- What is PBIS?

Positive Behavior Instructional Supports (PBIS) is a systems approach to improving school and classroom behavior among all students. PBIS is used to help staff create school-wide systems that allow them to teach and promote positive behavior among all students. By reducing behavioral problems, environments are created that allow teachers to teach and students to learn.

Taylorsville Elementary recently name as 1 of 3 model sights for PBIS in the state.
Instructional Consultation Teams

What is ICT?

Instructional Consultation Teams (IC Teams) provide one-on-one support for teachers who are struggling to design instruction that meets the needs of individual students, small groups, and/or whole classes. IC Team Members are trained to conduct assessment in reading, writing, math and behavior – as well as collaborative communication and systematic problem solving.
BCSC’s Integration of UDL, PBIS & ICT

| WHAT: | HOW: | WHY?
|-------|------|------
| School/Classroom: Culture/Environment Design | UDL & PBIS & ICT | Creates purposeful & motivated learners. |
| Content: Common Core Curriculum & Standards Design | UDL | Creates knowledgeable & resourceful learners. |
| Instructional & Task Design | UDL & PBIS & ICT | Creates strategic & goal directed learners. |

**If you design it, they will become purposeful, motivated, knowledgeable, resourceful, strategic and goal directed learners.**
Universal Design for Learning

GOAL: Integrate current and ongoing initiatives with UDL as the framework

REPRESENTATION
Input
The “What?” of learning

Options to see, hear and perceive information:
- Teacher Evaluation Rubric
- Student Success Rubric
- Summer Institute

Options to decode language, math, symbols:
- Summer Institute
- ICT

Options to make sense and understand knowledge:
- Summer Institute

ACTION/EXPRESSION
Output
The “How?” of learning

Options to do, move and interact:
- Teacher Evaluation Rubric
- Student Success Rubric
- Summer Institute

Options to differentiate expression of knowledge:
- Summer Institute
- ICT

Options to plan, strategize and initiate action:
- Summer Institute
- PBIS

ENGAGEMENT
Connection
The “Why?” of learning

Options to care, value and find relevance:
- Teacher Evaluation Rubric
- Student Success Rubric
- Summer Institute
- PBIS

Options to vary challenge and/or support:
- Summer Institute
- ICT

Options to set goals and self regulate:
- Summer Institute
- ICT
- PBIS
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<thead>
<tr>
<th>Year</th>
<th>English Lang Learners</th>
<th></th>
<th></th>
<th>Non English Lang Learners</th>
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<td>Both</td>
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<td>83.1</td>
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<table>
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<th>Year</th>
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<th>Gen Ed</th>
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<td></td>
<td>LA % pass</td>
<td>Math % pass</td>
<td>% pass both</td>
<td>LA</td>
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<td>2012</td>
<td>51</td>
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</table>
Why is the Learning Environment a component?

- How does the design of the learning environment affect access to content, expression and connection?
- How do we evaluate barriers in the learning environment in order to make instruction and tasks accessible?
Evaluating the Learning Environment

- What prevents learners from reaching or connecting to the curriculum and/or the learning environment?

  - In groups of 3-4 discuss the essential question by:
    - Evaluating what composes a curriculum
    - Evaluating what composes a learning environment
    - What barriers does the student present?
Where is the focus?

Curriculum: (goals, methods, materials, assessments)

Learning Environment

Obstacles

Barriers

Student: must overcome the barriers to reach the curriculum/learning environment.
Where is the focus?

Curriculum: (goals, methods, materials, assessments)
Learning Environment: are responsible to reach the student(s).
Summary

- UDL is based on what we’ve learned in neuroscience and the learning sciences about **HOW we learn**.

- There are **3 brain networks** associated with learning: Affective, Recognition, Strategic and **3 UDL Principles** offering multiple means of: Engagement, Representation and Action & Expression.

- The Learning Environment is a key component.

- Barriers must be evaluated and replaced with scaffolding and supports.

- We can plan a **UDL Curriculum and Learning Environment** in order to make curriculum, instruction, tasks and goals accessible by evaluating barriers and utilizing the UDL Guidelines.
Video Resources from CAST

- UDL: Principles and Practice
- UDL Guidelines in Practice: Grade 1 Mathematics
- UDL Guidelines in Practice: Grade 5 Language Arts
- UDL Guidelines in Practice: Grade 6 Science