## Please sit near a partner for session activities...

## Dynamic Learning Maps Assessment





# Dynamic Learning Maps Assessment: Supporting Access to Literacy for Students with Significant Cognitive Disabilities

Carrie Mark & Lauren Adams
University of Kansas - Center for Educational Testing
and Evaluation
International Reading Association
April 30, 2012





#### **Session Overview**

- Background -
  - Who's in the assessment consortia?
  - What is the DLM-AAS?
- Activity making a mini map!
- Traditional Assumptions about Literacy
- How was the DLM-AAS developed?
- Activity inaccessible nodes
- New Approach how will the DLM-AAS support access to literacy?





#### **Common Standards**

#### COMMON CORE STATE STANDARDS

**FOR** 

English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects







#### **Assessment Consortia**

General Assessment	Alt. Assessment	EL Assessment
SMARTER Balance	DLM	ASSETS
PARCC	NCSC	





### **DLM State Participants**



## Overview of Dynamic Learning Maps

#### **DLM Assessment System**

BEGINNING OF YEAR

English Language Arts and Mathematics, Grades 3 - 8 and High School

END OF YEAR



DIGITAL LIBRARY of learning maps; professional development resources; guidelines for IEP development and student selection for the alternate assessment; instructionally relevant tasks with guidelines for use materials, accommodations, and scaffolding; automated scoring (for most) and diagnostic feedback; and online reporting system.



#### EMBEDDED TASKS ASSESSMENTS

A series of more than 100 items/tasks per year embedded within instruction, each with various forms and scaffolds to allow for customization to student needs. Each task typically requires one to five minutes for completion.



#### Two options for summative assessment\*



Instructionally embedded tasks used with all DLM students. States may choose to use aggregate data for summative purposes (state decision).\*



Summative assessment for accountability for those states that choose not to use the embedded tasks for accountability.

\*Research will be conducted to review the technical feasibility of using data from the tasks for summative accountability purposes.





#### **DLM Timeline**

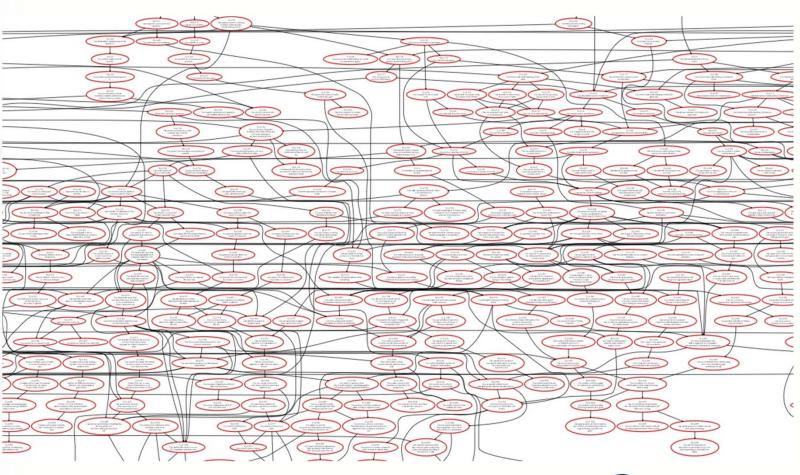
#### **Dynamic Learning Maps Alternate Assessment System Timeline**







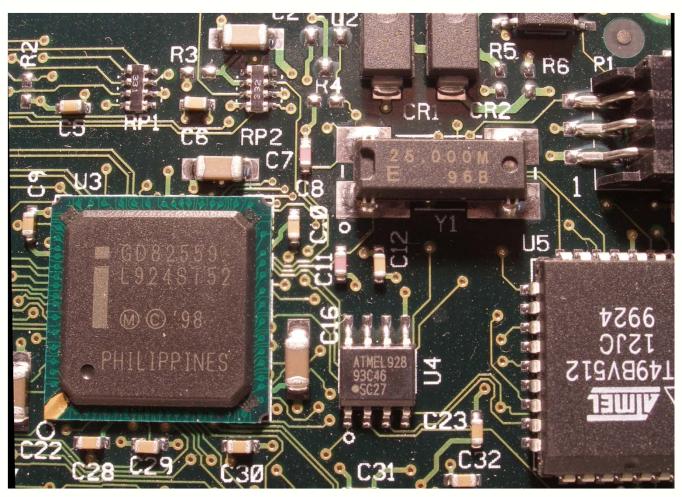
## Section of the ELA Map







#### Maps are an internal system







### Why are we doing this?

Linear Progression
Centralizes notion of 
"superhighway"



Learning Map
Delineates *multiple*pathways







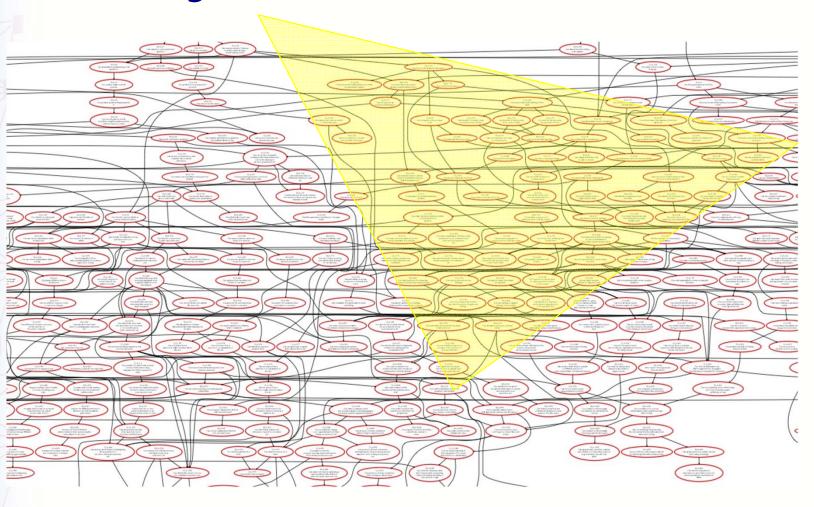
### Map Drives the Assessment







### Bayes-net Inference



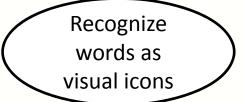




## **Activity - Making Maps**







Reads short stories independently



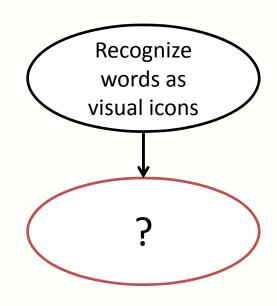


#### **Directions: Place These Nodes**

- a) Reads words instantly because of underlying alphabetic skills
- b) Partially segments phonemes within words (beginning/end sounds)
- c) Reads high frequency words (memorize orthography)
- d) Segments all individual phonemes within words (including medial sounds)





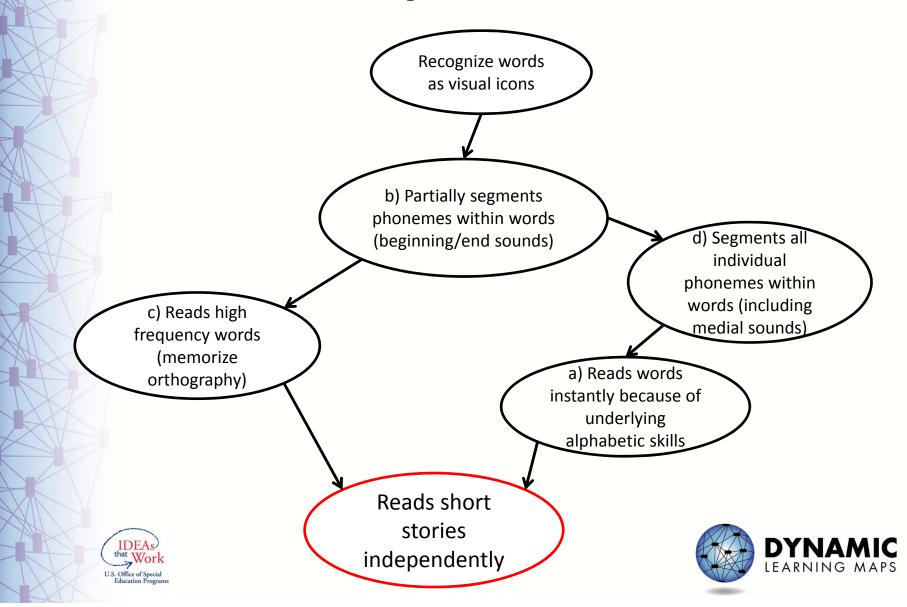


Reads short stories independently





#### Our Attempt at Placement

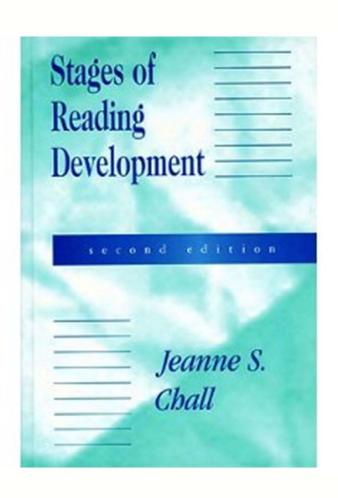


## Traditional Assumptions about Literacy Development





#### Chall's Stages of Reading



Stage 0 - Pre-reading

Stage 1 – Initial Reading

Stage 2 – Confirmation & Fluency

Stage 3 – Reading for Learning the New

Stage 4 – Multiple Viewpoints

Stage 5 – Construction & Reconstruction

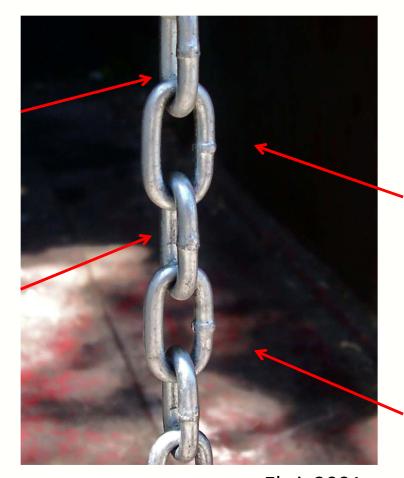




#### Ehri's Phases of Sight Word Reading

Consolidated Alphabetic

Partial Alphabetic



Full Alphabetic

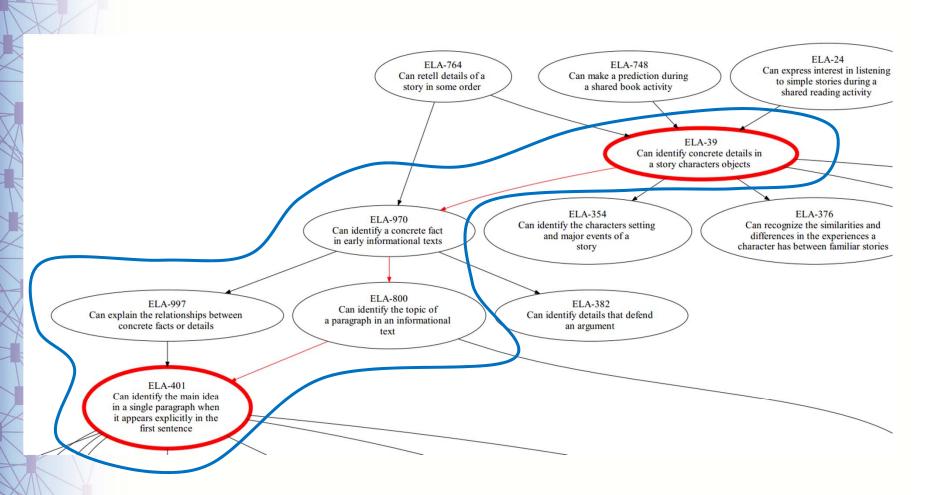
Pre-alphabetic

Ehri, 2001





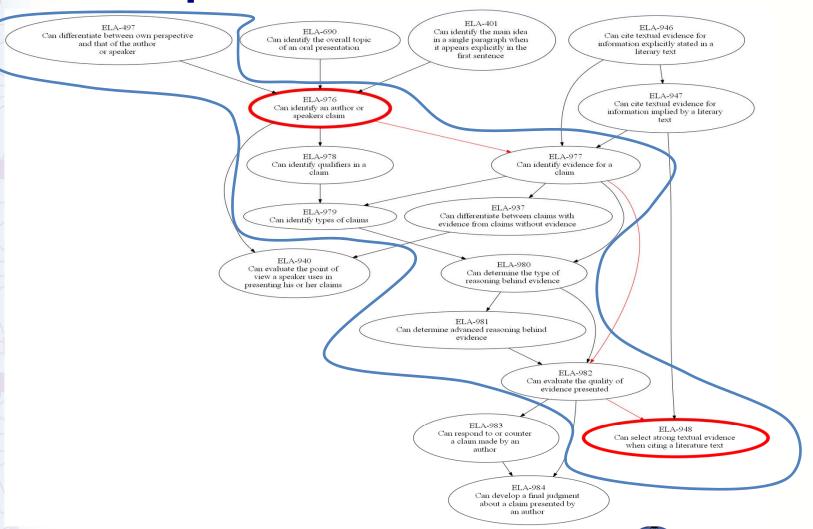
#### Map: Main Idea







#### Map: Claims/Evidence







## Map Development





## Multi-disciplinary Team Completes the Following:

- 1. Review of Literature
- 2. Node Development
- 3. Connection Placement







#### 1. Review of Literature

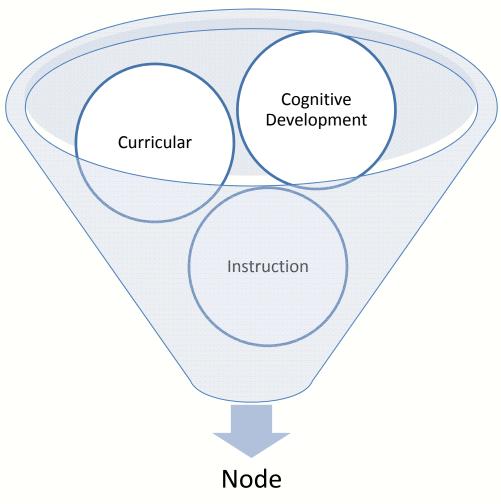
✓ Identify seminal literature

✓ Synthesize literature with expert knowledge





#### 2. Node Development





(Learning Target)



#### Node Development

Can recognize abstract symbols

Cognitive Development

**Curriculum** (specific content)

**Instruction** (method of instruction)





#### 3. Connection Placement

**Connection** = predicted relationship between skills

- ✓ Single direction
- ✓ Multiple connections
- Represents integrated approach to skill development







#### **Educator Review**







#### Content Reviews (K-12 ELA)

K-5 Educator Map Review September 2011 6-12 Educator Map Review January 2012 Special Educator Map Review June 2012 **Beginning of Map Development Expert Map Review** September 2012

**Map Development** 



Jan 2011



#### **Special Educator Review**

K-5 Educator Map Review
September 2011

6-12 Educator Map Review
January 2012

Special Educator Map Review
June 2012

Beginning of Map Development
Jan 2011

Expert Map Review
September 2012

**Map Development** 





#### **Expert Review**



**Map Development** 





#### A New Approach -Supporting Access





#### Multiple Routes within Typical Development Recognize words as visual icons b) Partially segments phonemes within words d) Segments all (beginning/end sounds) individual phonemes within words (including medial sounds) c) Reads high frequency words a) Reads words (memorize instantly because of orthography) underlying alphabetic skills Reads short stories independently

#### Multiple Routes within Typical Development Recognize words as visual icons b) Partially segments phonemes within words d) Segments all (beginning/end sounds) individual phonemes within words (including medial sounds) c) Reads high frequency words a) Reads words (memorize instantly because of orthography) underlying alphabetic skills Reads short stories independently

## What about students with SCD AND sensory differences?





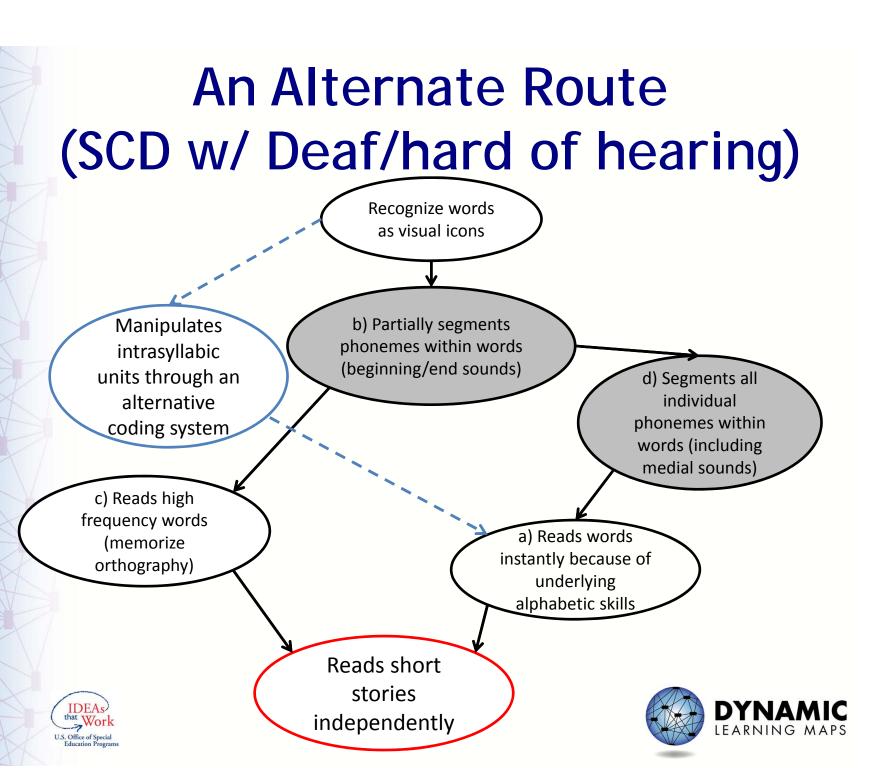


### Activity - inaccessible nodes





#### Are any of these nodes inaccessible? Recognize words as visual icons b) Partially segments phonemes within words (beginning/end sounds) d) Segments all individual phonemes within words (including c) Reads high medial sounds) frequency words a) Reads words (memorize instantly because of orthography) underlying alphabetic skills Reads short stories independently



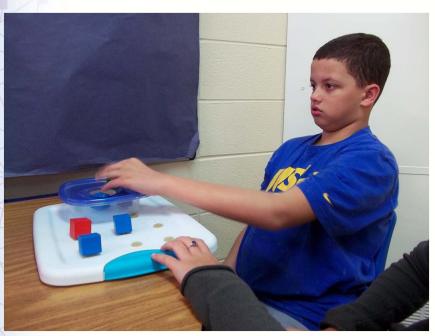
#### Kearns Study (2011)

- 1% Population can be described as...
  - Symbolic (67%): can used oral speech or augmentative and alternative communication (AAC) to communicate a wide variety of intents
  - Emergent Symbolic (23%): can use objects, pictures, signs, and gestures in addition to oral speech to communicate intents
  - Pre-symbolic (10%): can use cries, facial expressions, and body movements, but the intent of their communicative output had to be interpreted by the listener/observer





#### Student on the Alt. Assessment



- Significant cognitive disability
- Visual impairment
- Hearing impairment

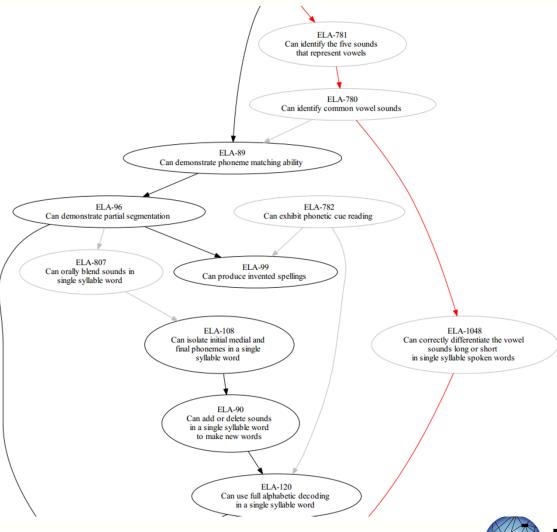
How does this impact the map (i.e., the items a student is driven to)?





#### **Inaccessible Nodes** ELA-24 Can express interest in listening to simple stories during a shared reading activity ELA-756 Can name objects in pictures during a shared reading activity ELA-757 Can use a picture as a source of information ELA-70 laces and Can demonstrate symbol recognition Can demonstrate § te detail EL ELA-179 Can recognize Can identify letter names ELA-414 ELA-177 ELA-181 Can identify which part of Can identify most common sounds Can copy upper and lower Can read high a text an illustration describes of consonants case letters ELA-410 ELA-369 Can describe the characters setting ELA-418 ELA-259 Can recognize the difference between and events of a story Can distinguish between information presented Capitalizes the first letter story books and information books based on illustrations and details in a text and illustrations sentence from the text **DYNAMIC** LEARNING MAPS

#### **Inaccessible Nodes**

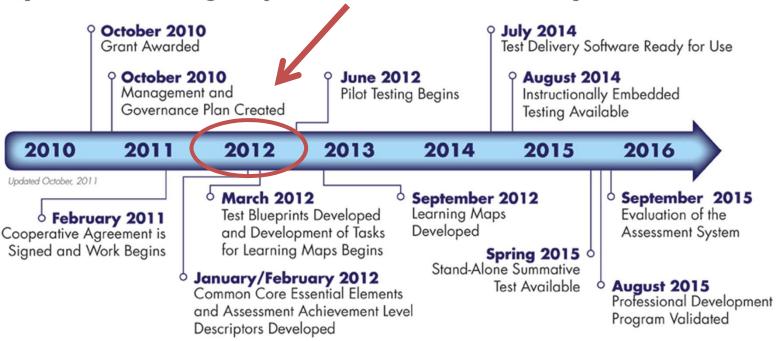






#### Where are we now?

#### **Dynamic Learning Maps Alternate Assessment System Timeline**







#### THANK YOU!

For more information, please contact:

dlm@ku.edu

or

Go to: www.dynamiclearningmaps.org



The present publication was developed under grant 84.373X100001 from the U.S. Department of Education, Office of Special Education Programs. The views expressed herein are solely those of the author(s), and no official endorsement by the U.S. Department should be inferred.

