



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



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.



**DYNAMIC**  
LEARNING MAPS

# 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

---

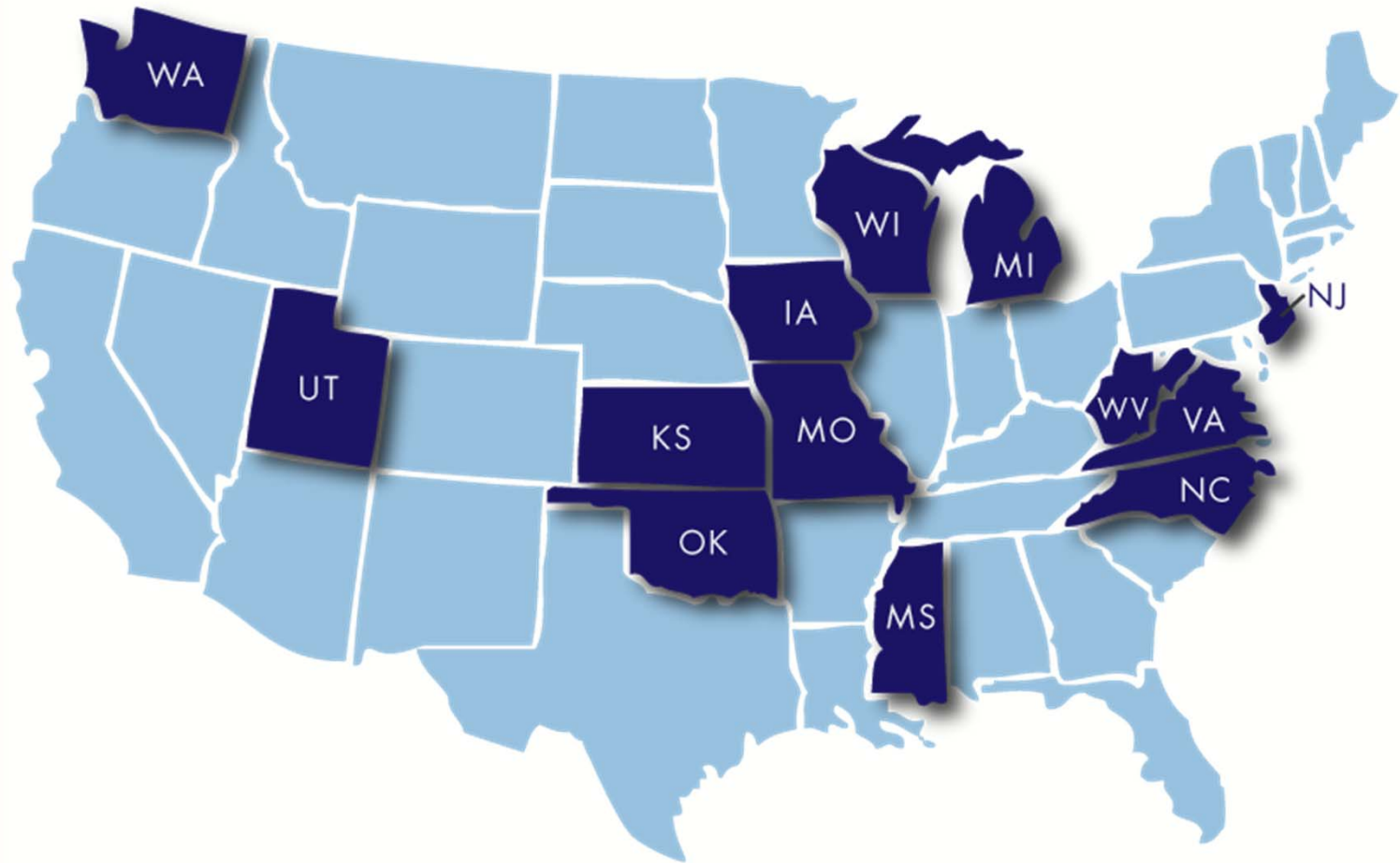
English Language Arts  
&  
Literacy in History/Social Studies,  
Science, and Technical Subjects



# Assessment Consortia

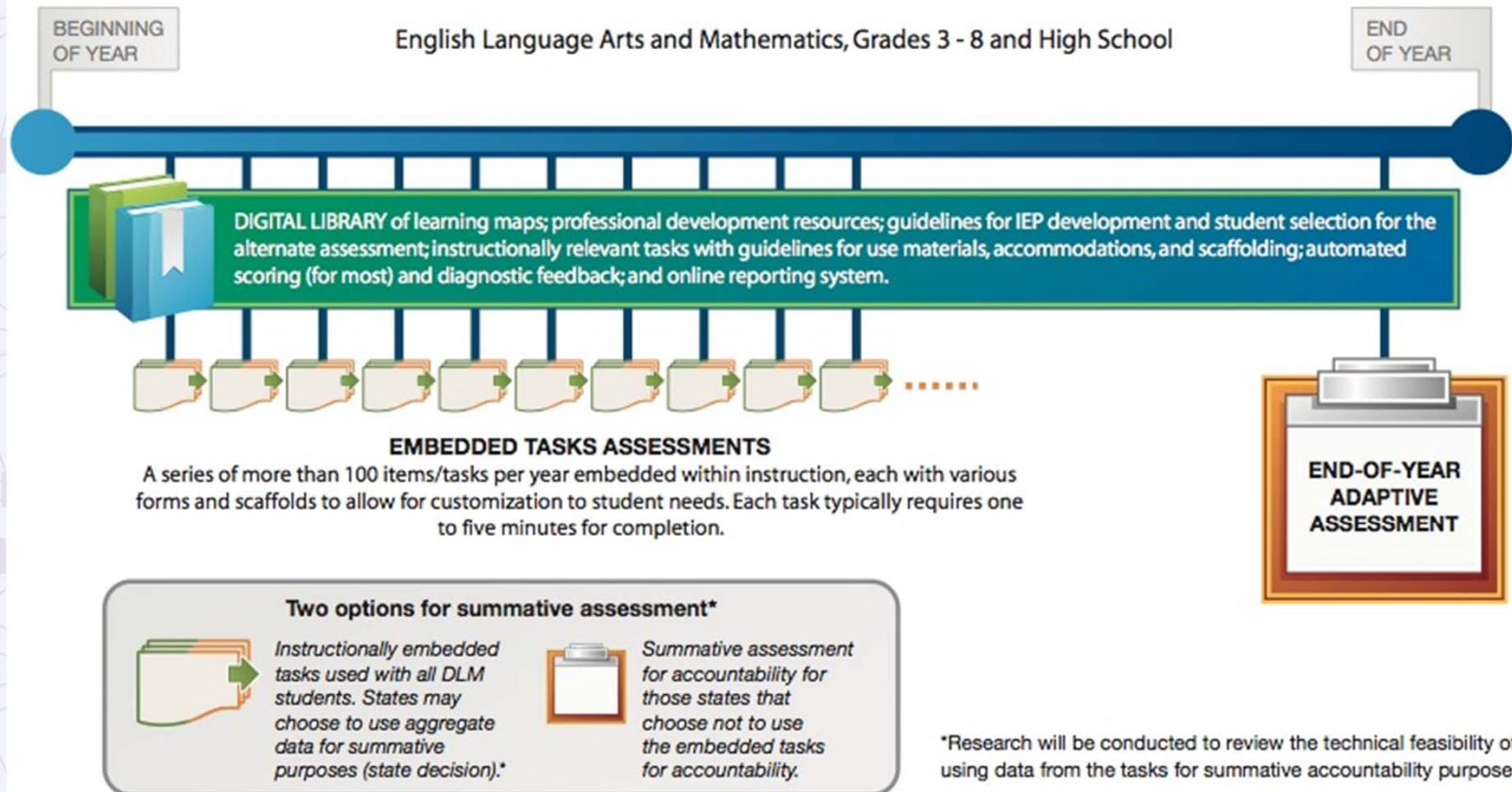
General Assessment	Alt. Assessment	EL Assessment
SMARTER Balance	DLM	ASSETS
PARCC	NCSC	

# DLM State Participants



# Overview of Dynamic Learning Maps

## DLM Assessment System



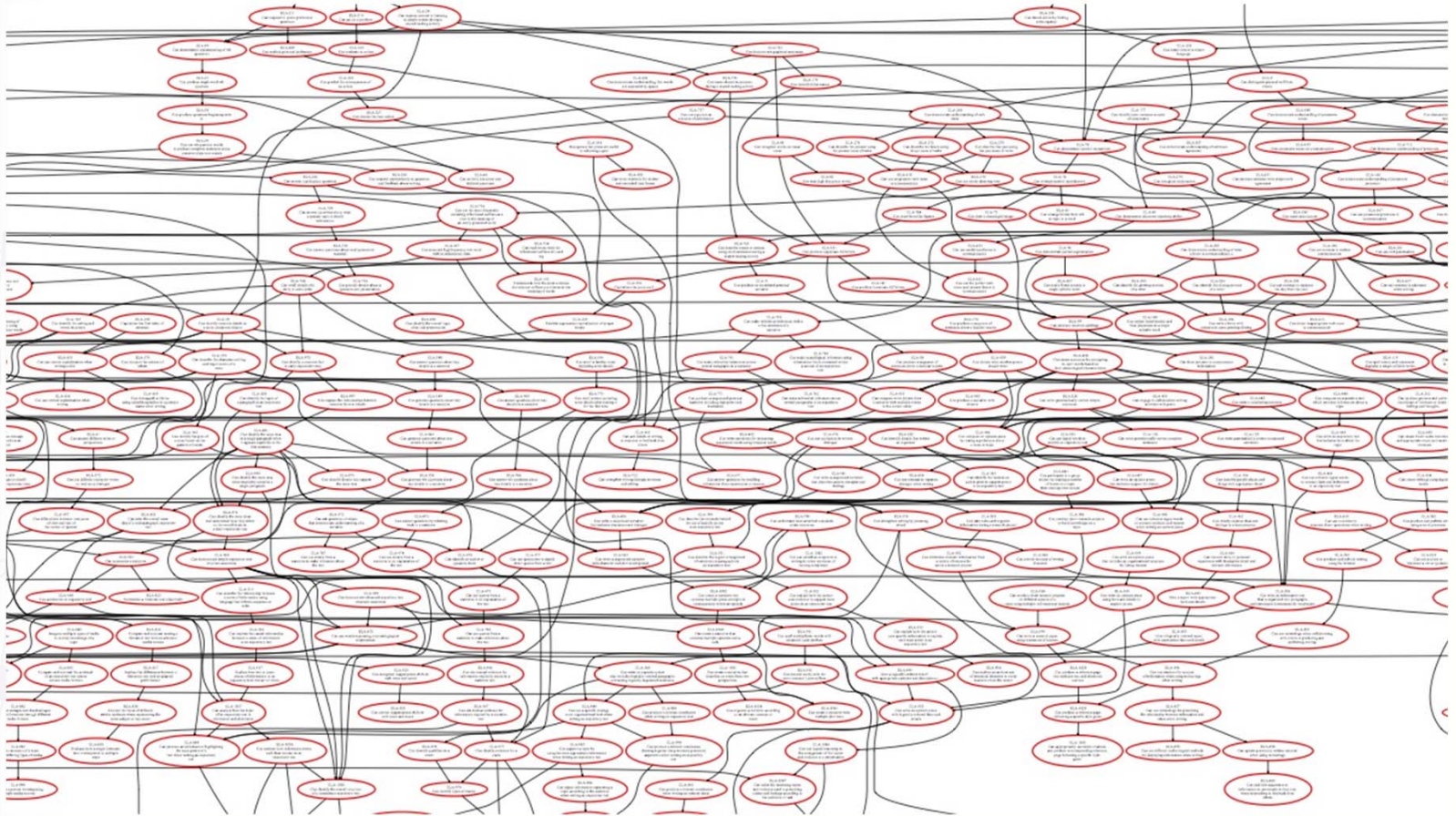
# DLM Timeline

## Dynamic Learning Maps Alternate Assessment System Timeline

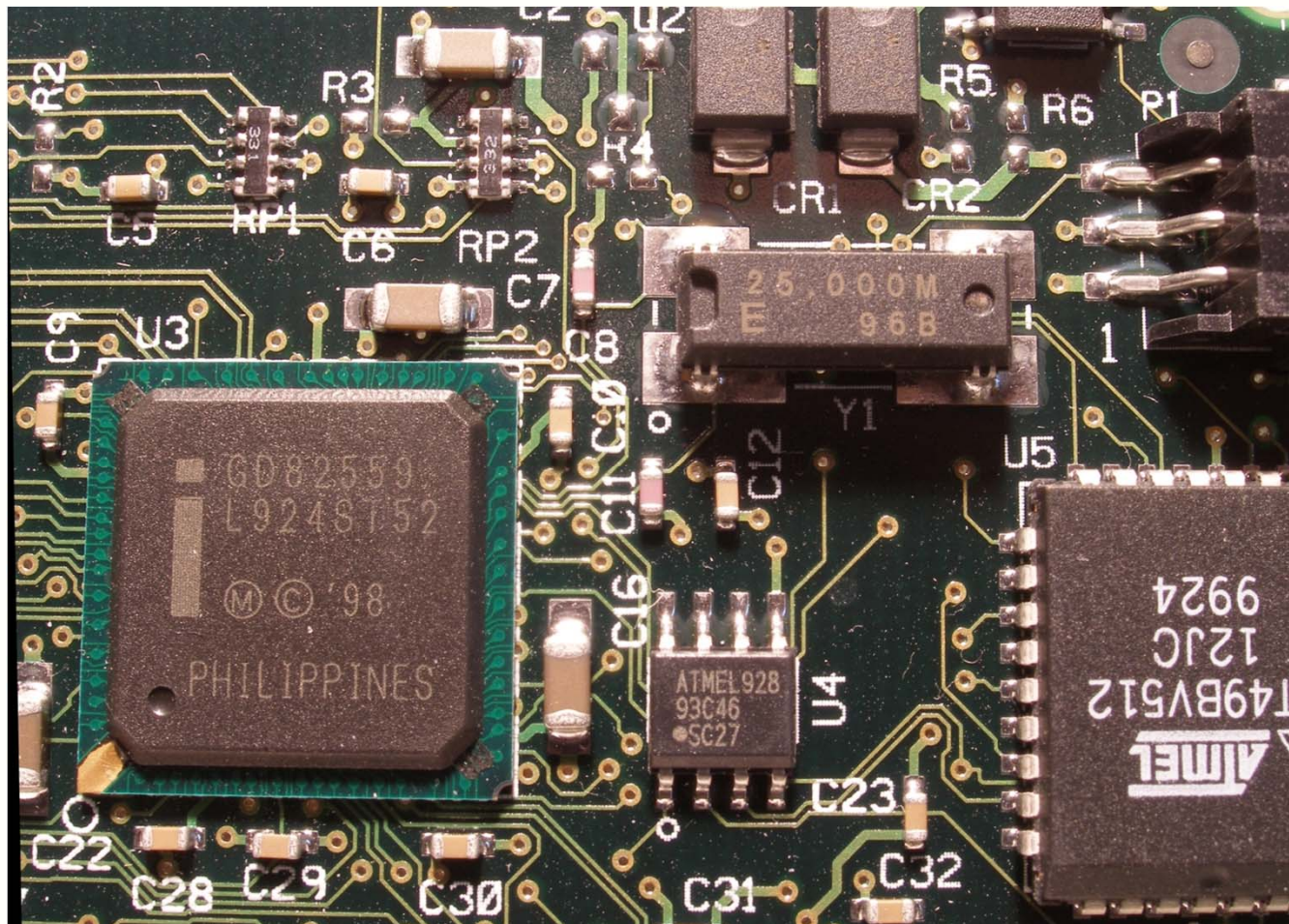




# Section of the ELA Map



# Maps are an internal system



# Why are we doing this?

Linear Progression

Centralizes notion of  
"superhighway"

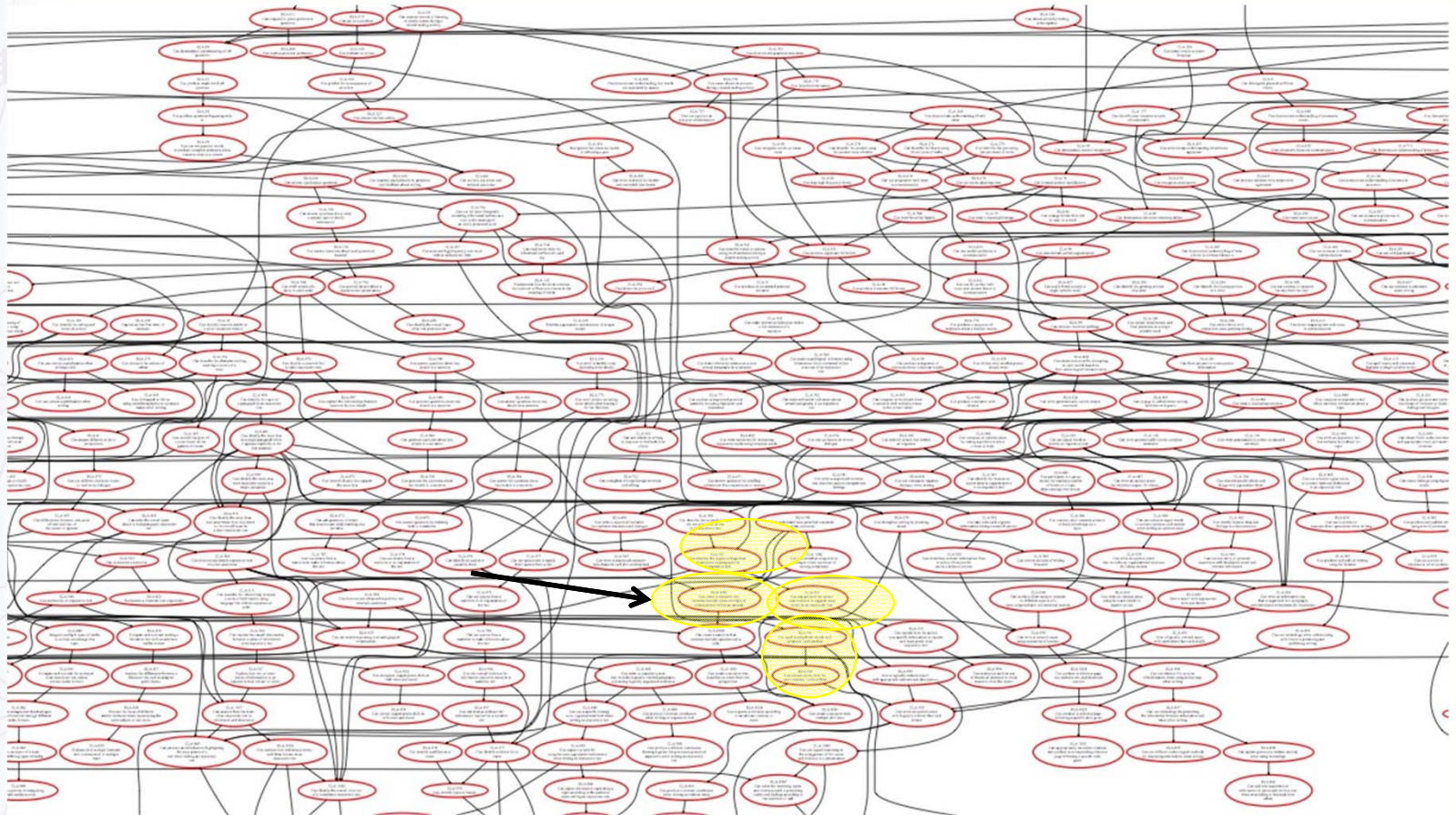


Learning Map

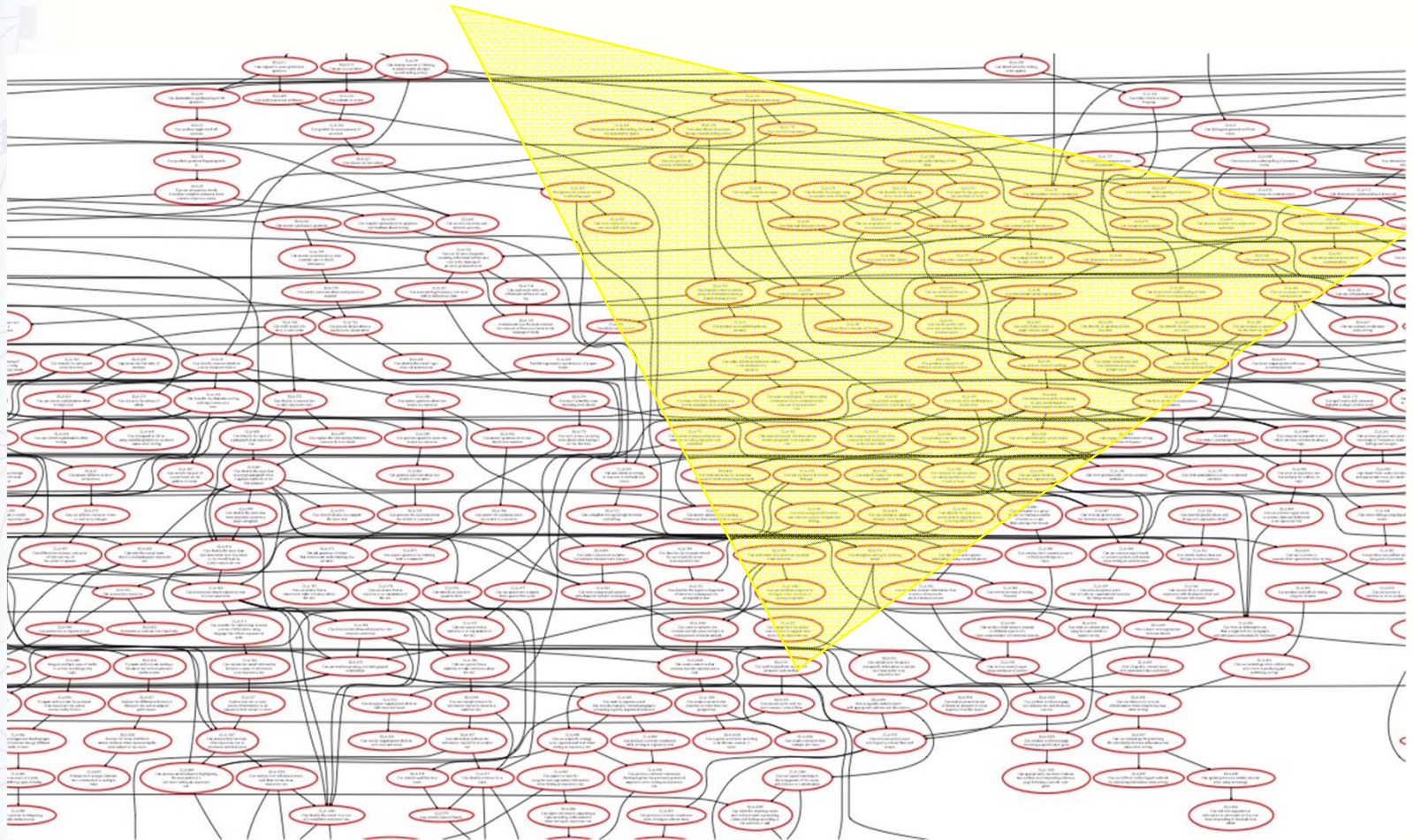
Delineates *multiple*  
pathways




# Map Drives the Assessment



# Bayes-net Inference



# Activity - Making Maps




Recognize  
words as  
visual icons

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)





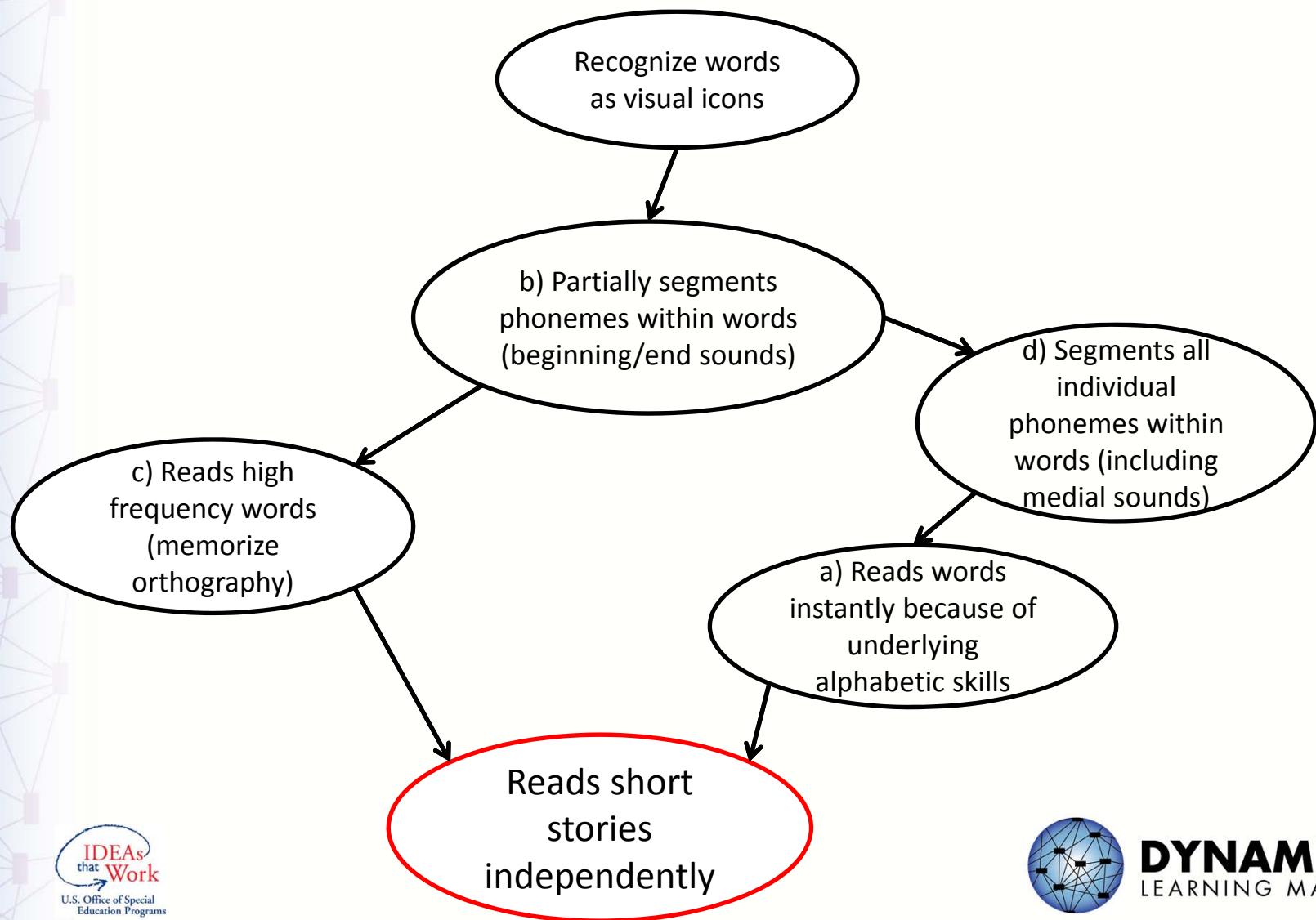
Recognize  
words as  
visual icons



?

Reads short  
stories  
independently

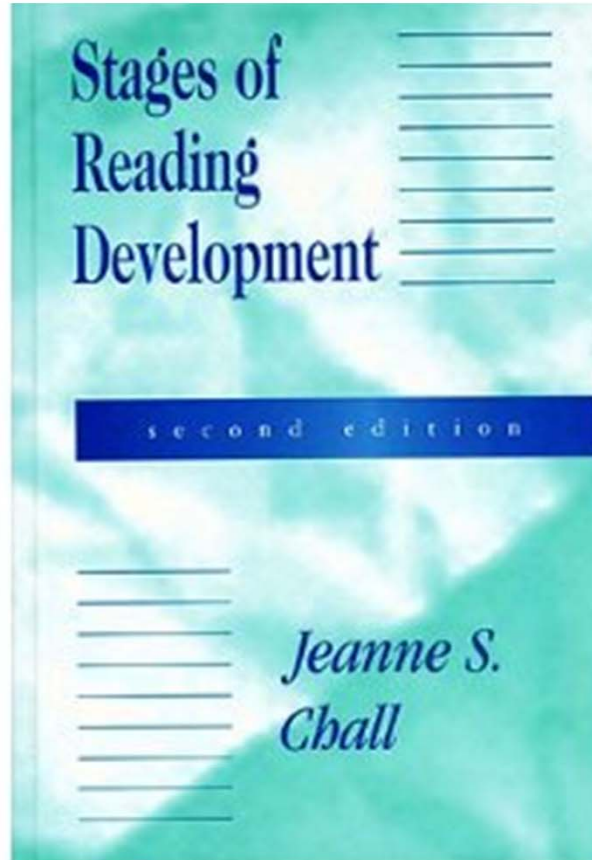
# Our Attempt at Placement





# 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

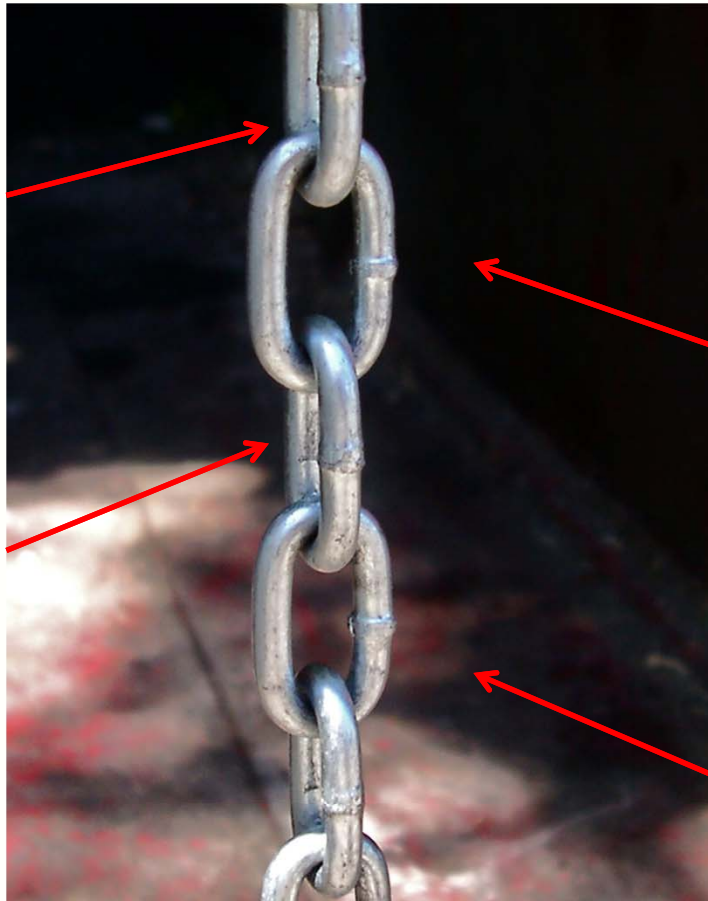
Stage 4 – Multiple Viewpoints

Stage 5 – Construction & Reconstruction

# Ehri's Phases of Sight Word Reading

Consolidated  
Alphabetic

Partial Alphabetic

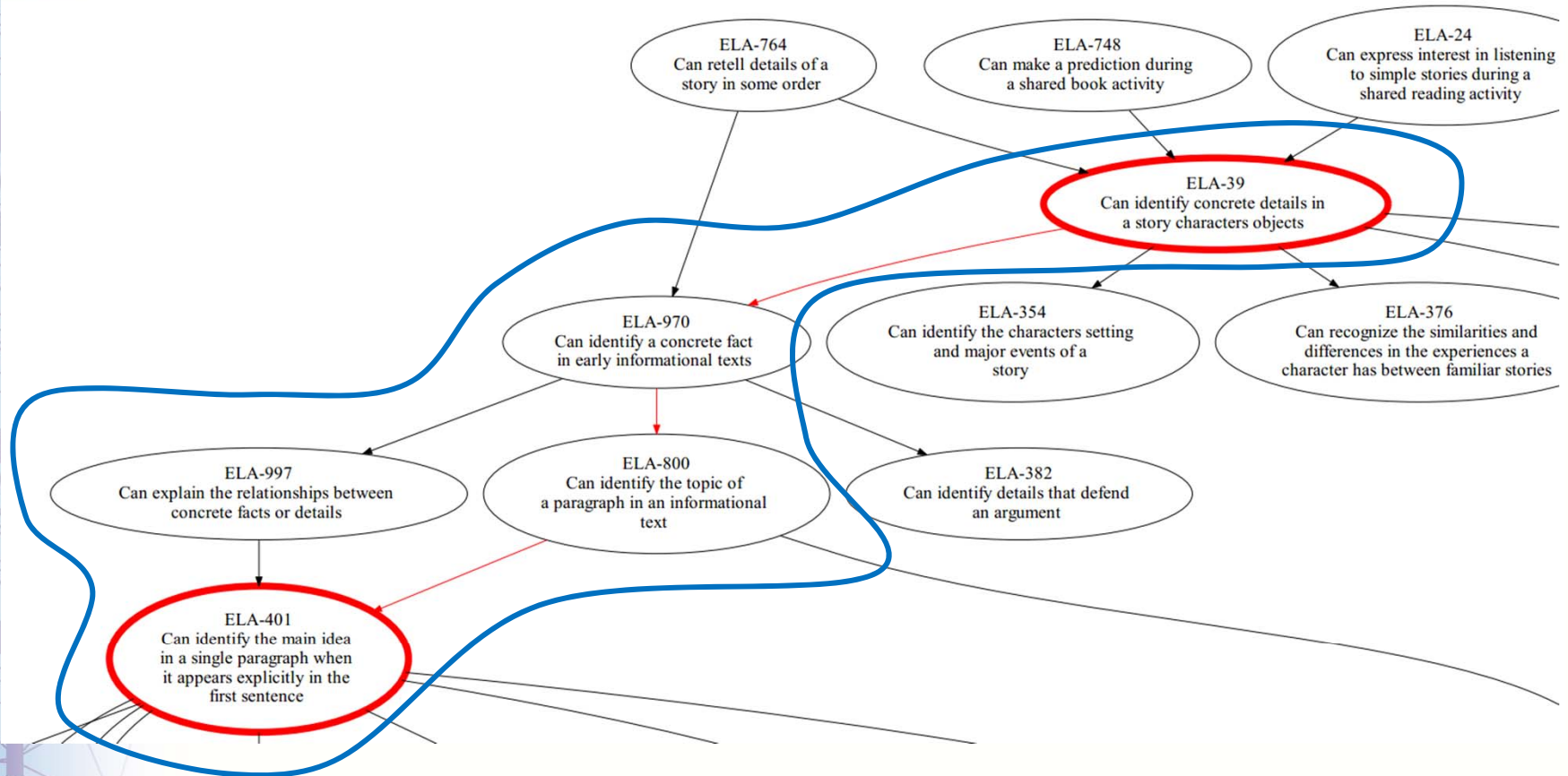


Full Alphabetic

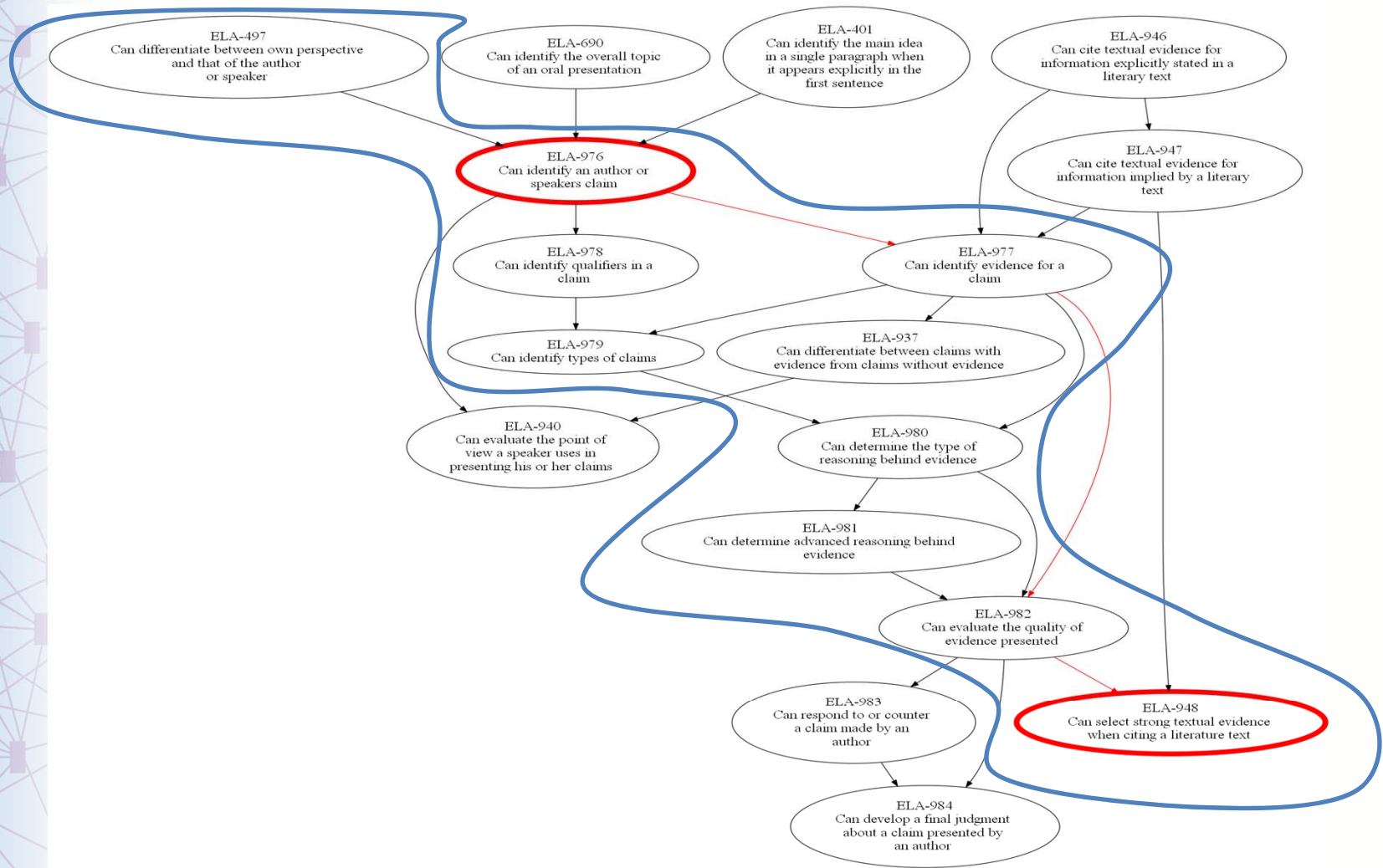
Pre-alphabetic

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

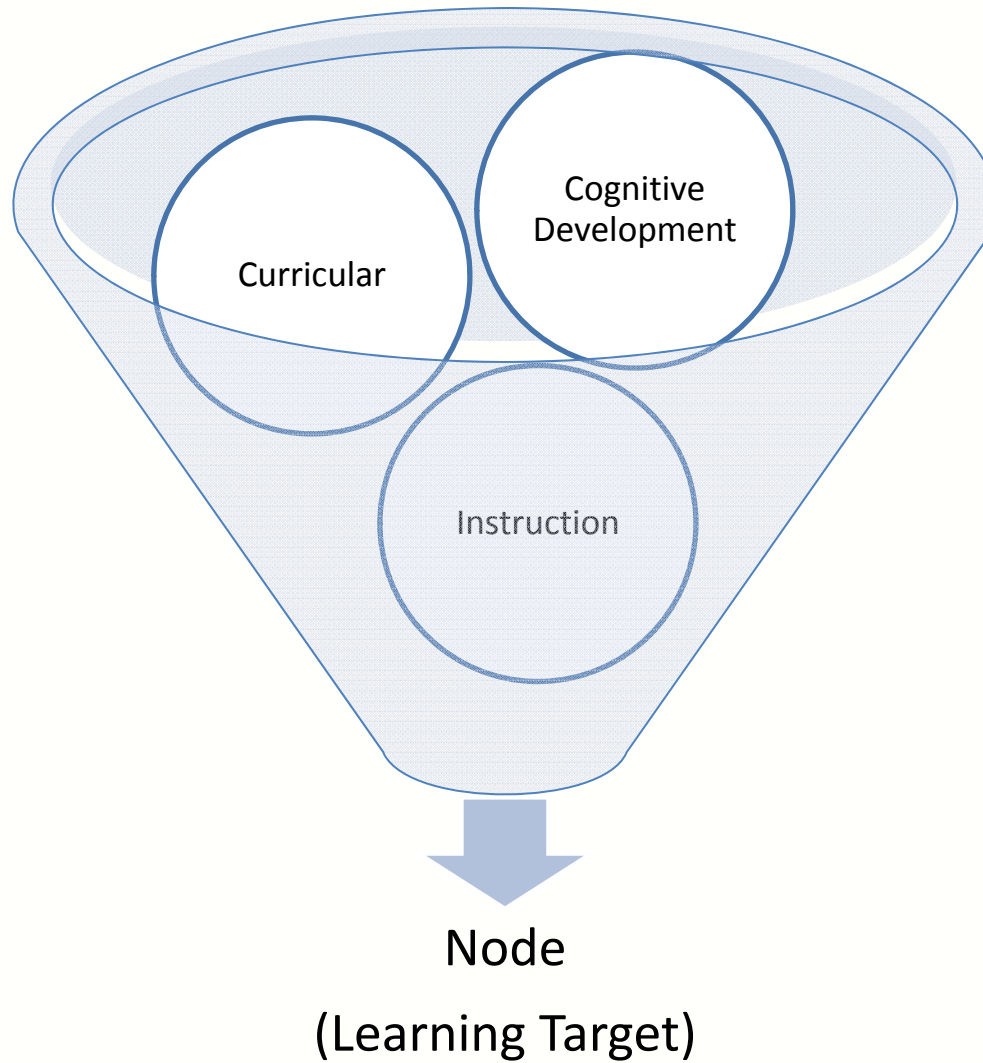


# 1. Review of Literature

- ✓ Identify seminal literature
- ✓ Synthesize literature with expert knowledge

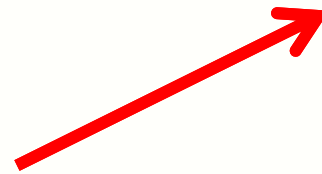


# 2. Node Development



# Node Development

Can recognize  
abstract symbols



**Cognitive  
Development**

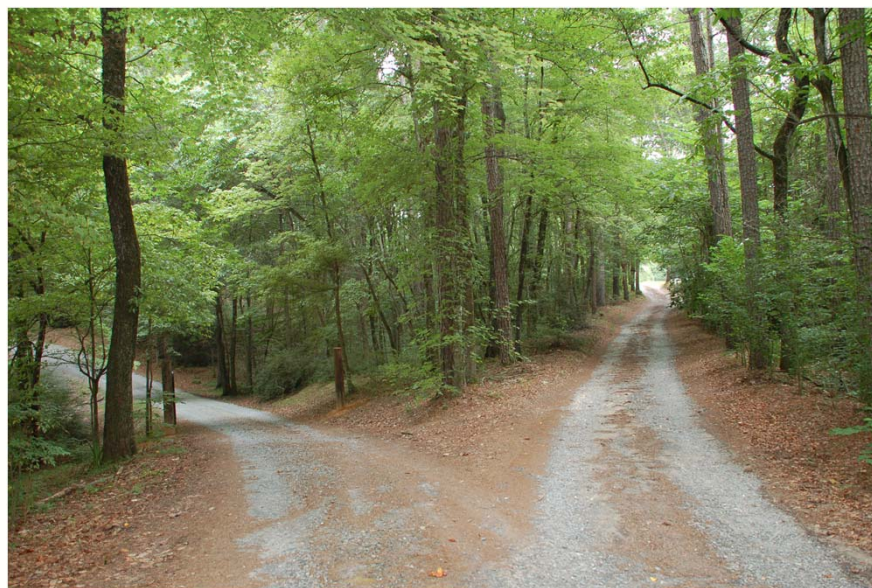
**Curriculum**  
(specific content)

**Instruction**  
(method of  
instruction)

# 3. Connection Placement

**Connection** = predicted relationship between skills

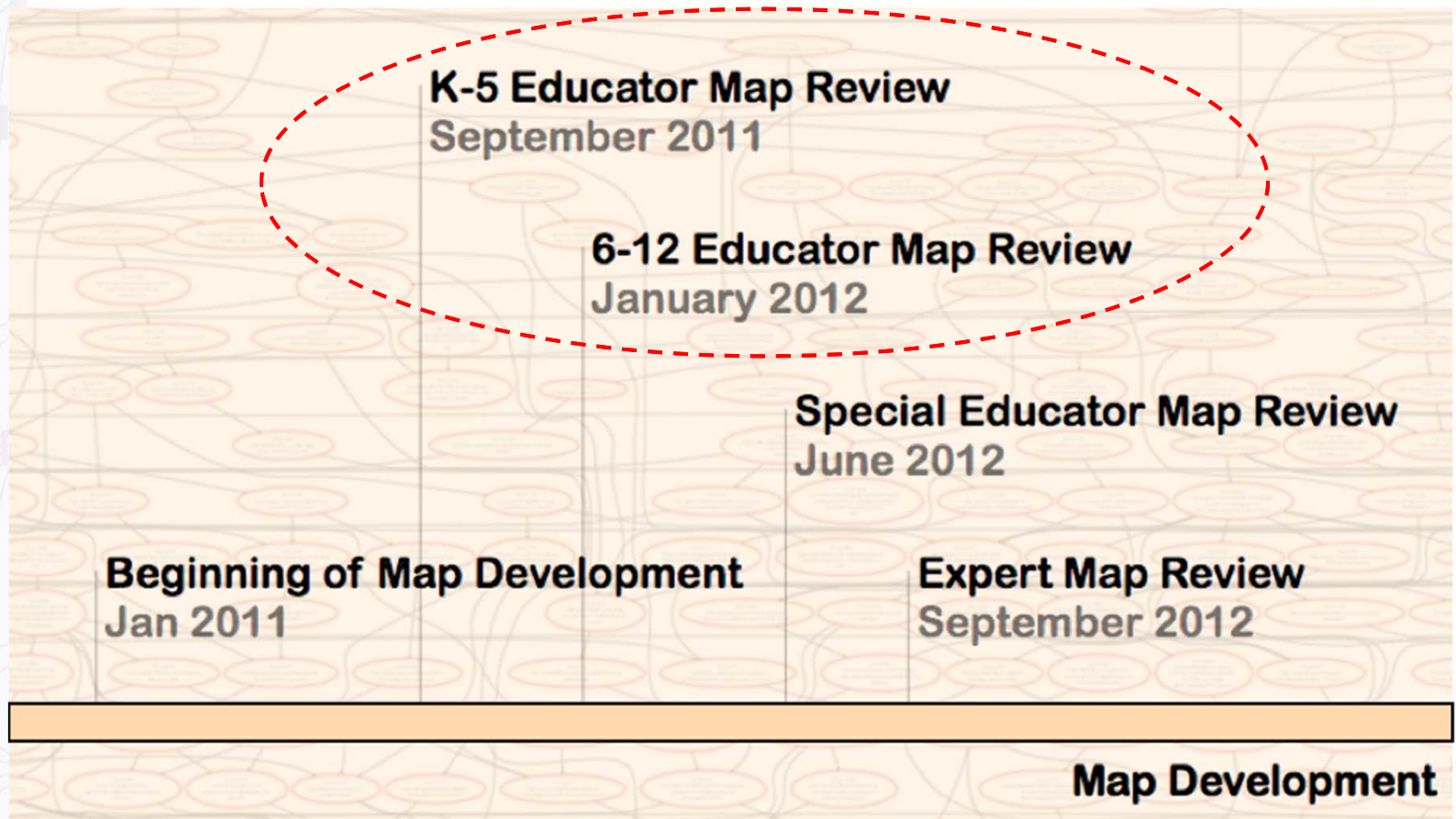
- ✓ Single direction
- ✓ Multiple connections
- ✓ Represents integrated approach to skill development



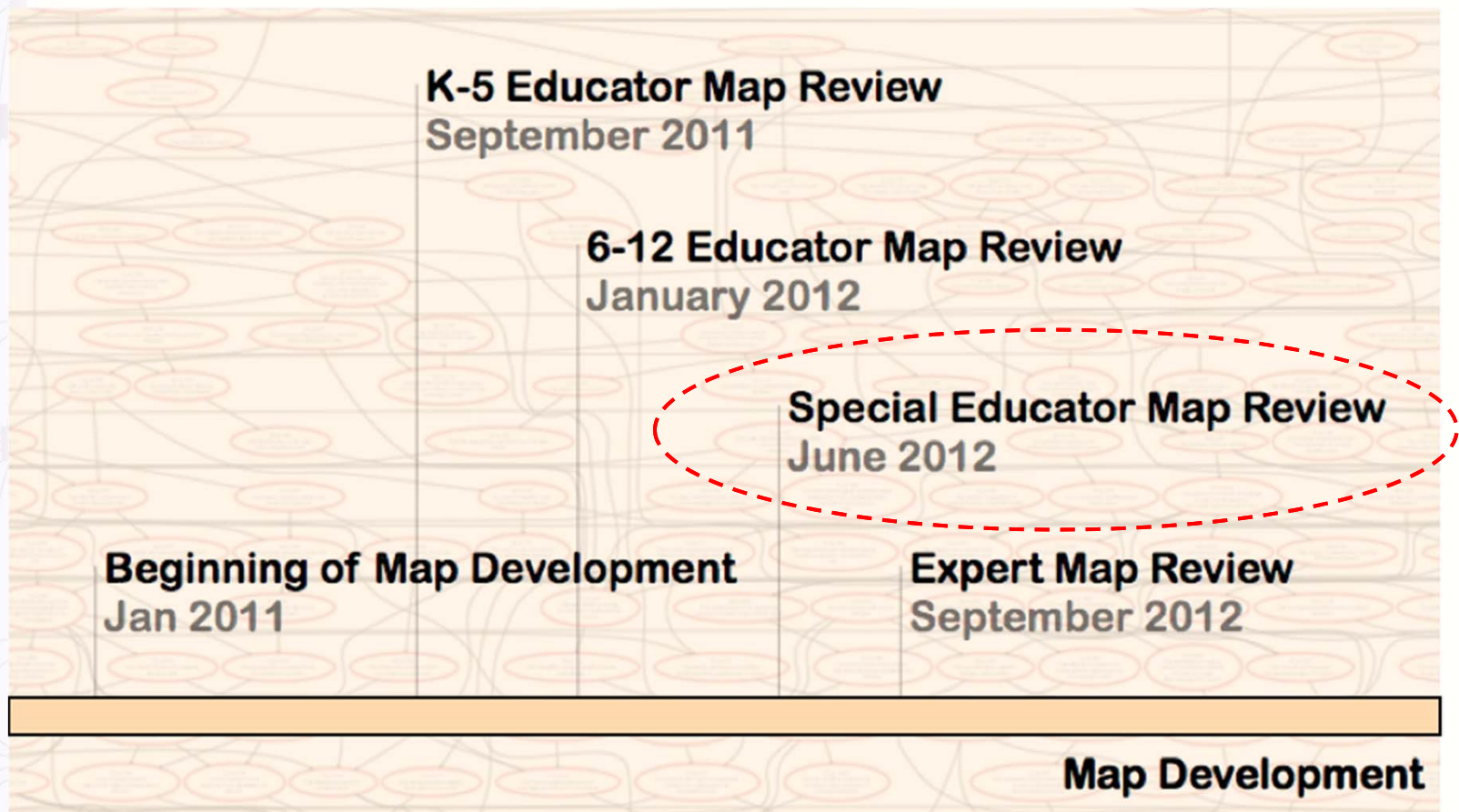
# Educator Review



# Content Reviews (K-12 ELA)



# Special Educator Review





# Expert 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

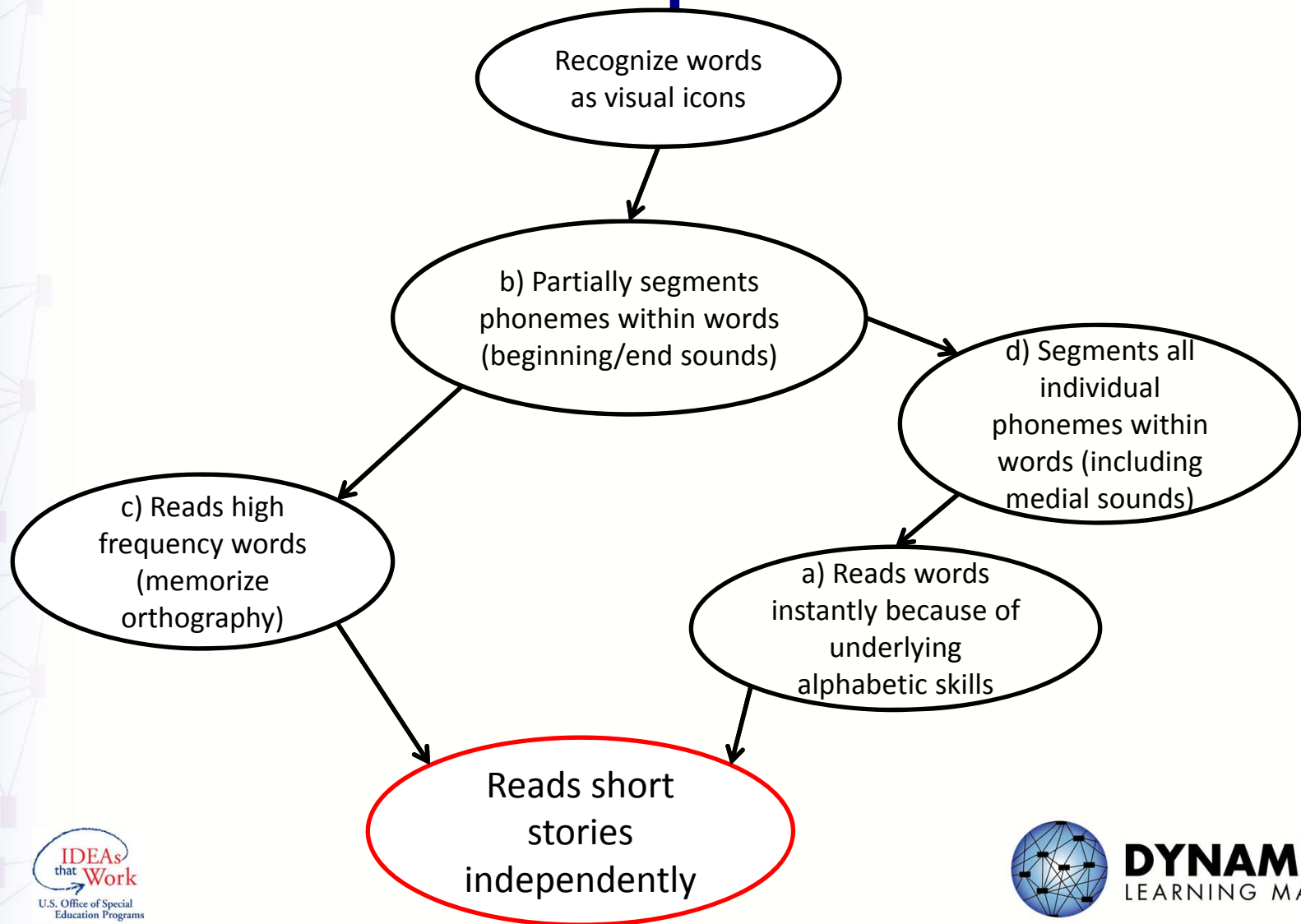
**Expert Map Review**  
September 2012

**Map Development**

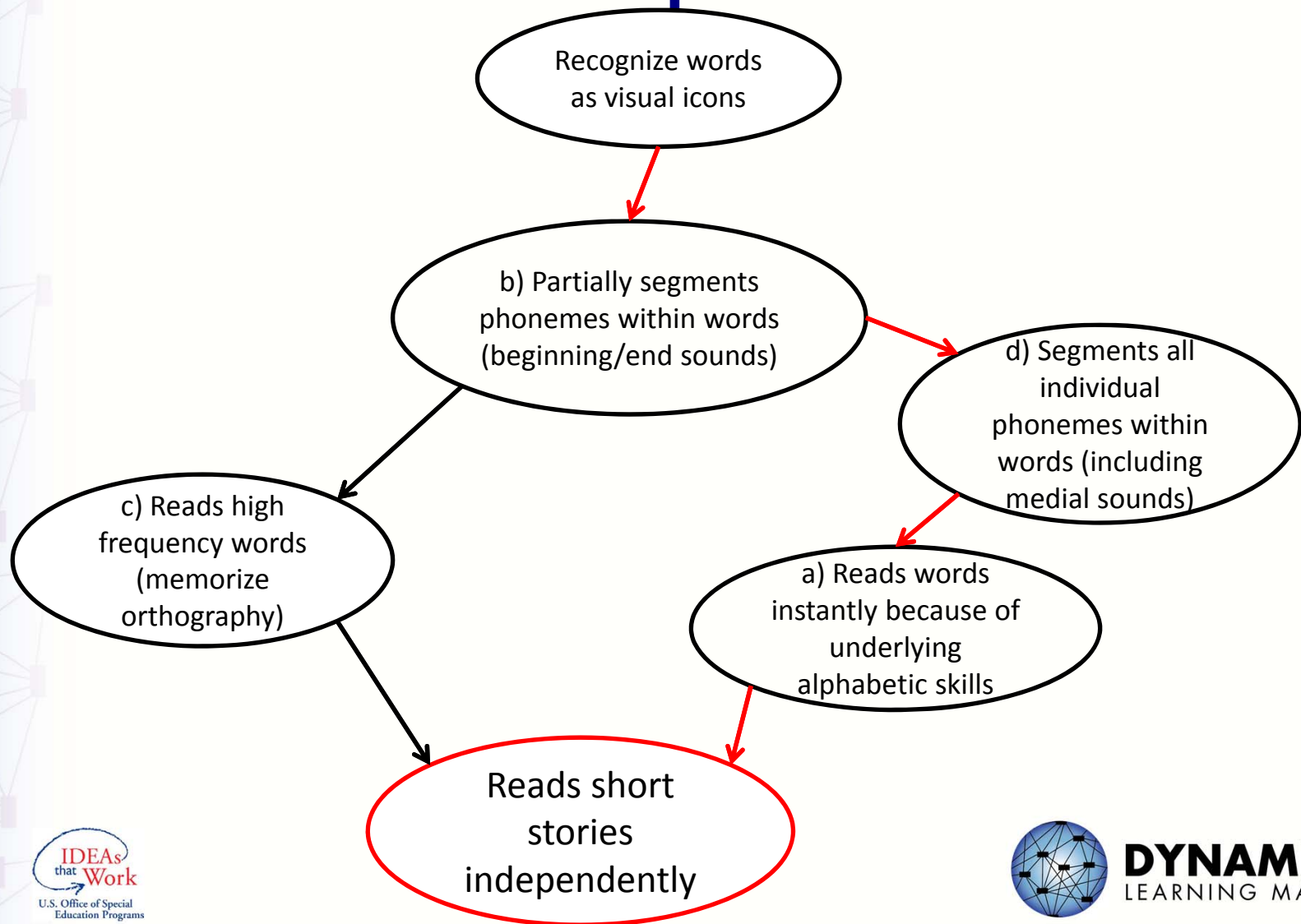
# A New Approach - Supporting Access



# Multiple Routes within Typical Development



# Multiple Routes within Typical Development

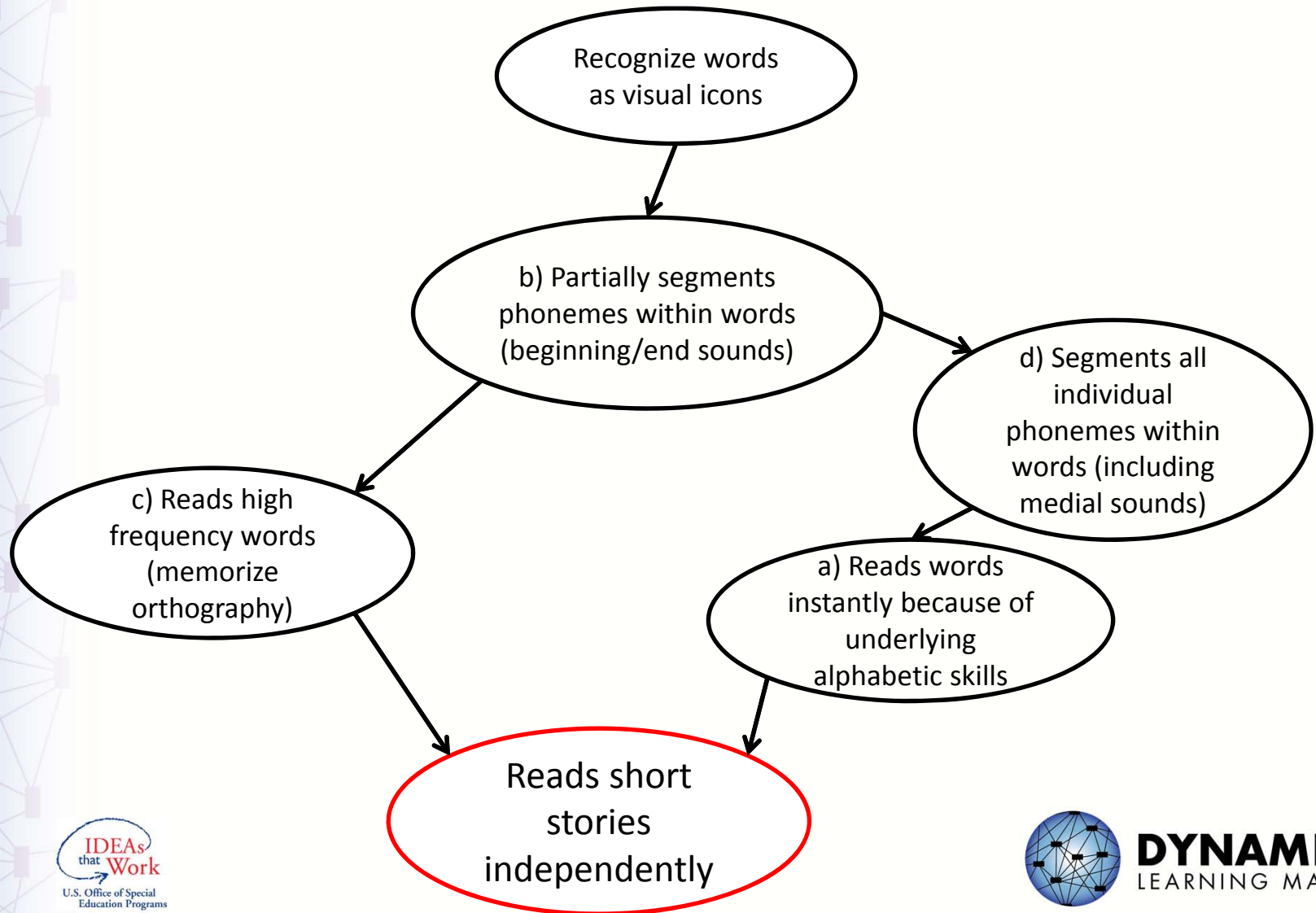


# What about students with SCD AND sensory differences?

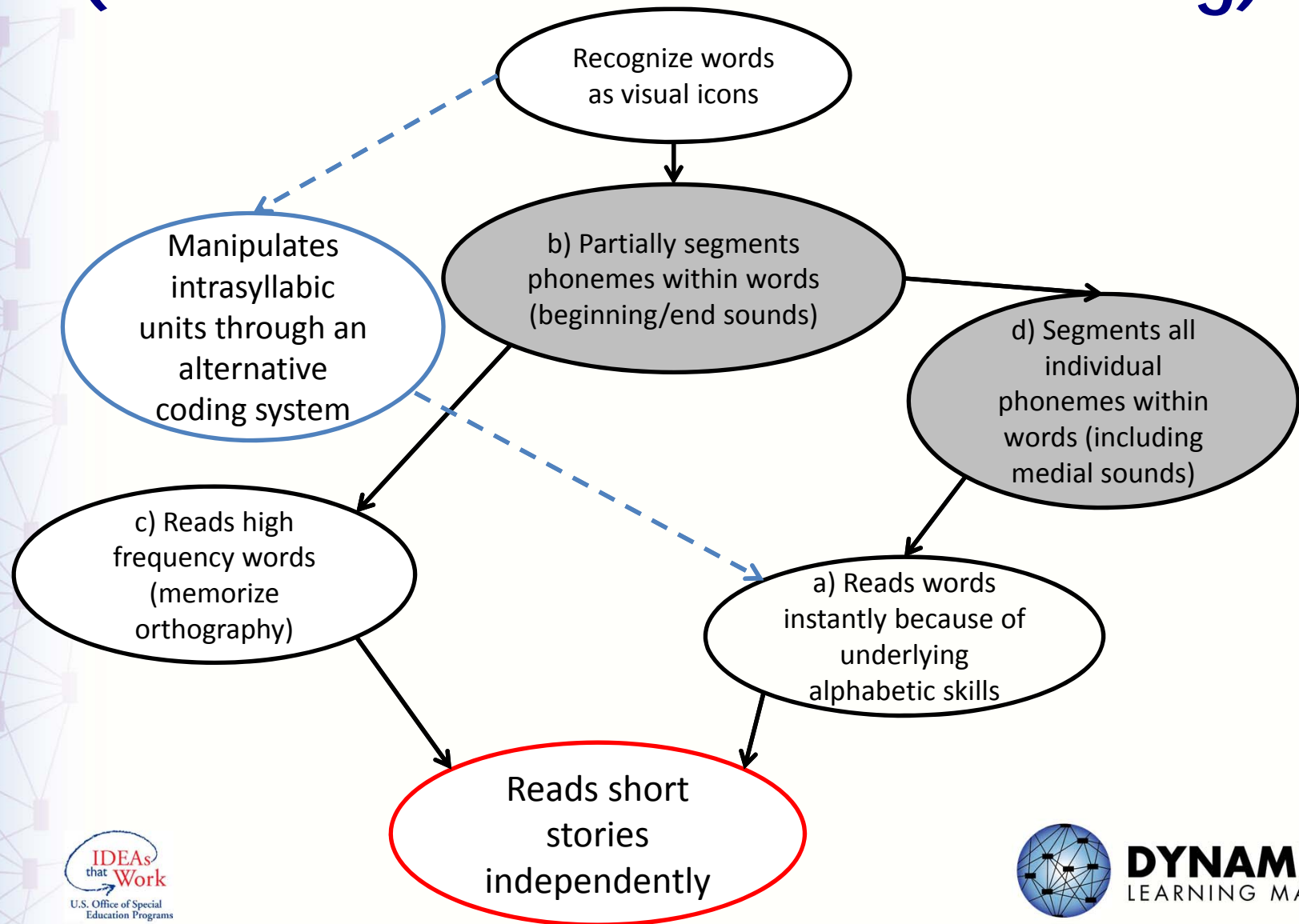


# Activity - inaccessible nodes

# Are any of these nodes inaccessible?



# An Alternate Route (SCD w/ Deaf/hard of hearing)





# Kearns Study (2011)

- 1% Population can be described as...
  - **Symbolic** (67%): can use 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

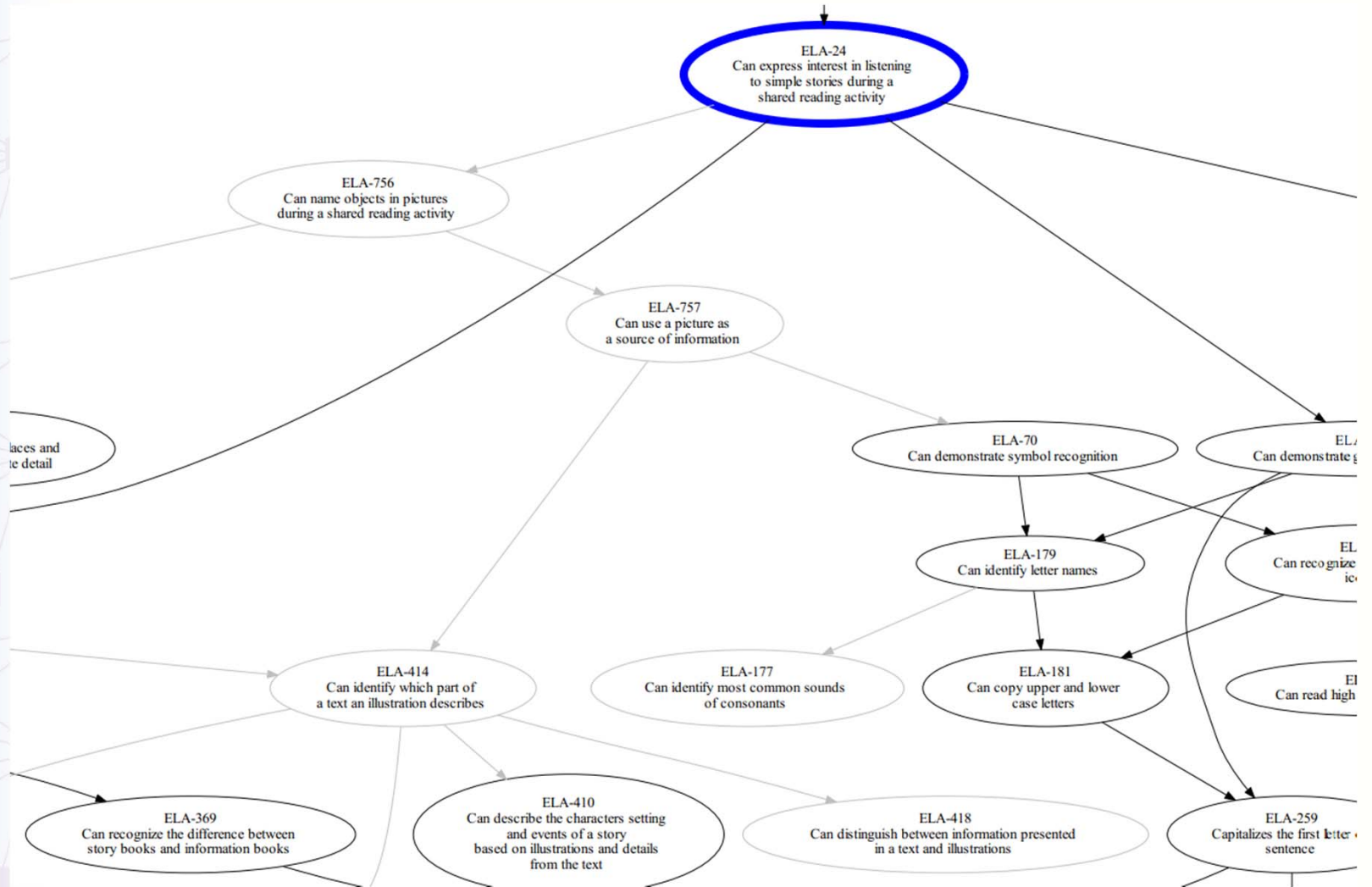
# Student on the Alt. Assessment



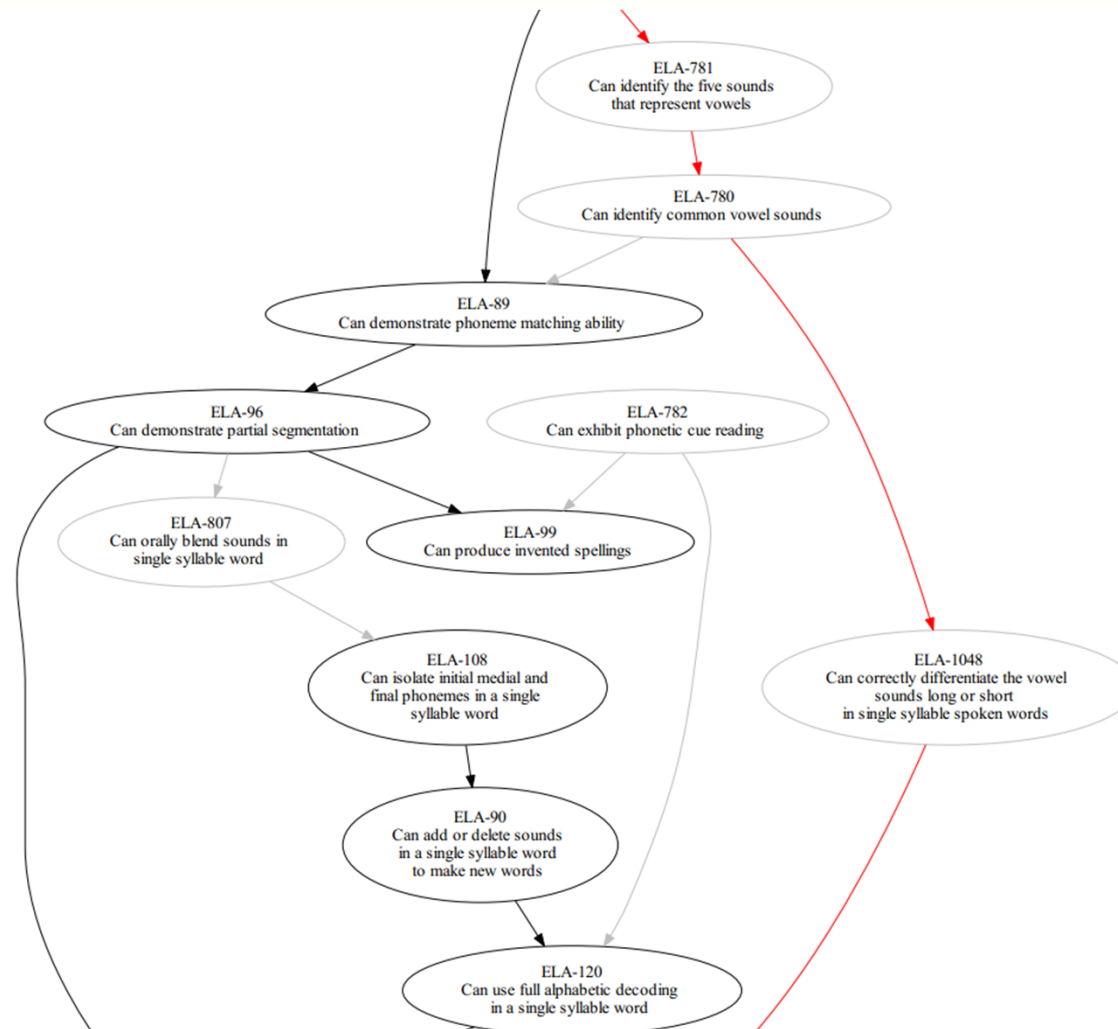
- Significant cognitive disability
- Visual impairment
- Hearing impairment

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

# Inaccessible Nodes

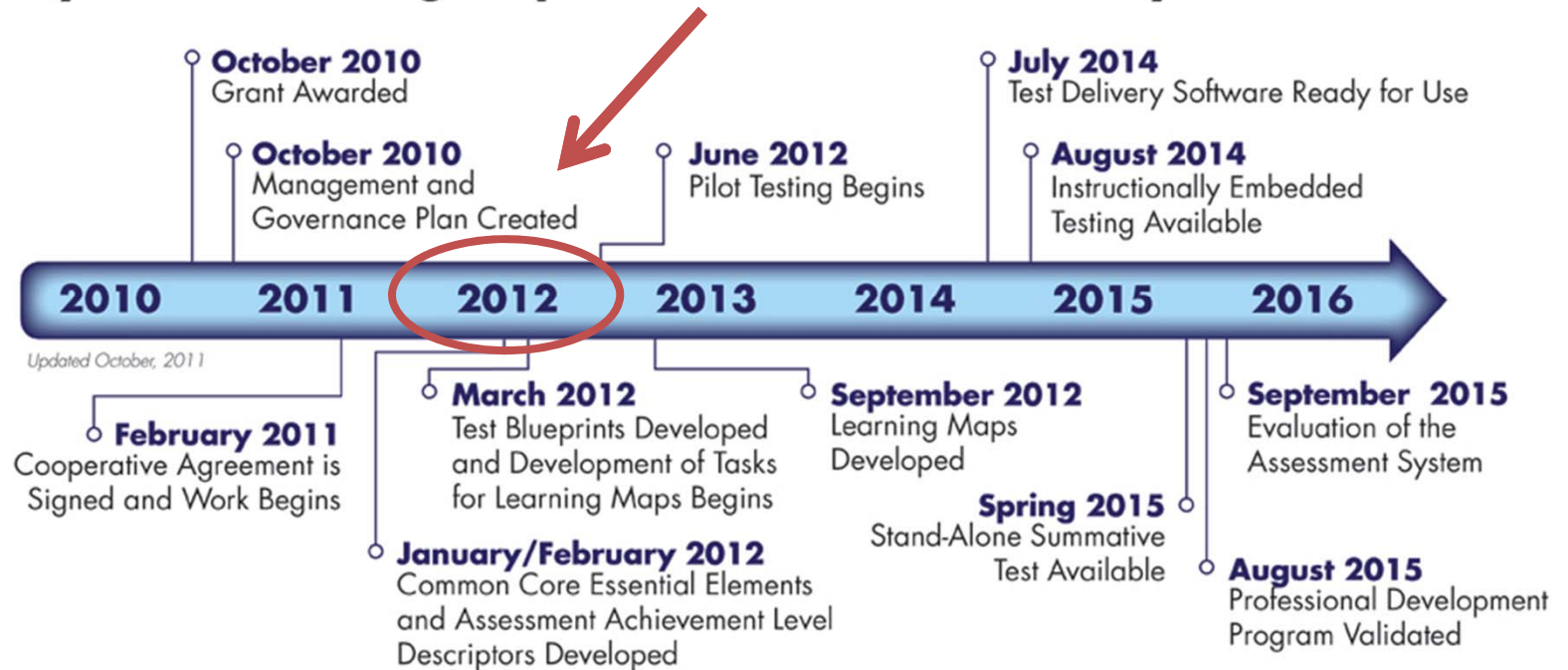


# Inaccessible Nodes



# Where are we now?

## Dynamic Learning Maps Alternate Assessment System Timeline





# THANK YOU!

For more information, please contact:

[d1m@ku.edu](mailto:d1m@ku.edu)

or

Go to: [www.dynamiclearningmaps.org](http://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.



**DYNAMIC**  
LEARNING MAPS