

# Loyola Marymount University | The Center for Equity for English Learners National Professional Development Grant

## PROJECT STELLAR

Science Teaching for English Learners: Leveraging Academic Rigor  
2012 - 2017

Lennox School District – Wiseburn School District – Environmental Charter Schools



*Environmental literacy, oral language and expository writing development  
for Long-Term English Learners*

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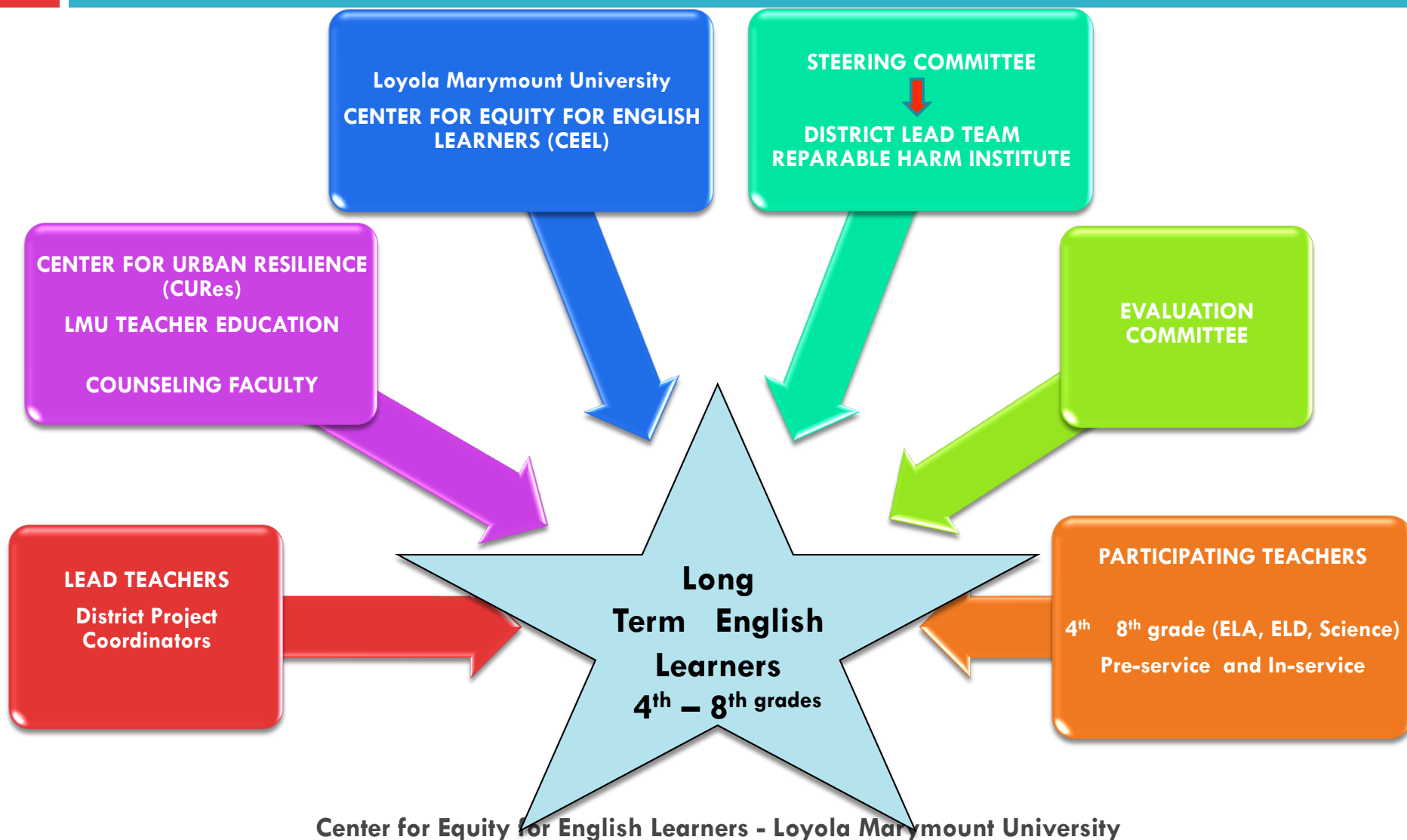
**Center for Equity for English Learners - Loyola Marymount University**

# PROJECT STELLAR PROJECT GOAL

To improve instruction and educational outcomes for English Learners with special emphasis on LTEs, through high-quality, research-based professional development

# PROJECT STELLAR PARTICIPANTS

Science Teaching for English Learners: Leveraging Academic Rigor



# California context

- 1.4 million English Learners (24% of enrollment; 33% of elementary enrollment)
- 612 out of 706 LEA/Consortia in CA are in Title III Program Improvement Status
- Increasing gap between ELL and others

# *English Learner Typologies*

- Newly arrived with adequate schooling (including literacy in L1)
- Newly arrived with interrupted formal schooling - “Underschooled” - “SIFE”
- English Learners developing normatively (1-5 years)
- Long Term English Learner

# Legislation- AB 2193 (Lara)

- Established a definition for LTELs
- Established criteria/indicators of “at risk of becoming LTEL”
- Established that the California Department of Education’s responsibility for providing data to districts/sites



***Definition: An English Learner at the secondary school level who...***

- *Has been continuously or cumulatively enrolled in US schools for 6+ years*
- *Not met reclassification criteria*
- *Evidence of inadequate progress (e.g., slow, inadequate or stalled progress in English language development)*
- *Is struggling academically (e.g., GPA of 2.0 or below; grades of D or F in two or more core classes)*

# The continuum:

## Learning English as a second language



**LTEs STUCK  
HERE**

No English

**Oral,  
social  
English**

CELDT  
Proficient

CST Basic

**Proficient  
for  
Academic  
work**

I

II

III

IV

V

Current CELDT Proficiency  
Levels

# Project STELLAR

## PROFESSIONAL DEVELOPMENT

*Pre-service and In-service Teachers of English Learners*

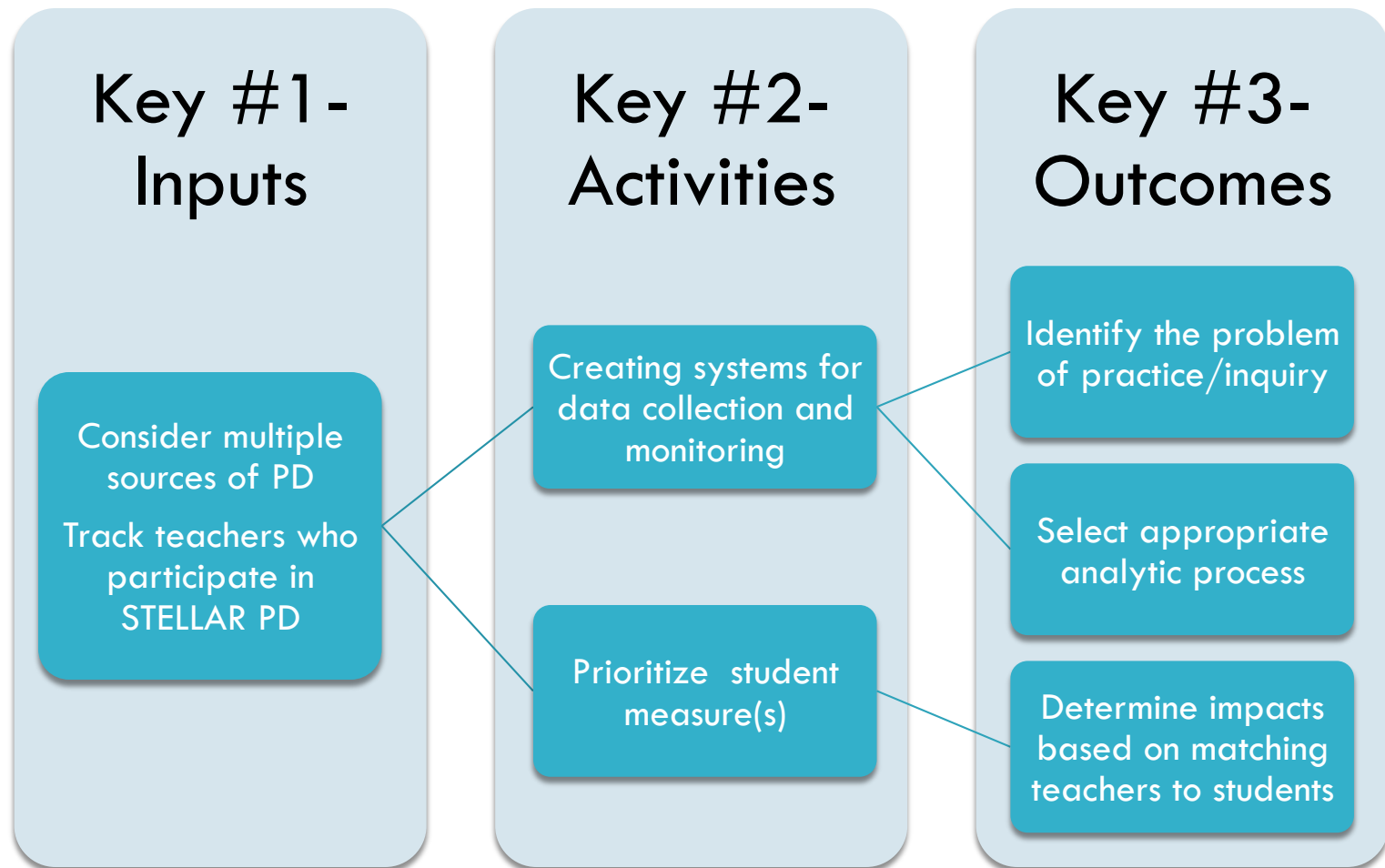
Project STELLAR Focus Areas		Core Activities
AREA 1:	<ul style="list-style-type: none"><li>• Content based language and literacy development</li><li>• Interdisciplinary approach - Developing academic oral and expository writing skills</li><li>• Urban ecology/environmental science</li></ul>	<ul style="list-style-type: none"><li>• Focused professional development</li><li>• OPAL (Observation Protocol for Academic Literacies) teacher leaders</li><li>• Focused conversations</li><li>• Urban Ecology curriculum</li><li>• In-classroom support</li></ul>
AREA 2:	<ul style="list-style-type: none"><li>• Critical Transitions for ELs</li></ul>	<ul style="list-style-type: none"><li>• Reparable Harm: Preventing Long Term English Learners Leadership series</li><li>• Summer Bridge Student Program</li></ul>



# Project STELLAR Evaluation Components

Participants	Evaluation Measures			
Pre-Service Teachers	Course Sequence and Content	Completion of Credential Requirements	Attainment of Bilingual Authorization	Level of Participation in STELLAR PD and Summer Bridge
In-Service Teachers	Professional Development Participation & Perception of Impact on Practice	Levels of Urban Ecology for English Learners Curriculum Implementation	OPAL – Classroom Practices for Culturally & Linguistically Diverse Students	Teacher Leadership & Coaching
Student Impact	Language: Changes in CELDT levels & RFEP	Academic Achievement: Writing Benchmarks Interactive Notebooks	Participation Numbers, including Summer Bridge Program	Summer Bridge – Student Surveys (Socio-emotional factors)
Systems for EL Success & Prevention of LTELs	Leadership Reparable Harm Participation & Perception of Impact	Reparable Harm Checklist	District – System-wide Documentation: e.g. Alignment with other initiatives, benchmarks	

# Keys to Matching Professional Development to Student Outcomes



# Impact- Progress towards Reclassification

- Changes in California English Language Development Proficiency
- RFEP – Reclassification to Fluent English Proficiency rates

Student population: 4th – 8th grade students of participating teachers in three districts

Comparison: 4 - 8 grade students in participating districts

## **Analysis:**

- For participating students, **gains** from one reporting period to the next
- For comparison, **differences** in populations based on pretest, differences in gain scores from one reporting period to next.

# Impact: Writing Benchmarks – Pre-and Post Writing Assessment

## Informational Text Prompt with Scaffolds

Use the information you recorded from the “**Visual Text Analysis**” to write *at least one paragraph* that tells how you think humans create and transform neighborhoods into urban ecosystems.

Think about these questions before you write your response:

- What do you see in a neighborhood?
- How do neighborhoods connect with one another?
- Who plans a city?
- How can human actions have an effect on nature?

# Standards Connection

## **ELA CCSS**

- **Produce clear and coherent writing (including multiple-paragraph texts) in which the development and organization are appropriate to task, purpose, and audience.**
- **[Write informative/ explanatory texts to examine a topic and convey ideas and information clearly.]**

## **ELD – Expanding Level Productive Mode**

- **Write increasingly concise summaries of text and experiences using complete sentences and key words [e.g. from notes or graphic organizers]**

# Pre-Post Writing Assessment Rubric

		4	3	2	1
<b>INFORMATIONAL TEXT STRUCTURE</b>	<b>INTRODUCTION</b>	Clearly addresses the topic and engages the reader	Generally addresses the topic	Does not address the topic	The introduction (topic sentence/thesis) is incomplete
	<b>BODY</b>	Clearly supports the main idea and provides complete information	Generally supports the main idea and provides adequate information	Minimally support the main idea and provides only basic information	Does not support the main idea and/or provide any essential information
	<b>CONCLUSION</b>	Fully restates the main idea in a clear, exact manner	Generally restates the main idea	Vaguely restates the main idea	Does not restate the main idea
<b>ACADEMIC DISCOURSE</b>	<b>VOCABULARY</b>	Includes key urban ecology vocabulary (domain specific) words and academic words	Includes some key urban ecology vocabulary (domain specific) words and academic words	Includes few key urban ecology vocabulary (domain specific) words and academic words	No evidence of urban ecology vocabulary words (domain specific) and academic words
	<b>SYNTAX/STRUCTURE</b>	Uses complex sentences and language structures	Uses sentences and language structures	Uses simple sentences and language structures	Writes using words or phrases and uses limited language structures
<b>SPELLING AND GRAMMAR</b>		Makes a few minor errors in capitalization, punctuation, spelling and grammar	Makes some errors in capitalization, punctuation, spelling and grammar	Makes many errors in capitalization, punctuation, spelling and grammar	Punctuation and spelling errors prevent understanding
<b>METACOGNITIVE/ METALINGUISTIC REFLECTION</b>		Identifies all scientific and transition words accurately	Identifies many scientific and transition words accurately	Identifies a few scientific and transition words OR inaccurate identification	Does not complete the metacognitive reflection

# STELLAR PROJECT-BASED LEARNING

## Writing Task – Elements of a Proposal

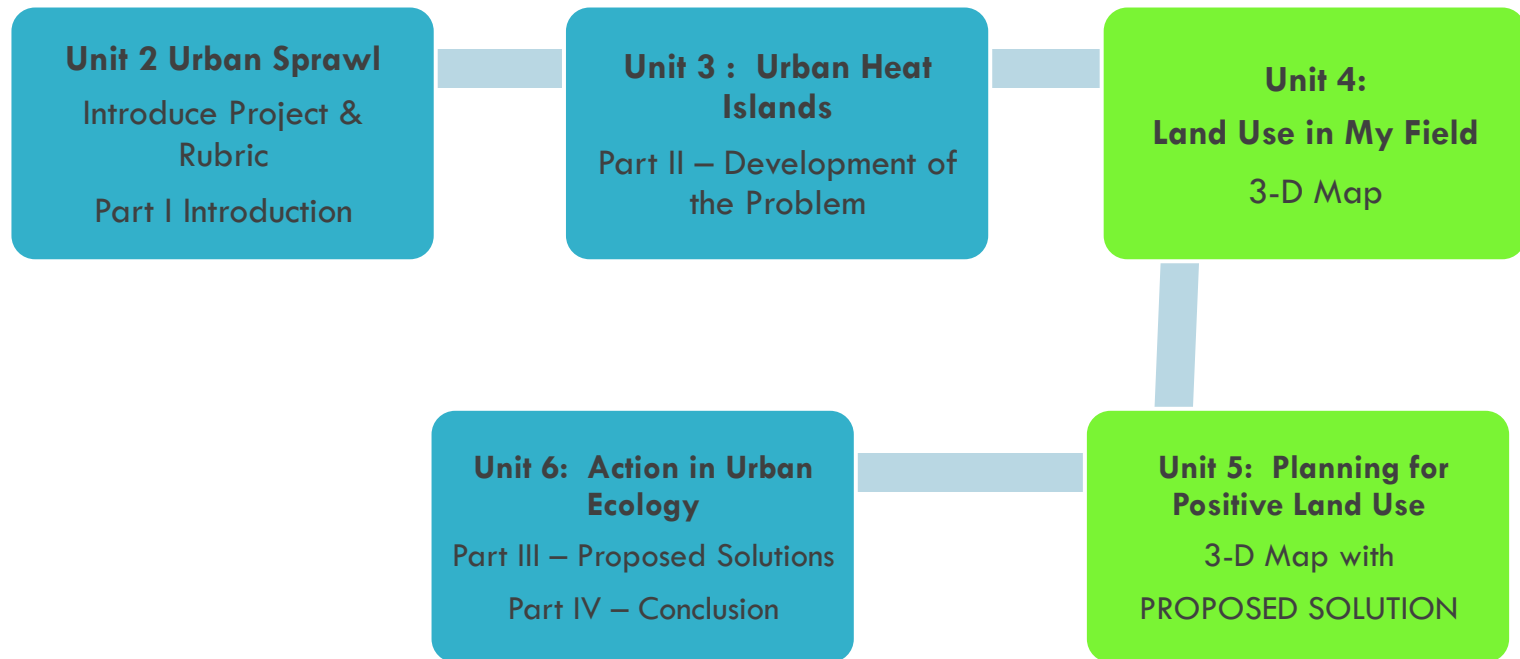
### LAND USE PROPOSAL OUTLINE

- I. Introduction – Topic or Thesis Statement
- II. Development of the Problem
- III. Proposed Solution (s)
- IV. Conclusion

# Benchmarks to Support Land Use Proposal Project Development

## TAB 2 – MODULE 2: ASSESSMENT EVIDENCE (PAGE 4)

- Review resources to guide your students' development of the land use proposal
- Pre-view lessons that will help ELs be better prepared to succeed in writing a land use proposal





# Project Assessment Rubric

## □ **Part I: Land Use Proposal** **WRITING CRITERIA:**

- Introduction
- Development of the Problem
- Proposed Solution(s)
- Conclusion
- Academic Discourse
- Spelling & Grammar
- Collaboration

## □ **Part II: Land use Map** **CRITERIA: 21<sup>st</sup> Century Skills**

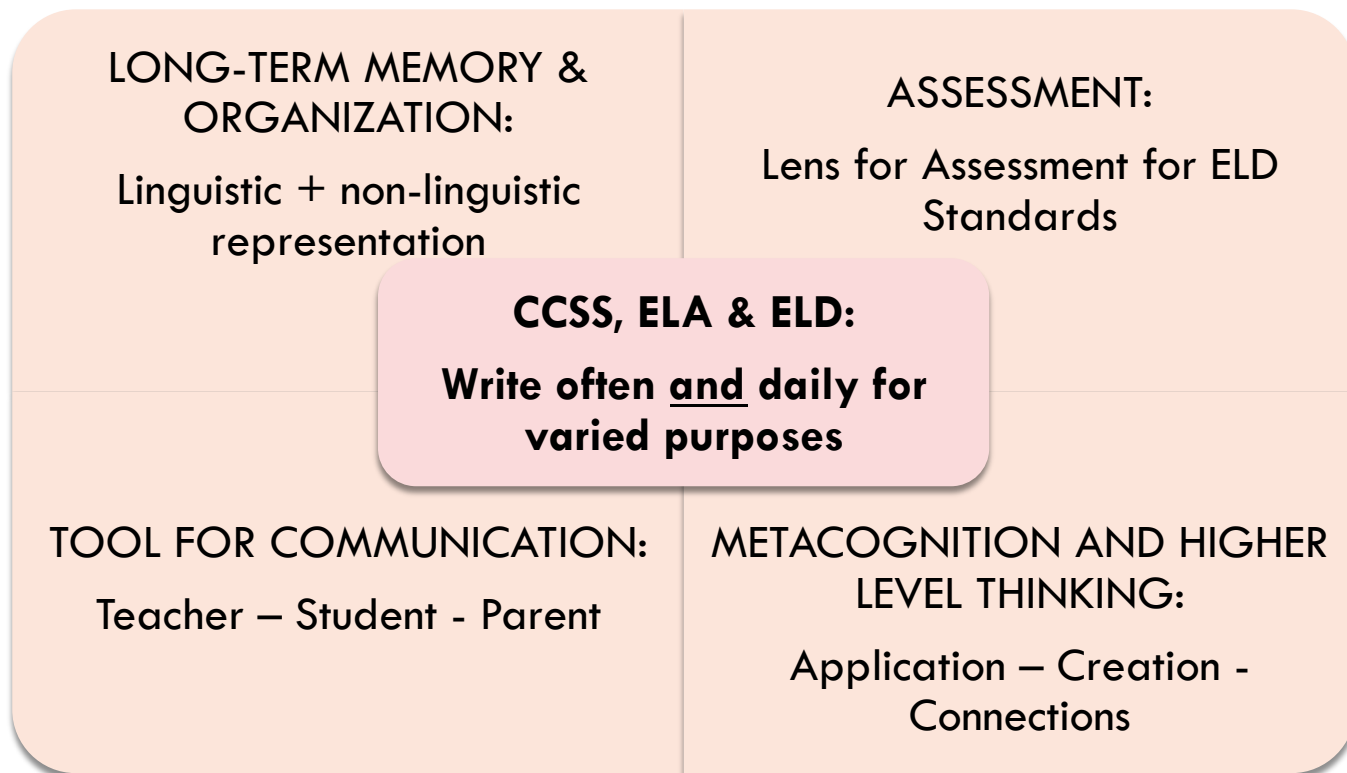
- ▣ Critical Thinking & Problem Solving
- ▣ Creativity & Innovation
- ▣ Communication
- ▣ Collaboration

## □ **Part III: Oral Presentation** **SPEAKING CRITERIA:**

- ▣ Academic Discourse
- ▣ Communication

# Interactive Notebooks for English Learners – A Tool to Develop Thinking & Writing

## Why are interactive notebooks an effective tool for developing thinking and writing for English Learners?



# Interactive Notebook

## Left Side

Student Output

**Lots of Color**

**The brain remembers things in color better.**

- ❑ Concept Maps
- ❑ Drawings
- ❑ Reflective Writing
- ❑ Questions
- ❑ Data and Graphs
- ❑ Songs
- ❑ Poems
- ❑ Data from Experiments
- ❑ Cartoons or cartoon strips

## Right Side

Teacher Input/Content

**Blue or Black Ink/pencil**

- ❑ Information given in class
- ❑ Lecture Notes
- ❑ Lab Activities
- ❑ Video Notes
- ❑ Summaries
- ❑ Textbook Notes
- ❑ Procedures for experiments
- ❑ Classroom Specific Information

# STELLAR STUDENTS

(4<sup>TH</sup> GRADE – General Ed. Student)

LEFT SIDE (STUDENT OUTPUT)

Output  
(Student's thoughts)

My opinion on the decreasing population of Tree Swallows in our city is this: I feel that this can be fixed and I'm not happy that this is a growing problem.

This is what I learned today: I learned that the population of the Tree Swallows that migrate here is decreasing. They are decreasing because they lay their eggs in dead wood, but the people in Los Angeles don't want it there. They want to build buildings with it, so they can get more money, and we are going to do something about it. We are going to build houses of our own and give it to the Tree Swallows hoping they will come every spring to visit us.

RIGHT SIDE (TEACHER INPUT)

Input

9-25-13

(Teacher's notes)

Growing Problem

The number of Tree Swallows that migrate to our city every spring is decreasing.

Urban Ecologist

"A person who studies about the city (where we live)"

"Urban" = of a city, belong to a city  
"Ecologist" = a person who studies about where we live

# STELLAR STUDENTS

(4<sup>TH</sup> GRADE – EL Student)

LEFT SIDE (STUDENT OUTPUT)

output  
(students opinion)

My Opinion on the decreasing population of tree swallows in our city is this I feel like they are helping us we should help them. what I learned today they eat bug to keep us alive

RIGHT SIDE (TEACHER INPUT)

input  
teachers opinion

Growing problems  
The number of Tree swallows that migrate our city every spring is decreasing. Urban Ecologist: A person who studies about city where we live. Someone who helps us.

# INTERACTIVE NOTEBOOK Assessment

## Lens - Sample

	To what extent did the student exhibit content understanding?	To what degree did the student use academic language to convey content knowledge?	How do you think the “input” (right side) influenced the “output” (left side)?
SAMPLE EL 4 <sup>th</sup> grade	Low – Mid – High <ul style="list-style-type: none"><li>Identifies problem</li><li>Identifies service provided by tree swallows</li><li>Supports opinion with minimal facts</li></ul>	Low – Mid – High <ul style="list-style-type: none"><li>Minimal use of general and specific academic vocabulary</li><li>Use of simple sentences with fragmented conditional statements, e.g. <i>[Because] they are helping us, we should...</i></li></ul>	

# Socio-Emotional Questionnaires

## Summer Bridge Program Themes:

- ❑ *Eagerness as well as a willingness to learn English*
- ❑ Expressions of *liking to learn* seemed to correspond with their receipt of *positive feedback/reinforcement* (e.g., verbal, behavioral)
- ❑ *Evidence of family support* to learn English
- ❑ Defined students' needs for *affiliation* and to feel like they *belonged*
- ❑ Expressions of needs for *feeling cared for* and knowing that *teachers and parents were invested in them*
- ❑ *Feel safe during Summer Bridge Program*

# Project Evaluation-PD Impacts on EL student outcomes

Participants	Evaluation Measures			
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