Closing the Achievement Gap for ELLs Through Technology & Proven Language Pedagogy

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Closing the Achievement Gap for ELLs through Technology & Proven Language Pedagogy

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“Educating speakers of other languages in English, and encouraging mastery of multiple languages, has long been important to America’s competitiveness — and will be increasingly vital in the years to come. **We challenge our schools and communities to invest in our future leaders with biliteracy and multiliteracy skills.**”

(Arne Duncan, Secretary of Education, 2014).

**Overview of Webinar**

In this webinar, we will discuss...

- Research findings related to different types of English Language Development programs
- Research-based pedagogical designs and instructional strategies for English Language Development classes

We will also...

- Illustrate these pedagogical designs and instructional strategies in a Blended Learning experimentation conducted in several New England school districts
- Discuss the findings of this research
Today...

... there are an estimated **4.6 million** English Language Learners (9% of public school student population).

... ELL is the **fastest growing student population** in the United States.

... the majority of ELLs, both in elementary and secondary schools, are **native-born U.S. citizens**.

U.S. Department of Education
Institute of Education Sciences
National Center for Education Statistics
Figure 1. Percentage of public school students who are English language learners (ELL), by state: School year 2011–12

Historically, the academic performance of ELLs has been lower than that of other subgroups, and the achievement gap has narrowed little over the years.
English Language Instruction Program Models

ESL Model
- Pull out
- Push in
- Self-contained ESL

Bilingual Model
- Transitional Bilingual Education
- One-way Bilingual Education
- Two-way Bilingual Education

Single Immersion Model
- Content-based English as a Second Language (CBESL)
- Sheltered English Immersion
Both one-way and two-way bilingual programs lead to grade-level and above-grade-level achievement in second language, the only programs that fully close the gap. (Collier & Thomas, 2004)


“In every study conducted, we have consistently found that it takes six to eight years, for ELLs to reach grade level in L2, and only one-way and two-way enrichment dual language programs have closed the gap in this length of time. No other program has closed more than half of the achievement gap in the long term.” (Collier & Thomas. 2004)

“Conversational aspects of proficiency reached peer-appropriate levels usually within about two years of exposure to English but a period of 5-7 years was required, on average, for immigrant students to approach grade norms in academic aspects of English (e.g. vocabulary knowledge).” (Cummins, 2008)
An Interactive Immersion Program for Middle School English Language Learners.

Localized curriculum
(Place-based pedagogy)
• Wetlands
• Extreme Weather
• Baseball
• Transportation
• Inventions

<table>
<thead>
<tr>
<th>District</th>
<th>Local Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelsea, MA</td>
<td>Chelsea Clock</td>
</tr>
<tr>
<td>Taunton, MA</td>
<td>Silver</td>
</tr>
<tr>
<td>Hartford, CT</td>
<td>Bicycles and Transportation</td>
</tr>
<tr>
<td>Lynn</td>
<td>Shoe Industry</td>
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</tbody>
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Summer 2013 – 1 district (26 students)
Summer 2014 – 4 districts (300 students)
Indicators of Success

- For all 2014 Gateways programs, students demonstrated growth in the average writing scale score and proficiency level.
- All four districts showed an increase in the literacy composite scale score.
- All districts met or surpassed a demonstrated satisfaction grade of 80% for parents, students and teachers.
- All students indicated an increased interest in career choices, particularly science, math and engineering as a result of their summer experience.
- All students indicated that they felt better prepared for school following the summer program.
Adding to the Instructional Model: A Blended Learning and Multiliteracy Approach

- Contextualized Learning
- Complex Thinking
- Language and Literacy Development
- Observation and Modeling
- Instructional Conversation
- Joint Productive Activity
- Student Directed Activity

BLENDED LEARNING & MULTILITERACY APPROACH
A Flexible and Modular Program Structure

- **Grades 4-5, Level 1 and 2**: 80 learning modules and 20 project modules per level
- **Grades 6-8, Level 1, 2 and 3**: 80 learning modules and 20 project modules per level
- Learning modules are grouped by 4 in a theme and associated to a project module

20 Themes per Level

Theme 1

Theme 2

Theme 3

... Theme 20
Connects the curriculum and the learning activities to the students’ prior knowledge and experiences.

A culturally inclusive curriculum that takes into consideration the sociocultural values and perspectives of the students and his/her community is conducive to improved learning outcomes.
Contextualized Learning: Connecting to Students’ Lives and Identities

**Project Introduction**

**Identity Map**

Your project is to create an identity map in the shape of a tree.

On the roots, you will write your influences. On the branches, you will write a sentence about what influences your identity.

Right now, do some research online about the country that you are from.

In your project notebook, write at least three things that are unique.
Contextualized Learning: Connecting with Peers

Listen and Respond 5

Which childhood experience changed Frederick Douglass the most?

Listen and then check who said what.

- Brian J. Acosta
- Tara Mishra
- Their Win
- Jake Trotman

Self Assessment

- Not knowing his birthday
- Not being able to spend time with his mother
- He was in slavery from the time he was born
2. Higher-Order Thinking

- Cognitively challenging content from academic disciplines
- Meaningful and authentic intellectual work
- Scaffolded learning tasks and projects that require complex thinking
- Reflection activities and thinking and learning strategies
Food webs are part of our environment. Click play to learn about ecosystems. Listen for the words in the Word Bank.

Word Bank:
- plants
- animals
- organisms
- ecosystems

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Higher-Order Thinking: Literacy Engagement

- **Amount** and **range** of reading and writing
- Use of **effective strategies** for deep understanding of text
- **Positive affect and identity investment** in reading and writing

Drawing on both the 1998 NAEP data from the United States and the results of the PISA study of reading achievement among 15-year olds in international contexts, Guthrie (2004, p. 5) notes that students

“...whose family background was characterized by low income and low education, but who were highly engaged readers, substantially outscored students who came from backgrounds with higher education and higher income, but who themselves were less engaged readers. Based on a massive sample, this finding suggests the stunning conclusion that engaged reading can overcome traditional barriers to reading achievement, including gender, parental education, and income.” (Cummins, 2011)
Higher-Order Thinking: Framing The Evidence (Cummins, 2011)

Literacy/Language Attainment

Literacy/Language Engagement

- Scaffold Meaning (input and output)
- Connect to students’ lives, Activate/Build background knowledge
- Affirm Identity
- Extend language
3. Academic English & Literacy Development

- Vocabulary building and the four skills: listening, speaking, reading and writing
- Metalinguistic awareness
- Contextualized focus on form activities to identify patterns in oral and written structures, to model one’s writing on relevant academic texts, and to write and present on specific academic topics
- Explicit attention to word formation and word origin
Module 1: Food Webs

energy

en + ergon
(in, at, near) (work; action)

= energy
Vocabulary Journal

1. Choose a word from the Theme Glossary.

2. Choose and print a Word Map template.

Word Map

- An antonym for compare is ____________.
- In your theme project paragraph you and contrast a religious practice in the past with today.

Compare verb

- A synonym for compare is ____________.
- Compare means to examine in order to note ____________.
4. Observation & Modeling

- Observation and modeling as a scaffolding strategy, from imitation to creation of discourse in the end project.
- Metacognitive modeling through reflective questions and self-assessment rubrics.
- Metacognitive modeling strategy helps students become self-aware, autonomous and efficient learners.
Writing Concept 2

Main Idea/Details

Drag the sentences from an informational text to show the main idea and supporting details.

Most cells have three main parts—the membrane, the cytoplasm, and the nucleus.

The nucleus is located near the center of the cell.

The cell membrane is a thin but tough wall surrounding the cell.

The cytoplasm is composed mainly of water, with some solids.

Parts of the Cell

Main Idea

Detail 1

Detail 2

Detail 3
Observation & Modeling: Metacognitive Modeling

**Project Rubric**

The Project Rubric will tell you how to complete your project successfully.

> Read the Project Rubric. Then, select the score that the following project descriptions would receive.

**The Project Description**

1. **1 star**
   - My poster is complete (5 or more sentences).

2. **2 stars**
   - My poster has some images but no heading, or a heading but no images.

3. **3 stars**
   - I did not work with my classmates or provide helpful feedback.
5. Instructional Conversation

- Dialogic dynamic: students are prompted with reflective questions as they read
- Discussion Board and in-class interaction for project
**On the Discussion Board** you will read sentences posted by your classmates. You will reply and write questions.

Practice and write 2 questions you can ask.

One thing that hasn’t changed over time is that Eid Al-Fitr helps all Muslims around the world remember our common goal of unity. Eid Al-Fitr remains a way to celebrate the end of Ramadan, and to come together as family.

It sounds like a nice holiday.

(Type your questions here.)
6. Joint Productive Activity

Project drives students’ learning through discovery, inquiry and collaborative creation, and involves authentic communicative language use in the process.

Learning is facilitated by the collaboration and the interaction with peers and teacher.

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Project Introduction

At the end of this module, you will create your own infographic about a food web. You will share your infographic with your classmates.

Look at the example. Select Yes or No if you can answer the question.

- Does the sun shine on plants?
- What do animals eat?
- Why do animals eat?
7. Student-directed Activity

- Students choose and decide on their project’s topic and format of delivery.
- Use of reflection activities and self- and peer-assessment rubrics.
District Pilot in Hartford, Connecticut

**Sites**
- 8 Sites - 15 teachers
- 13 Sections utilizing 6-8
- 8 Sections utilizing 4-5

**Students**
- Approximately 250 students total participating in online modules
- Students participate in a “pull out” environment
- ELL teacher provides instruction during daily intervention class period

**Support**
- ELL Director
- 6 District Level Coaches
- 2 School based Coaches – One each at two different sites

**Observations**
- Student Surveys
- Teacher and School-based Coach Focus Groups
- Administrator Focus Groups
- Parent Focus Groups

Mixed Method Study by the Centre for Research & Reform in Education (JHU).
The goal is to provide English Language Learners (ELLs) with instructional support that:

- develops English language proficiency in all language domains (listening, speaking, reading and writing)
- enables students to connect and participate in regular content area classes
- develops Common Core literacy skills and strategies (e.g., CCRA. R1: Cite textual evidence, make inference)
- helps students develop confidence using English and participating in school experiences
School Year 2014-15 Pilot Implementation

Fall Semester 2014
- 8 Sites – grades 4-8
- Overarching Theme I

Spring Semester Group 1
- Four Sites, grades 4-8
- Overarching Theme 2

Spring Semester Group 2
- Two Sites, grades 6-8
- Overarching Theme 3

Spring Semester, Group 3
- Two Sites, Grades 4-8
- Overarching Theme 4

Summer Program
- 6-8 Sites, Grades 4-8 and High School
- Overarching Theme 5 and Level II, Overarching Theme 1
Data Collection

Las Links Benchmark Assessments
- 3 benchmarks
  Fall – Winter - Spring

Online Teacher Surveys
- Post theme instruction

Anecdotal Records
- Mid-year and year-end report based on observations and feedback from coaches, teachers and students
### Average Gain - Fall 2014

- **MIL Gains**: Overall Average Increase - 6.7
  - Overall Average Increase w/o Decreasing Scores: 7.9
- **Non-MIL Gains**: Average Gain - 5.3
  - Overall Average Increase w/o Decreasing Scores: 7.1

### Average Gain by Tiers

- **MIL Scores**
  - % Students with Increasing Scores: 78%
  - % Students Increasing at least 10 Points in Basic Level: 41%
  - % Students in Top Tier Basic (23-32) at 2nd Benchmark: 31%
- **NON-MIL Scores**
  - % Students with Increasing Scores: 73%
  - % Students Increasing at least 10 Points in Basic Level: 21%
  - % Students in Top Tier Basic (23-32) at 2nd Benchmark: 17%

### Special Education

- Overall SPED Average Score Increase: 7.6
- Overall SPED Avg. Score Increase w/o Decreasing Scores: 8.5
Teacher Comments

**How has the pilot impacted my teaching?**
- ELLs love the program.
- ELLs love the projects.
- Students are developing new interests as a result of the Themes.
- Teachers have more awareness of students’ background knowledge as a result of Themes.

**How has using the pilot impacted student learning?**
- Improvement in academic vocabulary.
- Increased confidence level.
- Reading, writing, speaking, and listening have improved.
- Students have developed new interests.
- Students are using technology to learn.
- Students have developed new pride in learning.

**How has the pilot changed my practice?**
- Improvements in pacing, especially for new arrivals.
- Renewed desire to make more fun, interactive, learning activities.
- Better understanding of grouping.
- More collaboration with classroom teachers.
- Connections to more relevant contextualized information.
- Better understanding of blended learning.

**What challenges have I encountered?**
- Students who are entering after program has begun.
- Students who have additional learning difficulties.
- Small classrooms.
- New arrivals who are at different language and academic levels.
- Groups that are not even.
- Some students have limited technological background.
- Tracking progress.
- Finding additional materials for further learning with Themes.
- Additional teacher resources for Themes.
The overall perspective from the District is positive.

Teachers have embraced teachable moments.

There are perceived changes in quality of instruction and richness of discussion.

Teacher’s are integrating new strategies.

Students get excited “out loud.”

Students connect with the content on a cultural level.

Parents and students appreciate sequencing and repetition.
“There must also be an explicit effort to make sure that general education teachers and other school professionals who teach ELLs are equipped with the necessary skills and knowledge”

(NEA President Dennis Van Roekel, 2011).
Thank you!

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