Applying a Learning Progressions Schema to Curriculum Mapping and Instructional Planning

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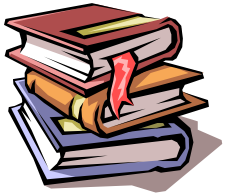

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What can LPs look like in the classroom? [video link at end of PP]

Hawai'i Progress Maps Project

- 2 years to develop with teachers (using available research and professional judgment)
- 1 year to implement and track "struggling learners" (pre-mid-post)
- 50 teachers - K-8 ELA and math
- Progression descriptions validated & revised using student work samples analyzed collaboratively

Some working definitions of LPs

- "descriptions of the successively more sophisticated ways of thinking about an idea that follow one another as students learn" (Wilson & Bertenthal, 2005)
- "a picture of the path students typically follow as they learn…a description of skills, understandings, and knowledge in the sequence in which they typically develop" (Masters & Forster,1996)

Definitions (continued)…

- Learning progressions propose the *intermediate* understandings that are "reasonably coherent networks of ideas and practices…that contribute to building a more mature understanding…the important precursor ideas may not look like the later ideas, yet crucially contribute to their construction." (Duschl, et al., 2007)

Learning Progressions can provide a schema for …

- Planning & Modifying Curriculum and Instruction
- Developing Meaningful Assessments – especially formative assessments
- Monitoring Progress
  - Mastery of Specific Benchmark Concepts & Skills
  - Novice ⟷ Expert Performance

Looking at 4 *Interrelated Guiding Principles* of Learning Progressions

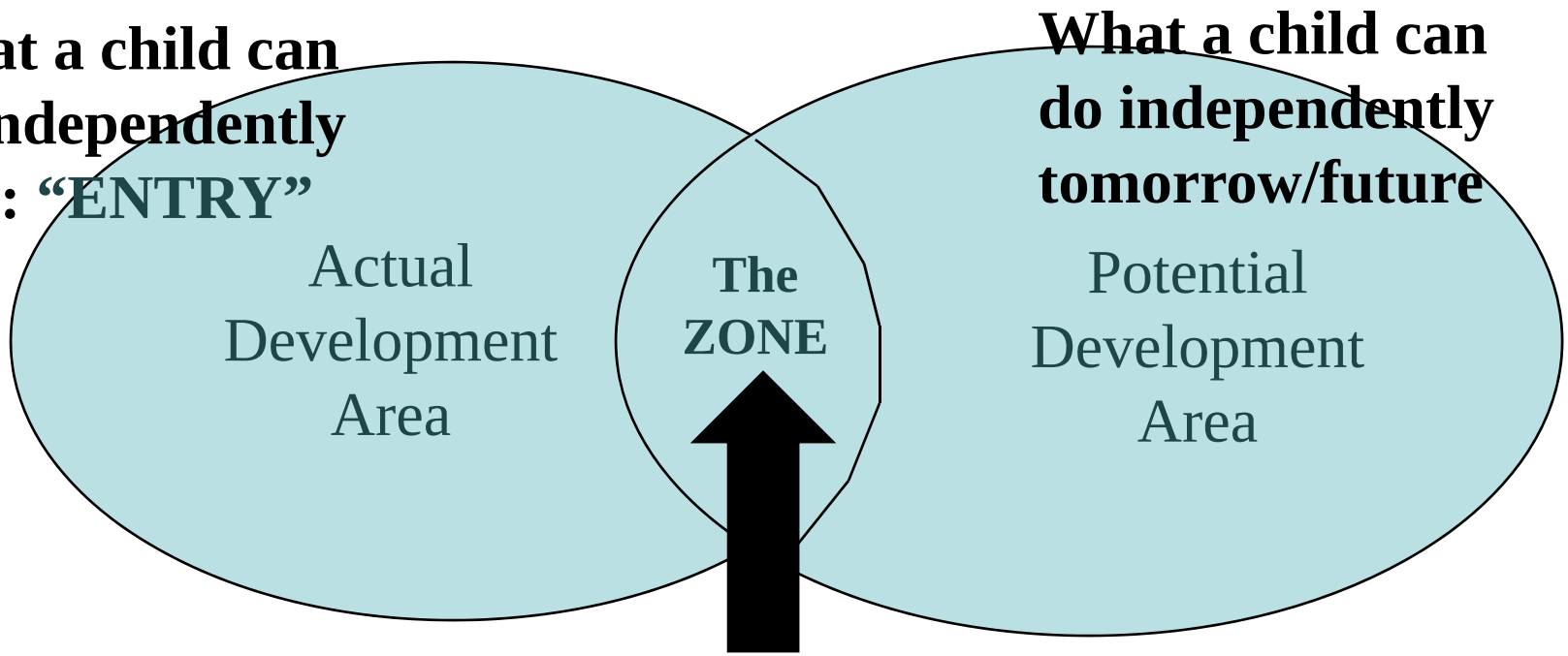
1. Based on available Research
2. The big ideas/the "essence" of concepts/processes are the binding threads
3. May not be linear, but articulate movement toward increased understanding (e.g., deeper, broader, ability to apply or generalize)
4. Go hand-in-hand with well-designed/aligned assessments

What does "based on research" mean? (Principle 1)

1. What does cognitive research tell us about building deeper & broader understanding?
2. What does content-specific research tell us about learning/building upon earlier skills/concepts?
3. What do we elicit & learn from ongoing action research/formative assessment?
   - ✓ Observations (ongoing & systematic)
   - ✓ Evidence (what's there/what's not there)
   - ✓ Assessment Tasks (short constructed responses that "uncover" student thinking)

Vygotsky: Zone of Proximal Development

(What a child can do *with assistance* today)



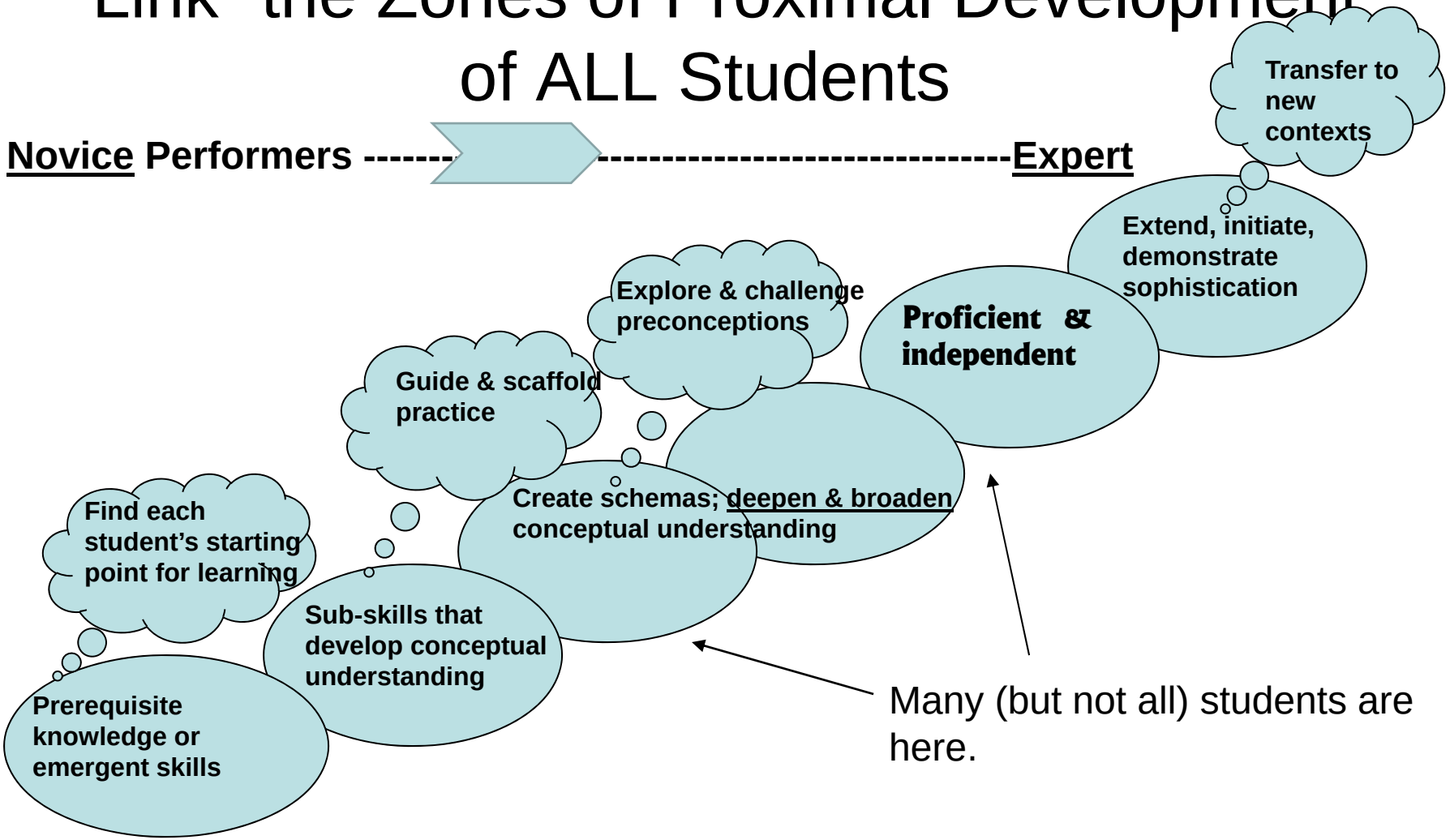
LEARNING PROGRESSIONS ZONE:

Dynamic area

Causes development to move forward

Social interaction essential (scaffolding)

Learning Progressions
"Link" the Zones of Proximal Development of ALL Students



Hess, 2008

Student Work Analysis (SWA): a “quick sorting” of papers

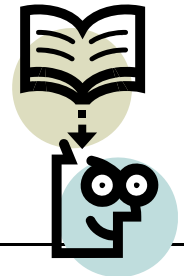
Objectives not met	Objectives partially met	Objectives met	Exceeds Objectives
List Students + Describe what they typically did			
___% of class	___% of class	___% of class	___% of class

Determine what each group of students needs next for their instruction…

Summary:
Unit Development with LPs

- Start lesson 1 with a pre-assessment: find out if students have the pre-requisite skills needed to be successful (& use SWA tool)
- Intentionally use FA *in each lesson*
- Use SWA frequently in the unit
- Several performance tasks within the unit, building to greater rigor
- End with summative performance assessment (& benchmark papers)
- Collaborative scoring & analysis

Related Resources



- Hawaii LP video (under “products”)

http://tristateeag.nceo.info/hawaii-main

Numerous papers available at www.nciea.org

- Learning Progressions & Common Core Standards
- Articles: Text Complexity & Text Structures
- You can request --
  - Student Work Analysis tool
  - How to Evaluate Formative Assessment tools

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