Implementation of Universal Design for Learning: RESEARCH PRACTICE

CEC Convention: April 11, 2014
Take a walk in our shoes: Cases of UDL Implementation in K-12

CEC Convention: April 11, 2014
Goals for this session:

• Understand the steps used to address barriers & determine successes while integrating & scaling up UDL implementation in K-12.

• Recognize how the five-phase UDL implementation process positively contributes to sustainable, systemic change towards a goal.
David Rose on K-12 UDL Implementation
Implementation of Universal Design for Learning: Research and Practice

UDL in the Classroom: UDL and Teacher Evaluation

Dr. Katie Novak
Imagine you own a catering company. Create a fabulous tasting menu that will make my party a huge success. What resources will you need? Be sure to highlight your strengths as a chef!

Oops...forgot to tell you...

- Lucy is lactose intolerant.
- Nathaniel has a nut allergy.
- Greg is on a gluten free diet.
- Victoria is a vegetarian.
- Wanda is on Weight Watchers.
## UDL and Teacher Evaluation

### Domain 1: Planning and Preparation

<table>
<thead>
<tr>
<th>Danielson Framework</th>
<th>UDL Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating knowledge of content and pedagogy</td>
<td><em>The two types of standards – a closer look</em></td>
</tr>
<tr>
<td>Demonstrating knowledge of students</td>
<td></td>
</tr>
<tr>
<td>Setting instructional outcomes</td>
<td><em>Standards-based</em></td>
</tr>
<tr>
<td>Demonstrating knowledge of resources</td>
<td></td>
</tr>
<tr>
<td>Designing coherent instruction</td>
<td><em>Standards-based</em></td>
</tr>
<tr>
<td>Designing student assessments</td>
<td><em>Standards-based</em></td>
</tr>
</tbody>
</table>
Teaching the Two Types of Standards

There are two types of standards.

Content standards define the knowledge, and concepts that students should acquire.

Performance standards outline specific skills students will have to complete in specific ways. The KEY to their success is following steps to a process. The method is embedded in the expectation.
Reminder: Content standards

**Students have:**
1. Options for how they learn
2. Choices which will engage their interest and challenge them
3. Choices for how they demonstrate their learning

**Teachers provide:**
1. Flexible ways of presenting lesson content
2. Flexible options for student engagement
3. Flexible methods of expression and assessment
Reminder: Methods standards

Students have:
1. to complete a task in a specific way

Teachers provide:
1. Flexible ways of presenting lesson content
2. Scaffolding and work samples for each step of the process
3. Graphic organizers, rubrics, and opportunities to provide mastery oriented feedback.
How are these standards different? Here’s HOW!

  ex: My husband will learn ways to help me relax after a long day with the kids.

– Then, identify one “methods standard”.
  ex: My husband will massage my shoulders every night for fifteen minutes using the kneading technique, coconut oil, and jasmine candles.

Now, let’s role play!
# UDL and Teacher Evaluation

## Domain 2: Classroom Environment

<table>
<thead>
<tr>
<th>Danielson Framework</th>
<th>UDL Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating an environment of respect and rapport</td>
<td><em>Foster collaboration and community</em></td>
</tr>
<tr>
<td>Establishing a culture for learning</td>
<td><em>Using the Guidelines to create a learning culture</em></td>
</tr>
<tr>
<td>Managing classroom procedures</td>
<td></td>
</tr>
<tr>
<td>Managing student behavior</td>
<td><em>Provide options for self-regulation (i.e., respect forms)</em></td>
</tr>
<tr>
<td>Organizing physical space</td>
<td></td>
</tr>
</tbody>
</table>
## UDL and Teacher Evaluation
### Domain 3: Instruction

<table>
<thead>
<tr>
<th>Danielson Framework</th>
<th>UDL Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating with students</td>
<td><em>Sharing standards and Guidelines – Anyon study</em></td>
</tr>
<tr>
<td>Using questioning and discussion techniques</td>
<td></td>
</tr>
<tr>
<td>Engaging students in learning</td>
<td><em>Provide multiple means of engagement by considering the Zone of Proximal Development</em></td>
</tr>
<tr>
<td>Using assessment in instruction</td>
<td></td>
</tr>
<tr>
<td>Demonstrating flexibility and responsiveness</td>
<td></td>
</tr>
</tbody>
</table>
Jean Anyon & the Hidden Curriculum of Work

“Hidden work perpetuates the maintenance of the status quo.”

-Jean Anyon

Discussion: What does this mean for UDL and Educator Evaluation?
The engagement guidelines are built upon the social constructivist approach to learning.

Learning takes place in and through activity with other people.

Knowledge is only meaningful and useful if it can be used as a tool for further activity.

Learning is active and constructive and must be in the “zone of proximal development.”
Students are engaged in the zone

Lower limit: what student can achieve independently with ease = boredom.

Upper limit: what a student cannot achieve = anxiety.

• UDL Curriculum should fall somewhere in the middle. Provide scaffolding so students can achieve a level that will challenge them.
# UDL and Teacher Evaluation

## Domain 4: Professional Responsibilities

<table>
<thead>
<tr>
<th>Danielson Framework</th>
<th>UDL Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflecting on teaching</td>
<td>Model self-assessment and reflection (i.e, the reflection ticket-out)</td>
</tr>
<tr>
<td>Maintaining accurate records</td>
<td></td>
</tr>
<tr>
<td>Communicating with families</td>
<td></td>
</tr>
<tr>
<td>Participating in the professional community</td>
<td>Sharing your knowledge of UDL!</td>
</tr>
<tr>
<td>Growing and developing professionally</td>
<td>Learn more about UDL!</td>
</tr>
<tr>
<td>Showing professionalism</td>
<td></td>
</tr>
</tbody>
</table>
The Long & Short

Be Flexible! and Reflect

- Present information and content in different ways
- Differentiate the ways that students can express what they know
- Stimulate interest and motivation for learning
Implementation of Universal Design for Learning: RESEARCH PRACTICE

UDL in Baltimore County, Maryland

Liz Berquist
Nicole Norris
OUR ROLE

• Liz Berquist, Asst. Professor Towson University, UDL facilitator
• Nicole Norris, Principal Lansdowne Middle School, Baltimore, Maryland

OUR RECENT HISTORY

• COMAR regulation
• Gates UDL Grant
• Towson University Presidential Scholar Project
A. Beginning in the 2013-2014 school year, each local school system shall identify and implement the principles, consistent with Regulation .02, in English and mathematics as a model, curriculum.

B. Beginning in the 2014-2015 school year, each local school system shall identify and implement the principles, consistent with Regulation .02, in all subjects:

1. Curriculum;
2. Instructional materials;
3. Instruction;
4. Professional development; and
5. Student assessments.
Baltimore County Participation in CAST/Gates Grant

Baltimore County Public Schools

Baltimore County Public School (BCPS) district is the 26th largest school system in the U.S. It is a geographically and demographically large district that surrounds the city of Baltimore, Maryland. Like most school districts, BCPS is constantly undergoing change. During the year of the project the district hired a new superintendent who brought a different management style, background knowledge and new priorities.

An important factor to consider when looking at school districts in Maryland is that the Maryland Department of Education proposed and the Maryland State Board of Education adopted regulations in June 2012 that require all local districts to use Universal Design for Learning in the development of curriculum and selection of instructional materials beginning in the 2014-2015 school year.

BCPS Student Demographics

26th largest school system in the U.S., 3rd largest in Maryland
$1.5 billion budget, FY 2013
105,315 students (9/30/11)
54.8% minority enrollment (9/30/11)
3.8% English language learner (10/31/11)
44.8% eligible for free/reduced price meals (10/31/11)
174 schools, programs, and centers
17,000 employees, including 8,850 classroom teachers
Towson University Presidential Scholar Project

Baltimore County UDL PDS
Welcome to the UDL Connect site for the Baltimore County UDL PDS Project! We will use this space to share resources, host discussions and provide ongoing support for UDL PDS members.
Website: http://bcps.org
Members: 118
Latest Activity: 18 hours ago

TU Presidential Scholar UDL Project
A community of learners from Lansdowne and Pine Grove Middle Schools working together to build a better understanding of UDL, technology integration, and creating opportunities to learn for all students.
Location: Lansdowne Middle School
Members: 4
Latest Activity: on Thursday

A little "Digital Conversion" humor, courtesy of Doctor Who
Our Corner:  
A Case Study of UDL and Professional Learning

• Lansdowne Middle School
  • School Demographics
  • PLC Demographics

• Professional Learning Opportunities: Year 1
  • Gates/CAST grant
  • Strategies for growth
  • Barriers and lessons learned

• Professional Learning Opportunities: Year 2
  • TU Presidential Scholar Project
  • Strategies for growth
  • Barriers and lessons learned

• District Connection
Lansdowne Middle School

- 674 students in 6th, 7th, and 8th grades
- Student demographics-40 Asian, 218 African American, 107 Hispanic, 22 Two or More Races, 287 White
- 115 students who receive special education services
- 115 students who receive ELL services
- 573 FARMS (85%) (free and reduced meals) - Title I
- Attendance is 93.5%
<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>3</td>
</tr>
<tr>
<td>Teachers</td>
<td>58.8</td>
</tr>
<tr>
<td>Paraeducators</td>
<td>10</td>
</tr>
<tr>
<td>Clerical</td>
<td>4</td>
</tr>
<tr>
<td>Parent Service Coordinator</td>
<td>1</td>
</tr>
<tr>
<td>Behavior Interventionists</td>
<td>2</td>
</tr>
<tr>
<td>School Psychologist</td>
<td>0.5</td>
</tr>
<tr>
<td>Social Worker</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Overview of CAST Grant

• Opportunity for only 2 schools in BCPS
• Introduction of UDL to Instructional Leadership Team
• Support and motivation from Liz Berquist
• Meeting CAST staff and continued collaboration
LMS PLC

Keys to Success

Introduction of UDL PLC to Instructional Leadership Team

PLC Members from each content area – chosen by their peers

Liz Berquist – UDL Facilitator

Nancy Reed – Technology Support

Open-minded; willingness to work with one another, learn and take risks

Professional Development Opportunities

Carrie Reeve – PE/Health (DC)
Lauren Kimble – Math/ESOL
Melissa Wiegner – Special Education
Justin Benjamin – Social Studies (DC)
Amanda Hughes – English/Language Arts
Wendy Prioleau – Reading Resource Teacher
Carol Connor – Reading
Summer Professional Development for UDL PLC

Our Goals:

• By the end of the summer, the PLC will be able to create and upload on UDL exchange one collaborative lesson and one individual lesson or resource for a teambuilding activity.

• By winter break, all departments will be introduced to UDL exchange and UDL guidelines through presentations in department meetings.

• By winter break, all PLC members will need to create and upload one lesson/resource in their content area on UDL exchange.

• By the end of the 2013-2014 school year, PLC members will observe at least one PLC member and co-plan a cross curricular UDL lesson and upload on UDL exchange.
Strategies – Year 1

The right people at the right time – UDL PLC monitoring and assistance from liaisons (Liz and Nancy) provided time needed for focus and organization.

LMS access to technology and knowing which resources were available through BCPS – high tech and low tech deliverables were an expectation.
Strategies – Year 1

- Access to UDL Exchange and UDL Studio
- Willingness of PLC to share ideas through collaboration and professional
Barriers – Year 1

- Initial anxiety and fear
- Time needed to plan
- Time needed to experiment with planning resources
- Overwhelmed with number of resources
- Questioning of current practices and strategies—implementation of UDL in more lessons
- Allowing time and helping students process for self-reflection
- Allowing proper student processing time without stepping in
Implementation of Universal Design for Learning: Research Practice

Barriers – Year 1

Implementation outside of PLC

• Teacher mindset
• Teacher capacity
• Teacher personality
• Internet access at LMS

Believe and Achieve
Towson University Presidential Scholar
Universal Design for Learning
Professional Development Project

CAST
Universal Design for Learning

The Baltimore County Public Schools

Towson University

Kennedy Krieger Institute
Strategies – Year 2

• Bi-weekly PLC meetings
• 3 credit CPD Course
• Just-in-time planning support for small group and tech integration
• Technology enhances (4 small group sets of iPads)
• Summer 3-Day UDL Institute at Towson University
**Stipend**

In order to be paid through the UDL Project Technology Integration Stipend you must complete the following:

1. Explore the UDL Framework
2. Design a lesson utilizing small group instruction
3. Participate in UDL Rounds process.
4. Additional stipend is available for attending the UDL Summer Institute, June 23\(^{rd}\), 24\(^{th}\) and 25\(^{th}\)

**MSDE Credits**

In order to receive 3 MSDE credits through the UDL Project Book Study you must complete the following:

1. 45 hours of professional development (both face to face and online)
2. Read the provided textbook, *Design and Deliver*, by Loui Lord Nelson
3. Complete all assignments
TU Presidential Scholar UDL Project

Created by Lisa Canby

Information

A community of learners from Lansdowne and Pine Grove Middle Schools working together to build a better understanding of UDL, technology integration, and creating opportunities to learn for all students.

Location: Lansdowne Middle School & Pine Grove Middle School
Members: 9
Latest Activity: Mar 12

A little “Digital Conversion” humor, courtesy of Doctor Who
CAST UDL KBP Survey
Introduction & Your Profile Information

Welcome and thank you for participating in the CAST UDL Knowledge, Belief, and Practice Survey. This survey is designed for a single administration that can be repeated at specific intervals, preferably before and after professional learning events. Its purpose is to collect information about changes in educators' practice. We appreciate your candid responses as you complete this UDL KBP survey.

Your participation in this UDL KBP survey is voluntary. You may withdraw your consent to participate at any time. This survey is part of our data collection process to understand implementation of Universal Design for Learning. By completing this survey you are consenting to CAST's use of the data collected in our research in the development of UDL implementation procedures.

NOTE: © CAST, Inc., 2014 The CAST UDL KBP is protected by the copyright laws of the United States and other countries. You may not share it, use it or make changes in it without written permission.

We anticipate that the survey will take between 25-30 minutes to complete.
UDL & the Common Core State Standards

The Common Core State Standards Initiative (CCSS) is a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA) and the Council of Chief State School Officers (CCSSO). Grounded in evidence and research, and internationally benchmarked, these rigorous education standards establish a set of shared goals and expectations for what K–12 students should understand and be able to do in English language arts and mathematics in order to be prepared for success in college and the workplace. For more information about the CCSS visit [http://www.corestandards.org](http://www.corestandards.org).

Universal Design for Learning (UDL) is included in the application to students with disabilities section of the CCSS. Although this reference to UDL may give the impression that UDL is just for students with disabilities, all students can benefit from applying UDL to curriculum design and instructional practice.

The CCSS can be considered the "What" in education, i.e., the goals and expectations. It is the destination we wish our students to reach. In light of that, UDL can be considered the "How" in education, i.e., the curriculum and instructional framework teachers use to plan their lessons. In other words, UDL and the CCSS are complementary: the UDL framework provides educators with the means to maximize student attainment of the CCSS.

The "What" & "Why" of the Common Core State Standards
Strategies – Year 2

- UDL as a way to meet highly effective in new evaluation system (Danielson Framework)
- Knowing resources that are available by the district, connecting them to the new evaluation, Common Core and UDL – making deliberate connections
Barriers – Year 2
District Connection

• Curriculum Re-design: UDL pre-req’s for designers
• Summer 2014- STAT Teacher Professional Development
Implementation of Universal Design for Learning: RESEARCH PRACTICE

George Van Horn
Director of Special Education

Loui Lord Nelson
former BCSC UDL Coordinator
Exploration to Optimizing: One District’s Journey – Are we there yet?

George Van Horn
Director of Special Education

Loui Lord Nelson
former BCSC UDL Coordinator
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 IS the framework for teachers to evaluate themselves and design their instructional practices and their learning environment.
Clearing a path for people with special needs clears the path for everyone!
How does BCSC address
12,000 +/- Students
Speaking 51 Languages
Students with Disabilities: 13.9%
Economically Disadvantaged: 50%
Minority: 16%
English Language Learners: 11%
Time Line: Outline

- Instructional Service Delivery
  - 2001-2006

- Positive Behavior Instructional Supports
  - 2003-ongoing

- Universal Design for Learning
  - 2006-ongoing

- Instructional Consultation Teams
  - 2007-ongoing

- Project based Learning
  - 2008 - ongoing
CAST's UDL Implementation Process

- EXPERT LEARNING
- OPTIMIZE
- SCALE
- INTEGRATE
- PREPARE
- EXPLORE

UDL GUIDELINES
- Representation
- Action and Expression
- Engagement

NEED FOR CHANGE
Many systems were in need of integration, alignment, and expansion
<table>
<thead>
<tr>
<th>Explore</th>
<th>Initiative</th>
<th>Action Taken</th>
<th>Data Collection / Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore</td>
<td>Internal inquiry about how special education decisions were made</td>
<td>Created a service delivery plan which was special education focused</td>
<td>Provided corporation-wide plan for service delivery</td>
</tr>
<tr>
<td>Explore</td>
<td>Learn more about the technology available to accommodate all learning styles and needs.</td>
<td>Six schools developed a three year UDL-focused technology action plan</td>
<td>Reported to PATINS project coordinator</td>
</tr>
</tbody>
</table>
## Explore/Prepare

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Action Taken</th>
<th>Data Collection / Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explore</strong></td>
<td><strong>Introduced Positive Behavior Instructional Supports as an optional initiative</strong></td>
<td>Participating schools created action plans</td>
</tr>
<tr>
<td><strong>Explore/Prepare</strong></td>
<td><strong>PBIS transitioned from optional to district wide</strong></td>
<td>PBIS coaches and facilitators were indentified</td>
</tr>
<tr>
<td>Initiative</td>
<td>Action Taken</td>
<td>Data Collection / Usage</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Prepare</td>
<td>Move UDL from special education focus to school-wide focus</td>
<td>Reviewed school improvement plans</td>
</tr>
<tr>
<td></td>
<td>Trained building level teams in UDL; placed UDL goals in school improvement plans</td>
<td></td>
</tr>
<tr>
<td>Initiative</td>
<td>Action Taken</td>
<td>Data Collection / Usage</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Integrate &amp; Scale</td>
<td>Look closely at inclusion in the school district</td>
<td>Initiative</td>
</tr>
<tr>
<td></td>
<td>Trained and implemented Instructional Consultation Teams</td>
<td></td>
</tr>
<tr>
<td>Integrate &amp; Scale</td>
<td>Measure school-wide understanding of UDL principles</td>
<td>Disseminated/collected the UDL Rubric, CAST</td>
</tr>
<tr>
<td></td>
<td>Broadened the training of UDL to school-wide</td>
<td></td>
</tr>
<tr>
<td>Initiative</td>
<td>Action Taken</td>
<td>Data Collection / Usage</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Scale</td>
<td>Identified school-specific needs related to the application of UDL</td>
<td>Visited classrooms with follow-up feedback and suggestions, CAST</td>
</tr>
<tr>
<td></td>
<td>Identified a point person for corporation to provide school specific and teacher specific support</td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td>Teacher takes the UDL coordinator role, partner with ICT coordinator, teacher evaluation rubric pilot</td>
<td>Teacher evaluation rubric pilot, University of Kansas, CAST</td>
</tr>
<tr>
<td>Identify specific classroom</td>
<td>Teacher takes the UDL coordinator role, partner with ICT coordinator, teacher evaluation rubric pilot</td>
<td></td>
</tr>
<tr>
<td>implementation issues and opportunities for integration of PBIS and ICT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## BCSC 2013-14 Teacher Success Rubric

### Ineffective (1)
- The goal is not posted
- Potential barriers are not considered during the planning of the lesson or the design of the learning environment
- Content and skills are presented without options and scaffolding
- Students are not engaged
- Students do not interact with or demonstrate content and skill comprehension

### Needs Improvement (2)
- The goal is posted but not addressed or instructional methods are not aligned with the goal
- Potential barriers are considered but the teacher is not applying that knowledge to the lesson plan
- Content is presented with few options and skills are presented without scaffolding
- Students are engaged in relevant learning opportunities
- Students interact with content and demonstrate content and skill comprehension but do not demonstrate knowledge

### Effective (3)
- The goal is posted and instructional methods and materials align with the goal
- Potential barriers are considered and the teacher applies that knowledge to the learning environment
- Content and skills are presented in multiple ways with options but with minimal scaffolding
- Students are engaged in relevant and meaningful learning opportunities
- Students interact with and demonstrate content and skill comprehension in multiple ways

### Highly Effective (4)
- The goal is posted, attainable and accessible. Instructional methods and materials align with the goal
- Potential barriers in the curriculum and learning environment are identified and addressed in the design of the lesson and the learning environment
- Content and skills are presented in multiple ways with options and scaffolding available
- Students are engaged in authentic, relevant, and meaningful learning opportunities
- Students consistently interact with and demonstrate content and skill comprehension in multiple ways
## Optimize

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Action Taken</th>
<th>Data Collection / Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>Identify school-specific needs related to the application of UDL</td>
<td>Identified a point person for corporation to provide school specific and teacher specific support</td>
</tr>
<tr>
<td>Scale</td>
<td>Identify specific classroom implementation issues and opportunities for integration of PBIS and ICT</td>
<td>Teacher takes the UDL coordinator role, partner with ICT coordinator, teacher evaluation rubric pilot</td>
</tr>
</tbody>
</table>
Staff Support for UDL Implementation

- 3 UDL Coordinators: Central Office
- 9 UDL Facilitators: ½ Time 1 per building
- Request for Educational Planning
- UDL Professional Learning Communities
- Quarterly UDL Professional Development Sessions with UDL Experts outside of BCSC
DATE:
Monday, July 22 - Friday, July 26

LOCATION:
Columbus Signature Academy - New Tech Campus
2205 25th Street
Columbus, Indiana 47201

TIMES:
Monday 7:30am—4pm
Tuesday—Thursday: 8am—3:30pm
Friday: 8 - 1:00

CRU'S: 25

You are encouraged to bring your laptop or other digital device to utilize during the institute.

Questions:
Rhonda Laswell
UDL Coordinator
1200 Central Ave
Columbus, IN 47201
Phone: 812.375.6709
Fax: 812.373.2188
E-mail: laswellr@bcsc.k12.in.us

Registration On-line at:
www.bcsc.k12.in.us
go to the UDL icon

UDL Summer Institute
Click on the UDL Summer Institute
OR

Scan the QR code:

UDL Implementation
Summer Institute
BCSC: July 22-26

Engagement
Representation
Action/Expression

Applying Universal Design for Learning...
by Embracing Learner Variability
KEYNOTE SPEAKER:
David H. Rose, Ed. D.
Dr. Rose is a developmental neuropsychologist and educator whose primary focus is on the development of new technologies for learning. Additionally, Dr. Rose co-founded CAST, a not-for-profit research and development organization whose mission is to improve education, for all learners, through innovative uses of modern multimedia technology and contemporary research in the cognitive neurosciences. Dr. Rose also teaches at Harvard's Graduate School of Education where he has been on the faculty for more than 25 years.

Institute Focus:
Bartholomew Consolidated School Corporation will be hosting a UDL Summer Institute focusing on the UDL framework as it relates to:
- The Learning Environment
- Learner Variability
- Goals
- Barriers
- Lesson Design/Planning

The UDL Summer Institute...
is for all educators with an understanding of Universal Design for Learning and ready to take the application to the next level of implementation. Participants will engage in large and small group instruction, activities and learning opportunities. Small groups will be facilitated by professionals from around the country. They will provide professional development and structured small group processes with protocols that align with the UDL framework to promote meaningful and resourceful learning experiences.

Goal:
Educators will evaluate and remove barriers in the curriculum and the learning environment and create a lesson/unit.

Objectives:
- Address Learner Variability
- Evaluate, Redesign and Align the Learning Environment
- Identify & Eliminate Barriers in the Learning Environment and Curriculum
- Set Accessible Learning Goals
- Design a Lesson/Unit
- Showcase their Lesson/Unit on UDL
UDL is an awesome organization that teaches others that it's OK to learn in different ways!
UDL is how people learn.

What do you want the people to know?
How do you want them to take it?
Why should they care?
UDL is how to engage the kids in learning and how to teach them in what fits them best.
From the UDL perspective, expert learners are...

<table>
<thead>
<tr>
<th>Resourceful &amp; knowledgeable</th>
<th>Strategic &amp; goal-directed</th>
<th>Purposeful &amp; motivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Bring considerable prior knowledge to new learning</td>
<td>*Formulate plans for learning</td>
<td>*Are eager for new learning and are motivated by the mastery of learning itself</td>
</tr>
<tr>
<td>*Activate that prior knowledge to identify, organize, prioritize, and assimilate new information</td>
<td>*Devise effective strategies and tactics to optimize learning</td>
<td>*Are goal-directed in their learning</td>
</tr>
<tr>
<td>*Recognize the tools and resources that would help them find, structure, and remember new information</td>
<td>*Organize resources and tools to facilitate learning</td>
<td>*Know how to set challenging learning goals for themselves</td>
</tr>
<tr>
<td>*Know how to transform new information into meaningful and useable knowledge</td>
<td>*Monitor their progress</td>
<td>*Know how to sustain the effort and resilience that reaching those goals will require</td>
</tr>
<tr>
<td></td>
<td>*Recognize their own strengths and weaknesses as learners</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Abandon plans and strategies that are ineffective</td>
<td>*Monitor and regulate emotional reactions that would be impediments or distractions to their successful learning</td>
</tr>
</tbody>
</table>
Request for Educational Planning

Date Submitted:

Teacher name:  Grade:  If Secondary Level, course name:

Specific Request:

Check all that apply (Learning Environment Design is required for all requests)

☐ UDL
☐ PBIS
☐ ICT
☐ Technology (specific to instructional use)
☐ Literacy - Specify:  ☐ reading  ☐ writing
☐ Math
☐ Behavior
☐ Special Education Evaluation (Student Information Form required)

*If this is a request for a Special Education Evaluation, please submit to the building administrator. All other requests may be given to the UDL Facilitator or UDL Instructional Coach.*
### Student Growth

**BCSC Student Growth Sample Rubric (2012-2013)**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Foundational (Under Construction)</th>
<th>Emerging (Making an Attempt)</th>
<th>Proficient (Taking it to the next level)</th>
<th>Advanced (Analyzing every component)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resourceful and Knowledgeable</strong></td>
<td>Uses prior knowledge in new learning&lt;br&gt;Recognize the tools and resources that would help them find, structure, and remember new information&lt;br&gt;Recall/describes prior knowledge and makes connections to new information&lt;br&gt;Recognize new Information</td>
<td>Summarizes and applies prior knowledge to new learning&lt;br&gt;Distinguish and locate the tools and resources that would help them find, structure, and remember new information&lt;br&gt;Activates prior knowledge to identify and organize new information&lt;br&gt;Recognize new information and know how to transform new information into meaningful and usable knowledge in known and predictable situations</td>
<td>Analyzes prior knowledge to new learning&lt;br&gt;Select and choose the tools and resources that would help them find, structure, and remember new information&lt;br&gt;Activates prior knowledge to identify, organize, prioritize, and assimilate new information&lt;br&gt;Know how to transform new information into meaningful and usable knowledge in known and unpredictable situations</td>
<td>Utilizes prior knowledge to appraise and evaluate new learning&lt;br&gt;Utilize and navigate the tools and resources that would help them find, structure, and remember new information&lt;br&gt;Synthesizes prior knowledge to identify, organize, prioritize, and assimilate new information&lt;br&gt;Know how to transform new information into meaningful and usable knowledge in new, unknown and unpredictable situations</td>
</tr>
</tbody>
</table>
| **Strategic and Goal-Directed** | Recognize the learning needs<br>Recognize effective strategies and tactics to optimize learning<br>Recognize resources and tools to facilitate learning<br>Record their progress<br>Recognize their own weaknesses as learners<br>Choose plans and strategies                                                                 | Formulate plans for learning<br>Select effective strategies and tactics to optimize learning<br>Organize resources and tools to facilitate learning<br>Monitor their progress<br>Recognize their own strengths and weaknesses as learners<br>Identify plans and strategies that are ineffective | Employ the learning plan<br>Utilize effective strategies and tactics to optimize learning<br>Utilize resources and tools to facilitate learning<br>Explain their progress<br>Analyze their own strengths and weaknesses as learners<br>Abandon plans and strategies that are ineffective | Assess or evaluate the learning plan (and adjust if needed)<br>Devise effective strategies and tactics to optimize learning<br>Evaluate resources and tools to facilitate learning<br>Evaluate their progress<br>Utilize their own strengths and weaknesses as learners<br>Recognize plans and strategies |}

**Figure 5**
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Foundational (Under Construction)</th>
<th>Emerging (Making an Attempt)</th>
<th>Proficient (Taking it to the next level)</th>
<th>Advanced (Analyzing every component!)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purposeful And Motivated</td>
<td>□ Know how to recognize challenging learning goals for themselves&lt;br&gt;□ Recognizes the effort and resilience that reaching goals requires&lt;br&gt;□ Recognize the emotional reactions that would be impediments or distractions to their successful learning</td>
<td>□ Know how to select challenging learning goals for themselves&lt;br&gt;□ Predicts the effort and resilience that reaching goals requires&lt;br&gt;□ Monitor emotional reactions that would be impediments or distractions to their successful learning</td>
<td>□ Know how to develop challenging learning goals for themselves&lt;br&gt;□ Demonstrates the effort and resilience that reaching goals require&lt;br&gt;□ Monitor and predict emotional reactions that would be impediments or distractions to their successful learning</td>
<td>□ Know how to evaluate challenging learning goals for themselves&lt;br&gt;□ Knows how to sustain and evaluate the effort and resilience that reaching goals require&lt;br&gt;□ Regulate emotional reactions that would be impediments or distractions to their successful learning</td>
</tr>
</tbody>
</table>
Upon Reflection

• Challenges

• Logistics

• Successes
George Van Horn, Ed.D.
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Bartholomew Consolidated School Corporation
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Loui Lord Nelson, Ph.D.
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Indianapolis, IN
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Implementation of Universal Design for Learning:

RESEARCH ↔ PRACTICE

UDL in Maryland

Marcella E. Franczkowski
Assistant State Superintendent
Division of Special Education/
Early Intervention Services
UDL: Maryland’s Approach to A Route for Every Learner

Marcella E. Franczkowski
Assistant State Superintendent
Division of Special Education/
Early Intervention Services

April 11, 2014
Maryland is committed to closing achievement gaps and maximizing learning for all students. Maryland legislation established a Task Force to explore incorporation of UDL in Maryland’s education systems. –Senate Bill 467/House Bill 59

The Task Force made recommendations in the report, “A Route for Every Learner.”

State regulation is passed to ensure implementation of UDL guidelines and principles. –Code of Maryland Regulation (COMAR 13A.03.06)

Maryland is implementing recommendations and designing resources to support UDL implementation Statewide.
Why is Maryland implementing UDL?
Community,

College and Career-Ready Students

Success for All Students

UDL

C,A&I

DI
Communicating Pathways for Exploration of UDL

- Ensuring Policies and Practices to Support All Citizens
- Promoting Accessible Environmental/Organizational Structures
- Establishing Beliefs, Curriculum, Assessment, and Pedagogy
- Selecting Instructional Materials
- Ensuring Deep Understanding of Learners
- Promoting Effective Instructional Practices for ALL Students
UDL/COMAR

- July 1, 2012: Code of Maryland Regulations (COMAR) to promote UDL in Local School Systems approved by the MD State Board of Education

- School Year 2013/2014: Curriculum revisions using UDL
School Year 2014/2015, UDL in the development and provision of:
- Curriculum
- Instruction and materials
- Professional development
- Student assessments
UDL: Maryland’s Approach to A Route for Every Learner

Responding to the needs of leadership, teachers, families to support All students
Our Guiding Question:

How can UDL help teachers create lessons and authentic learning opportunities that engage students and provide opportunities for choice and real world applications?
Universal Design for Learning

Curriculum, Instruction, and Assessment

Formative Assessment

Differentiated Instruction

Content
Process
Product

Co-Teaching
Connecting Brain Research and Universal Design for Learning (UDL)

The WHAT of Learning
We know from brain research the learner processes knowledge through Recognition Network: The Big Idea, Enduring Learning

UDL suggests: Multiple and Flexible Means of Presenting what is to be Learned:
- Representation

The HOW of Learning
We know from brain research the Learner processes knowledge through Strategic Network: Planning for Action

UDL suggests: Multiple and Flexible Means of Demonstrating what was Learned:
- Expression

The WHY of Learning
We know from brain research the learner processes knowledge through Affective Networks: Connecting Emotionally, Evaluating Patterns, Providing Purpose

UDL suggests: Multiple and Flexible means of Engaging the Learner in what is to be Learned:
- Engagement
State Curriculum

• College and Career-Ready Curriculum model units and lessons provide examples of UDL
• 3 UDL online professional development courses available to MD educators
• Rubric for approval of all student online courses requires UDL
• All online courses developed in MD must use UDL
State Curriculum

- Literacy Standards for History/Social Studies, Science and Technical Subjects
- Literacy Frameworks
Educator Effectiveness Academies

- Face to face academies over three summers
- Interim follow-up webinars/e-learning modules
- Content posted for the academies on the MSDE website

http://mdk12.org/instruction/academies/index.html
Regional Community of Practice for Specialized Educators (EEA)

April

Access
Webinar: Mindset for Teaching All Students
Available Statewide
UDL

Specialized Instruction
Two-Day Face-to-Face
Scenario Based - Active Learning with UDL Application of CCRS Tools/Resources

May

Assessment
Webinar: Assessment in the CCRS
Available Statewide
Accommodations for Standards Based IEPs/PARCC

June

Identifying Promising Practices
(Ongoing, Available Statewide through Maryland Learning Links)
Assessment

- Maryland is a governing member of the Partnership for the Assessment of Readiness for College and Careers (PARCC) Consortium
- Assessment includes ‘universally designed’ supports
- PARCC has released its assessment design and has posted their Invitation to Negotiate (ITN) on Item Development to vendors
Maryland UDL Resources

Professional Development

State-of-the-Art Web-Based Resources

Educator Effectiveness Academies

http://www.udl-rttt.mdonlinegrants.org/

App

UDLinks

http://marylandlearninglinks.org/
All Maryland UDL Resources are available on the Maryland Learning Links website.
In every area of the curriculum, the key to using UDL is to reduce or eliminate barriers to student learning. This requires applying UDL's 3 main principles of representation, action and expression, and engagement in a systematic way. Even excellent teachers can unintentionally have barriers that prevent some students from learning. As you explore the case study, look for ways you can use UDL principles to utilize all 3 brain networks to optimize learning and eliminate learning barriers in your own classroom.

UDL Virtual Tour

After reading the UDL Case Study, take a virtual tour of classroom to see everyday examples of UDL Principles. To navigate through the classroom, click and drag the mouse to the left or right. Click on hotspots and magnifying glasses to zoom in on specific examples. You might recognize your own classroom in some of the examples featured here!

NOTE: Some features of the virtual tour are unsupported in Internet Explorer. It is

http://marylandlearninglinks.org/1021
Individualized Education • Universal Design for Learning • UDL in Your Classroom • Instructional Methods

UDL Case Study: Instructional Methods

Now that Ms. Donaldson has analyzed her instructional materials, it is time for her to also think about her instructional methods. She knows that, based on UDL, her instructional methods need to be just as varied and flexible as her instructional materials, if she is to increase her students’ access to learning. When she looks at the methods she has been using—primarily relying on printed texts and lectures—Ms. Donaldson realizes that she has been unintentionally creating learning barriers for many of her students.

- She has not sufficiently addressed the fact that the students in her classroom have a wide range of learning preferences.
- She has relied too heavily on asking students to memorize facts and information rather than encouraging them to develop concepts, problem solve and learn new skills.
- In doing this, she has promoted passive—rather than active—learning among her students; her students have subsequently not been as engaged in their own learning as they should be.
- She has not provided enough context and background when introducing new material; this has meant that students who did not already have some background knowledge of the new material have missed out on crucial instruction.

Ms. Donaldson is not going to stop using printed texts and lectures, but she decides that she definitely has to broaden the range of her instructional methods. She finds the following list of techniques on the Ina Center website. These instructional methods are broken down in terms of the three principles of UDL.

http://marylandlearninglinks.org/1026
How to UDL-ize Your Lessons

Whether you teach 11th grade World History or 7th grade Math or a classroom full of Kindergartners, you know that there are a lot of differences among your students. There are different learning styles, different needs and, of course, different interests. This can be challenging, especially if you try to teach all of your students in the same way.

Universal Design for Learning (UDL) acknowledges the differences among students. And as the best teachers have always done, UDL rejects a "one size fits all" approach and instead uses a variety of approaches that fit every one in the class. Based on brain research showing that each of our brains is as unique as our fingerprints, UDL is front-loaded for teachers in terms of the time spent on preparing lessons. The time teachers put in before they teach, though, is more than repaid as UDL greatly reduces the time teachers have to spend after the fact, retro-fitting lessons for the students who were unable to succeed on the first go-around. UDL helps all students achieve at high academic levels without the need for endless remedial work by teachers and students.

Here's a short primer on how you can UDL-ize lessons for your students. While this is an overview, check out links to more information and tools on the right that can help you actually put UDL into action.)
Maryland UDL Resources: UDL Wheel

**Principle I: Provide Multiple Means of Representation** - the "WHAT" of learning - Learners differ in the ways that they perceive and comprehend information that is presented to them.

**Principle II: Provide Multiple Means of Expression** - the "HOW" of learning - Learners differ in the ways that they can navigate a learning environment and express what they know.

**Principle III: Provide Multiple Means of Engagement** - the "WHY" of learning - Learners differ markedly in the ways in which they can be engaged or motivated to learn. Some learners are highly engaged by spontaneity and novelty while other are disengaged, even frightened, by those aspects, preferring strict routine.

These UDL Guidelines and checkpoints can assist educators in designing flexible lessons and curricula that reduce barriers to learning and provide innovative and supportive learning to meet the needs of all learners. They can also help educators evaluate existing curricula goals, materials, methods and assessments.

**Options for Language & Symbols**
- Pre-teach vocabulary & symbols, especially in ways that promote connection to the learners experience and prior knowledge
- Highlight how complex terms, expressions, or equations are composed of simpler words or symbols
- Clarify unfamiliar syntax (in language or in math formulas) or underlying structure (in diagrams, graphs, illustrations, extended expositions or narratives)
- Support decoding of text, mathematical notation, & symbols
- Present key concepts in one form of symbolic representation (e.g. an expository text or a math equation) with an alternative form (e.g. an illustration, dance/movement, diagram, table, model, video, comic strip, storyboard, photograph, animation, physical or virtual manipulative)

Sample Resources:
- Define Vocabulary and Symbols
- Clarity Syntax and Structure
- Decoding Text
- Additional Resources and Information

http://udlwheel.mdonlinegrants.org/
Note: The purpose of this activity is to provide practice in applying UDL principles when developing goals, instructional delivery methods, materials selection, and assessment. The examples are not crafted to represent exemplar lesson development, but as a means to practice using UDL principles in each area. Clearly, when planning lessons, each of these elements, (goals, methods, materials and assessment) are integrated and not planned in isolation.
...would have included the learning methods of reading, writing, and most likely listening to a lecture and taking notes. And as you now know, this would have created substantial learning barriers for many of the students in this group:

SANDRA
- Reading at 6th grade level
- Loves History
- Mild organizational problems

SUSAN
- Loves animals
- Reading at 2nd grade level
- Poor vocabulary and background knowledge

SIMON
- Reading and written expression are at 1st grade level
- Strong social skills
- Huge music fan

JAMAL
- Physical/kinesthetic learner
- Displays "attention seeking behaviours"
- Has ADHD
- Poor auditory processing and organizational skills
This is cool. I finally understand what I'm reading.

Learning material would you add for Susan?

A. Digital texts with spell-check and scaffolding for new vocabulary
B. A software program for advanced elementary school writers
C. Both of the above

SUSAN
Loves animals
Reading at 2nd grade level
Poor vocabulary and background knowledge

SANDRA
Reading at 6th grade level
Loves History
Mild organizational problems

SIMON
Reading and written expression are at 1st grade level
Strong social skills
Huge music fan

JAMAL
Physical/kinesthetic learner
Displays "attention seeking behaviours"
Has ADHD
Poor auditory processing and organizational skills
Which learning method would you add for Susan?

- Offer multiple examples
- Role playing
- Compacting

SUSAN
- Loves animals
- Reading at 2nd grade level
- Poor vocabulary and background knowledge

SANDRA
- Reading at 6th grade level
- Loves History
- Mild organizational problems

SIMON
- Reading and written expression are at 1st grade level
- Strong social skills
- Huge music fan

JAMAL
- Physical/kinesthetic learner
- Displays "attention seeking behaviours"
- Has ADHD
- Poor auditory processing and organizational skills
SANDRA
Reading at 6th grade level
Loves History
Mild organizational problems

I could have written a regular report, but I love history and the idea of making a scrapbook sounds good to me.

In what other means of assessment would you add for Sandra?

A. Invent a board game
B. Make a scrapbook
C. Both of the above

SUSAN
Loves animals
Reading at 2nd grade level
Poor vocabulary and background knowledge

SIMON
Reading and written expression are at 1st grade level
Strong social skills
Huge music fan

JAMAL
Physical/kinesthetic learner
Displays "attention seeking behaviours"
Has ADHD
Poor auditory processing and organizational skills
Title: Animated Tutorial on Photosynthesis and Respiration.
Category: Multimedia Presentations, Tutorial
Topic: Biology
Grade level: 9, 10, 11, 12

Resource description: Two animated cartoon characters explain the concepts of...
Support Chronology

- State UDL leadership team
- Task force formation
- Voluntary discussion work group
  - Teachers K-12
  - Higher Education
  - Maryland Coalition for Inclusive Education (MCIE)
- Cross system facilitation of a UDL Maryland implementation network
LSS Network for UDL Implementation

- September, 2013  13 Districts
  - Goals
    - Identify examples of UDL implementation across the state
      - Scope of work, successes, challenges, resources
    - Opportunities to begin building an effective network
    - Identify strategies for growing our network
LSS Network for UDL Implementation

- Spring 2014
  - Goals
    - Identify examples of UDL framework in curriculum design and learning environments
    - Provide opportunities to begin building an effective UDL network
    - Identify strategies for coaching to support UDL implementation
LSS Network for UDL Implementation - *Curriculum*

• Curriculum development
  – Concept based
  – Embed UDL principles
  – scaffolds UDL into unit format
  – Accessibility rubric

• Re-evaluate resources and data-bases to align with curriculum

• Materials selection guides changes in instruction
LSS Network for UD Implementation-PD

• PLC/PLN

• Professional learning opportunities
  – District based
  – School based
  – Online courses

• New teacher training
  – Combining Danielson model with UDL

• Curriculum writer’s module

• Continued outreach
LSS Network for UDL Implementation-Resources

• Video examples
• UDL support staff in every school
• CAST
  – UDL Connect
  – UDL Exchange
  – UDL Curriculum Self-Check
• Defining multiple forms of text
• Assessment options
LSS Network for UDL Implementation - *Strategies*

- Model UDL in all professional learning opportunities
- UDL-is about the range of tech options
- Linking disciplinary literacy to UDL
- Concrete examples
- Focus on what the teachers need to support implementation
- Walkthroughs
The Maryland State Department of Education promotes the statewide use of Universal Design for Learning (UDL) principles and guidelines in the development and provision of: (1) Curriculum; (2) Instructional materials; (3) Instruction; (4) Professional development; and (5) Student assessments. To assist local school systems (LSS) in assessing their progress in local implementation of UDL, the following continuum is offered.

<table>
<thead>
<tr>
<th>Implementation Science</th>
<th>Exploratory</th>
<th>Installation</th>
<th>Initial Implementation</th>
<th>Full Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integration of UDL Guidelines and Principles Benchmarks</strong></td>
<td>LSS is matching needs, innovation requirements, potential barriers and resources</td>
<td>Necessary resources are acquired or repurposed to support UDL implementation, a UDL Implementation Team is operating, sources for training and coaching are identified, initial professional learning has occurred, organizational supports and protocols have been put into place</td>
<td>Practitioners are attempting to use newly acquired UDL practices in the classroom with students, coaching and data systems support practitioners, celebrations of successful implementation of UDL practices is evident</td>
<td>UDL is standard in teaching and learning across all classrooms, practitioners routinely provide UDL opportunities to ensure the success of ALL students, Implementation Teams ensure the gains in UDL practices are maintained and improved over time</td>
</tr>
</tbody>
</table>

**(1) Curriculum**

1.1: District identifies specific objective UDL criteria to help guide curriculum development.

1.2: Model lessons or exemplars are provided to illustrate UDL elements for specific curriculum areas.

   1.2.a: Model lessons or exemplars include strategies that provide flexible options for presenting content (e.g., options for visual displays of information, for auditory information and language supports.)

   1.2.b: Model lessons or exemplars include options for learners to express understanding in a variety of ways.

   1.2.c: Model lessons or exemplars promote relevant learner choice, self-monitoring and strategic planning when engaging with content.
Final Thought

"By designing learning environments from the outset to meet the challenge of individual differences, including the challenges of students with disabilities, we make better learning environments for everyone."