Literacy as a Tool for Student Engagement
Literacy as a Tool for Student Engagement

By Christopher Balow, Ph.D.  
Executive Director of Research
Agenda & Goals

Student Engagement:
- Background & Current Status
- Psychological Underpinnings
- Elements
- Causes
- Methods for Increasing
- Using Literacy to Enhance
What is Student Engagement?

Refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education.

Great School Partnership
What is Student Engagement?

Student engagement is viewed as multidimensional: involving aspects of students’ emotions, behaviors and cognitions.

Student engagement is the glue that links students, school, and home.

Fredricks, Blumenfeld, & Paris, 2004
Early History of Student Engagement

- The last two decades have witnessed an explosion of interest.
- Based on evidence that engagement is a malleable state which can be shaped by schools.
- It is a robust predictor of students’ learning, grades, achievement, test scores, retention, and graduation.
Early History of Student Engagement

In the 1980s, it was conceptualized as a way to understand and reduce:

- Boredom
- Alienation
- Dropping Out

Chicken or Egg?

- Some argued: School setting mediates student engagement
- **What does the student bring to the equation?**
Student Factors Related to Engagement

John Guthrie, 2004

1. Curiosity or Interest
2. Preference for Challenge
3. Involvement and Control
4. Self-efficacy
5. Competition
6. Recognition
7. Grades
8. Social Interaction
9. Work Avoidance
The Evolution of the Student Engagement Construct

- Understanding of the Risk Factors
- Socio-demographic Status Factors
  - SES
  - Ethnicity
  - English Learners
  - Family Structure
  - Other Distal Factors
The Evolution of the Student Engagement Construct

- Distal Risk Factors
  - Attendance (more complex factor)
  - Grade Retention
  - Low Academic Skills
  - Poor Test Performance
  - Behavior Concerns

- We have ignored instruction, curriculum, relationships, leadership
Current Status of Student Engagement

- Major Study of 900,000 students in grades 5-12 in 48 states (Gallup Student Poll, 2016)
  - 50% - Engaged
  - 29% - Not Engaged
  - 21% - Actively Disengaged

- This sounds bad but as Dr. Doug Reeves says, “It is actually worse.”
### The Student Engagement Cliff
**2016 Gallup Poll**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Engaged</th>
<th>Not Engaged</th>
<th>Actively disengaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 5</td>
<td>74%</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>Grade 6</td>
<td>67%</td>
<td>23%</td>
<td>11%</td>
</tr>
<tr>
<td>Grade 7</td>
<td>54%</td>
<td>28%</td>
<td>17%</td>
</tr>
<tr>
<td>Grade 8</td>
<td>45%</td>
<td>31%</td>
<td>24%</td>
</tr>
<tr>
<td>Grade 9</td>
<td>40%</td>
<td>34%</td>
<td>26%</td>
</tr>
<tr>
<td>Grade 10</td>
<td>33%</td>
<td>34%</td>
<td>33%</td>
</tr>
<tr>
<td>Grade 11</td>
<td>32%</td>
<td>35%</td>
<td>34%</td>
</tr>
<tr>
<td>Grade 12</td>
<td>34%</td>
<td>34%</td>
<td>32%</td>
</tr>
</tbody>
</table>
### Phillip Schlecty’s Levels of Engagement

<table>
<thead>
<tr>
<th><strong>Engagement</strong></th>
<th>The student associates the task with a result or product that has meaning and value for the student. The student will persist in the face of difficulty and will learn at high and profound levels.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Attention – High Commitment</td>
<td><strong>Strategic Compliance</strong></td>
</tr>
<tr>
<td>High Attention – Low Commitment</td>
<td><strong>Ritual Compliance</strong></td>
</tr>
<tr>
<td>Low Attention – Low Commitment</td>
<td><strong>Retreatism</strong></td>
</tr>
<tr>
<td>No Attention – No Commitment</td>
<td><strong>Rebellion</strong></td>
</tr>
<tr>
<td>Diverted Attention – No Commitment</td>
<td></td>
</tr>
</tbody>
</table>
Engaged Students Are...

- 4.5 times more likely to be hopeful for the future
- 2.5 times more likely to say they get excellent grades at school
- 2.5 times more likely to strongly agree they do well in school
- 200% more likely to attend a 2- or 4-year institution
Disengaged Students Are...

- 900% more likely to say they get poor grades at school
- 200% more likely to say they missed a lot of school last year
- 700% more likely to feel discouraged about the future
Psychological Underpinnings of Student Engagement
Human Motivation Theories

Vygotsky’s Cognitive Development
Expectancy-Value Theory

- Attribution Theory
- Achievement-Attribution Theory
- Attributional-Style Theory
- Self-determination Theory
- Mindsets
- Belief Systems
- Resilience, Grit, Perseverance
Attribution Theory and Belief Systems

“To explain by indicating a cause”

- How people make sense of their world
- Provides us with cognitive control
- Adds order and predictability to our world and to make inferences beyond available information
- Attributional errors... Teachers and students make them
Weiner's Achievement Attribution Theory

Three Dimensions

1. Stability (stable and unstable)
2. Locus of Causality (internal and external)
3. Control (controllable or uncontrollable)

Results in four common attributional assignments:

**Ability, Effort, Task Difficulty, and Luck**

<table>
<thead>
<tr>
<th></th>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stable</td>
<td>Unstable</td>
</tr>
<tr>
<td>Uncontrollable</td>
<td>Ability</td>
<td>Task Difficulty</td>
</tr>
<tr>
<td>Controllable</td>
<td>Effort</td>
<td></td>
</tr>
</tbody>
</table>
Weiner’s Achievement Attribution Theory

“Diagnose the Cause of Disengagement”

<table>
<thead>
<tr>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>Stable</td>
</tr>
<tr>
<td>Unstable</td>
<td>Unstable</td>
</tr>
</tbody>
</table>

- **Uncontrollable**
  - Ability: I was born not very smart
  - Math is just too difficult to learn
  - Grades are based on being liked by the teacher

- **Controllable**
  - I did not use the right strategy for this test, will try harder next time
  - Task Difficulty
  - Luck

**Effort** in failure have kids make effort rather than ability attributions.
Attributional Style: The Basis of Mindset

Optimistic Style
Internal & Controllable

- Negative events are explained in terms of external, unstable and specific causes
- Positive events to internal, stable, global causes

Pessimistic Style
External & Uncontrollable

- Learned helplessness
- Negative events explained in terms of internal, stable, and global terms (“I’m a bad person”)
- Positive events in terms of external, unstable, and specific causes
Self-Determination Theory of Engagement

(Deci, E., Ryan, R.)
Keys to General Student Engagement

Doug Reeves, 2017

- Hope & Resilience
- Respect
- Competence
- Efficacy
- Choice
Resilience & Hope

- Student engagement, motivation and resilience are interrelated concepts
- These constructs are examined through the lens of “mindsets”
- Degree of resilience and hope is a better predictor of outcome than IQ (Weisinger & Pawli-Fry, 2015)
- It is through the changes in mindset that leads to resilience in students
- Effective educators also have a set of beliefs and mindsets that foster resilience in students (See: Brooks, R., Brooks, S., & Goldstein, S., 2015)
Mindset of Resilient Students

- Set realistic goals
- View mistakes as setbacks
- Promote their own growth
- Do not deny their weaknesses
- Recognize talents
- Self-concept of strength
- Comfortable relating with others
- Seek out assistance

(Brooks & Goldstein, 2001)
Resilience & Hope

You cannot generate hope and resilience via:

- Punishment strategies
- Suspension
- Corporal punishment
- Assigning extra work
- Punitive grade practices
- Punitive attendance policies
Developing Respect With Students

- Actively listen and paraphrase
- Ask questions to learn about the students
- Notice the “little things”
- Be consistent with all students
- Be judicious in the use of evaluative statements
- Show no favorites
- Set high expectations
- Model the behavior you expect
- Show consistent attitudes and moods
- Admit your failures
- Be humble
Developing Competence

*Peak: Secrets from the New Science of Expertise*

"Deliberate practice" (K.A. Ericsson) has several components:

- Evaluating what needs improvement
- Selecting one small aspect of the skill to work on
- Developing a strategy
- Evaluating the results
- Revised performance

Immediate corrective feedback is key! That's why homework does not make a difference.

- K-5 = No Impact
- 6-12 = Limited Impact
- Practice in class!
Developing Self-Efficacy in Students

- Convey to students that they are making progress
- Set specific, attainable goals
- Use social models in instruction
- Provide feedback indicating level of competence
- Encouragement and rewards for effort
- Set high expectations
- Give control to students
- Student self-monitoring and metacognition of learning progress
- Rewards for performance improvements

Schunk & Pajares, 2009; Coutinho, 2008; Schunk & Ertmer, 2000; Jonson-Reid, Davis, Saunders, Williams, & Williams, 2005; Miller & Brickman, 2004
Providing Choice for Students

- Minimizing controls
- Perspective taking/empathy/openness to criticism
- Providing a range of acceptable options
- Provide authentic rationales
- Intrinsic value demonstration (IVD)
- Supporting value/goals/interests of students
- Fostering inner-directed values

(Assor, A. 2015)
**Mindsets: Carol Dweck**

**Fixed Mindset:**
Beliefs of their basic qualities, like their intelligence or talent, are simply fixed (stable) traits.

**Growth Mindset:**
Belief that basic abilities can be developed through dedication and hard work.
Does A Growth Mindset Impact Student Outcomes?

- John Hattie found only a .19 effect size for growth mindset in his most recent meta-analyses with .4 and above considered an effective practice.

- Adults have a fixed mindset and keep treating students accordingly, so right now the effect size is low, and will continue to stay low unless we change our practices in the classroom.

- Adults need to have that mindset for their own growth but more importantly for the growth of their students.
The Growth Mindset of Effective Educators

- Lifelong impact on students
- Influence of teachers on learning is paramount
- All students yearn to be successful
- Social-emotional needs are important
- Empathy
- Relationships
- Learning occurs with a sense of ownership
- Discipline is a teaching process
- Minimizing fear of failure
- Building on the strengths of students

(Goldstein & Brooks, 2007)
Behaviors for Teachers to Build Growth Mindset

- Model your own engagement in teaching by showing enthusiasm, hard work and careful thought.

- Share examples of how persistence paid off.

- Model and verbalize a growth mindset.

- View student engagement as a fascinating challenge or a puzzle to be solved.

- Remember that teachers have their own needs for relatedness, competence and autonomy so share that with your teammates to build a community around these factors.
Promoting Engagement: Classroom Environment

● Promote intrinsic motivation by offering fun and challenging activities, allow students to follow their own learning goals, providing clear instructions and feedback.

● Meet students’ needs for relatedness, competence, and autonomy.

● Foster caring relationships with warmth.

● Explain the relevance and importance of all activities while respecting all opinions.

● Promote classroom goals that focus on mastery, hard work, sustained effort, self-improvement and view failure is a temporary setback.

● Use punishment very carefully. Use logical consequences with differential reinforcement of positive behavior.
Literacy Curricula, Instructional Practices & Student Engagement
Different Schools for a Different World

- Mike Schmoker (2006) cites a study of more than 1,500 classroom observations to make the following claims about classrooms:
  - Evidence of higher-order thinking: 3%
  - Teachers using high-yield instructional strategies: 0.2%
  - Fewer than one-half of students were paying attention: 85%

- We have a structural problem. Study after study confirms that the work we typically ask students to do is:
  - Dull
  - Trivial
  - Thoroughly uninspiring

Scott McLeod, 2018
Different Schools for a Different World

- The “Relevance Gap” is related to student disengagement.

- The Achievement Gap asks, “Are students achieving X?” It focuses on mastery of content.

- The Relevance Gap asks, “Is X going to matter to the lives learners are likely to live?” It focuses on lifeworthy application of content and skills.

Scott McLeod, 2018
Different Schools for a Different World

**Why Schools Need to Be Different:**

1. Information landscape is becoming incredibly complex.
2. We need to account for automation and global competition.
3. Teachers are not the exclusive purveyors of information.
4. Students perform undemanding and tedious tasks.
5. We need to teach critical thinking skills.
6. Schools need educational innovations that can respond to evolving student needs.
7. The digital tools students need to be available to all students.

Scott McLeod, 2018
Four Big Shifts for 21st-Century Learning

1. **Higher-level Thinking**
   Creativity, critical thinking, problem solving, and effective communication and collaboration.

2. **Student Agency**
   Greater personalization, individualization, and differentiation of the learning process.

3. **Authentic Work**
   Help students see direct connections between their learning and the world around them.

4. **Technology Infusion**
   Globally connected learning spaces that are deeply and richly technology driven.
10 Building Blocks of The Four Shifts

1. Project- and inquiry-based learning environments
2. Authentic, real-world work
3. Competency-based education and standards-based grading
4. One-to-one computing initiatives
5. Digital and online information resources
6. Online communities of interest
7. Adaptive software and data systems
8. Alternative credentialing mechanisms
9. Flexible scheduling
10. Redesigned learning spaces

Scott McLeod, 2018
“The Problem with Literacy Programs”

“We must reckon with the fact that even popular, highly praised commercial programs often lack a robust evidence base.”

**Effective literacy programs must integrate:**

- Reading large amounts of varying texts
- Writing
- Discussion
- Explicit literacy instruction

Schmoker, *EdWeek*, 2019
Motivation, Engagement & Literacy Achievement

Irvin, Metzler & Dukes, 2007
Teaching for Literacy Engagement

Classroom practices can result in engaged and motivated readers who are:

- Active and energized
- Focused
- Strategic
- Conceptual using higher-order thinking
- Socially interactive
- Knowledge-driven

(John Guthrie, 2004)
Instructional Practices For Literacy Engagement

1. Content goals within in a conceptual theme
2. Texts are relevant to students’ lives and personal connection
3. Providing choice, control, and student agency
4. Ample opportunities to engage in sustained reading
5. Providing hands-on activities related to content goals
6. Using interesting and diverse genre of texts
7. Organizing collaboration and social interactions
8. Teach comprehension strategies
9. Classroom incentives reflect the importance of reading
10. Quality student feedback

L. Gambrell 2011; J. Guthrie 2004, 2011
Enhancing Writing Skills is a National Need

- Two-thirds of students’ writing in 4th, 8th, and 12th grade, was below grade-level proficiency.

- College instructors estimated that 50% of high school graduates are not prepared for college-level writing demands.

- American businesses spend $3.1 billion annually for writing remediation.

(Steve Graham, 2007)
Impact of Argumentative Writing on Student Outcomes

Many studies unequivocally show that “written argumentation” helps students:

- Acquire knowledge
- Promote scientific thinking skills
- Enhance comprehension of history and social studies
- Increase problem-solving in the academic setting
- Increase intrinsic motivation
Impact of Argumentative Writing on Reading

“The explicit teaching of argumentative structure in text, including identifying key elements such as claim, argument, and evidence, plays a crucial role in enhancing students’ comprehension and their ability to respond critically to argumentative text.”

“The writing and reading of persuasive discourse are highly integrated capabilities and that the synergy effects from the mutual dependency of productive and responsive facets of comprehending argumentative structure should be utilized in instruction.”

7 Ways to Increase Writing Engagement

1. Dedicate time to writing *across the curriculum* with various types of writing.
2. Increase students’ knowledge about writing.
3. Foster students’ interest, enjoyment, and motivation to write.
4. Help students become *strategic writers*.
5. Teach basic writing skills to mastery.
6. Take advantage of technological writing tools.
7. Use assessment to gauge students’ progress and needs.

(Steve Graham, 2008)
Increasing Writing Engagement: 
Strategic Writing

1. Set up a predictable writing routine.
2. Make it clear when students should use the strategy.
3. Show students how to use the strategy.
4. Provide students with practice applying the strategy, giving assistance, as needed.
5. Continue instruction until students can use the strategy independently.
6. Encourage students to apply the strategy in appropriate situations once instruction has ended.
7. Ask students to evaluate how the strategy improved their writing (meta-cognition).

(Steve Graham, 2008)
Increasing Writing Engagement: Multiple Purposes

Recognize the need for students to learn to write for multiple purposes including:

- Communicating with others
- Informing others
- Persuading others
- Learning content material
- Entertaining others
- Reflecting about self
- Responding to literature
- Demonstrating knowledge

(Steve Graham, 2008)
CERCA Literacy Framework

“A Predictable Routine”

C E R C A

Claim Evidence Reasoning Counterarguments Audience

A lens for reading, writing, collaborating, and thinking.
ThinkCERCA Curriculum

Content goals within conceptual themes
ThinkCERCA Curriculum
Differentiated texts that are relevant to students’ lives

Article

Yes to Uniforms: A Student’s View
By Rita Karim

There has long been debate about whether public schools can and should make school uniforms mandatory. I understand why some people are against uniforms. But I for one believe uniforms offer lots of benefits. My school requires all students to wear a uniform, and I support the policy. Proponents say uniforms cut down on school violence. Since the 1990s there have been a number of incidents where kids killed other kids over team jackets...

Writing Task
Do school uniforms empower students in ways that help them learn?

Primary Standards
Text Evidence, Argument Writing  View All
Class Discussion Question:
How can we prepare to farm in a world with a changing climate?
Personal Connection with the Text

Get Started

First, read this question and write a short answer.

Write words that describe who you are right now. Think about how you act, what your friends or family would say about you, what you care about the most, and other descriptions of yourself.
Interesting and Diverse Texts Providing Many Reading Chances
Reading Strategy and Skills Instruction

Reading Strategies

Grade Level: 3-12

In this lesson, students will learn strategies for reading including setting purposes for reading, making predictions before and during reading, checking predictions during and after reading, and monitoring comprehension.

Primary Standards
CCSS.RF.3.3

Assign Lesson
Overview

In this lesson, you will read a text on this topic and learn the vocabulary below:

Topic Overview  Vocabulary

The big, and small, events of our lives teach us more about who we are. These events might not seem to mean much at the time, but often a person looks back on a specific moment and realizes its importance. In this story, Graham Salisbury shares a story about working on his stepfather’s boat as a boy, which helped him come to an important realization about himself. As you read his story, notice that he provides a lot of exposition before he even starts recounting his experience. At the end of the story, he repeats the lessons he learned from this experience. He also asks the readers some questions to help them think about his theme as well.

Theme

(noun): A central observation, commentary, or question conveyed in an author’s choices throughout a work.
Closed Reading & Annotation for Deep Engagement with a Text

Use **Blue** to highlight descriptions of the narrator's behavior around John before becoming his deckhand.

Use **Purple** to highlight challenges the narrator experienced while working with John.

Select a Highlighter: 🟦 Blue  🟣 Purple

---

13 Two or three years after that my mother married again. A beachboy. A man named John, who was ten years younger than she was. **He had thick, wavy hair and muscles like Sylvester Stallone.** He could surf, he could water-ski on bare feet, he could free-dive to

---

14 The narrator compares John to a well-known, handsome public figure - thereby showing his esteem for John at first glance

---

15 [Remove]  [Save]  [Save]

---

17 He was a loner and a crusher of self-esteem—mine, and my sisters', and eventually my
Summarizing with Sentence Frames

Plan

Summarize

Write a statement to explain the way you changed as a result of significant event you’d like to share with your readers. This sentence can help you plan what you are going to say, but you do not need to include it in your narrative. The Sentence Starters can help you.

Once I realized how the dismissive way I talked hurt my mother, I changed the way I spoke to her to show that I really was listening, and cared about her thoughts. As a result, we grew closer to each other and learned how to communicate in ways that supported and suited us both.

Sentence Starters

You can use the Sentence Starter below to help you write the statement.

"Once I considered/realized ____ I changed the way I ____ As a result, ____"
Graphic Organizers to Drive Argumentative Writing Structures

 Claim

Your claim should clearly state your opinion—based on what you learned from the reading—about how convincingly the author makes the argument.

Reason

Rachel [is/is not] likely to be a confident woman as she gets older because _____.

Evidence & Reasoning

Counterargument

Next Step >
Integrating Reading and Writing to Support Your Claim

Draft

To the right is the Argument you built on the previous page. Use it to write a Draft that answers the Writing Prompt. Add an Introduction and a Conclusion to tighten your Argument. There are lots of ways to start. Try using your Summary, some ideas from your personal connection writing, or even any attention-getting fact, question, or quotation.

Writing Prompt

Based on what you learn about Rachel throughout the story, is she likely to be a confident young woman as she grows older?

Introduction

Eleven

By Sandra Cisneros

1 What they don't understand about birthdays and what they never tell you is that when you're eleven, you're also ten, and nine, and eight, and seven, and six, and five, and four, and three, and two, and one. And when you wake up on your eleventh birthday you expect to feel eleven, but you don't. You open your eyes and everything's just like yesterday, only it's today. And you don't feel eleven at all. You feel like you're still ten. And you are—underneath the year that makes you eleven.
A Calculated Risk
Why does Jonas Salk's risk make him a great American hero?

Student Writing

According to the article, "A Calculated Risk," polio was an epidemic that left victims paralyzed. Dr. Jonas Salk developed a vaccine that prevented polio. The polio vaccine was incredibly successful because Salk released it without a patent. This invention, and what he did with it, makes Dr. Salk a hero. Dr. Jonas Salk is a great American hero because he helped millions of people without thinking about his own profit.

Heroes are people who help others, so Salk was definitely a hero. For example, Salk decided to use himself and his family as human Guinea pigs for his new vaccine. (Because he was willing to risk himself and his loved ones in order to help others and make medical history, it shows that he is clearly a hero. Salk also "refused to patent his vaccine to profit from it personally." That demonstrates how he wanted to help others, not himself.

People could say that Salk was taking too many risks, but in the end, he saved millions of people from paralysis, so it was clearly all worthwhile. Polio was a terrible disease that affected thousands in the 1960s, but because of the risk he took, Dr. Jonas Salk changed the health of the world, and for that he should be considered a great hero.
Student Collaboration, Discussion & Debate

Critical literacy routines.

Self-paced

Collaborative

Teacher-Led
Student Collaboration, Discussion & Debate

WITH A PARTNER:

1. **Connect**
2. **Read**
3. **Engage with the Text**
4. **Summarize**
5. **Build an Argument**
6. **Create Your CERCA**

IN SMALL GROUPS:

- **Student-Led Error Analysis**
- **Collaborating to Find Evidence**
- **Socratic Discussion or Debate Game**
Studies Show: We Drive Student Achievement

2 years of reading growth
4x more growth than the next best performing product.

In a third-party study of 100+ schools, ThinkCERCA students outperformed their peers nationally on the NWEA MAP test.

Statistically significant impact on writing seen in as early as 8 weeks of implementation.

Source: Atlantic Research Partners, "Literacy Instruction with ThinkCERCA" study, 2016
Source: SRI Education, "Literacy Courseware Challenge Evaluation" study, 2016
Source: Leap Innovations, "Results from the LEAP Innovations Pilot Network" study, 2014-15
Double-Digit Gains Across Every School

8th Grade YOY Growth on Georgia Milestones ELA Assessment

An analysis of Georgia Milestones data revealed Bibb County 8th-grade students gained an average of 17 points on the Georgia Milestones ELA assessment in 2018 compared to 1.2 points gained in 2017 (before ThinkCERCA). Source: Bibb County Public Schools, 2017-2018 Georgia Milestones Data
Hattie’s Influences on Achievement Embedded in ThinkCERCA

- Influence - Effect Size
- Conceptual Change Programs: 1.2
- Formative evaluation: .90
- Collaboration and discussion: .82
- Teacher Clarity: .75
- Student Feedback: .74
- Metacognitive strategies: .69
- Scaffolding: .53
- Peer Influences: .53
Thank You!

Christopher Balow, Ph.D.
chris@thinkcerca.com