

The Beginning Teacher's K-6 Classroom

The Beginning Teacher's K-6 Classroom:

*Combining Theory and Practice
to Motivate Students to Learn*

By

Cynthia Wheatley Glenn

Cambridge
Scholars
Publishing



The Beginning Teacher's K-6 Classroom:
Combining Theory and Practice to Motivate Students to Learn

By Cynthia Wheatley Glenn

This book first published 2020

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Copyright © 2020 by Cynthia Wheatley Glenn

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-5275-4252-1

ISBN (13): 978-1-5275-4252-5

For all those who have encouraged me.

Education has for its object the formation of character. To curb restive propensities, to awaken dormant sentiments, to strengthen the perceptions, and cultivate the tastes, to encourage this feeling and repress that, so as finally to develop the child into a [person] of well proportioned and harmonious nature, this is alike the aim of parent and teacher.

—Herbert Spencer

TABLE OF CONTENTS

INTRODUCTION.....	xv
-------------------	----

SECTION ONE

CHAPTER ONE	3
-------------------	---

MAKING A CASE FOR LEARNING

Introduction.....	3
Psychological Capital and Creative Performance.....	5
<i>Patience and Creative Performance.....</i>	<i>5</i>
<i>Self-efficacy and Creative Performance.....</i>	<i>5</i>
<i>Hope and Creative Performance.....</i>	<i>6</i>
<i>Optimism and Creative Performance.....</i>	<i>6</i>
<i>Resilience and Creative Performance.....</i>	<i>7</i>
<i>Looking for Leprechauns.....</i>	<i>7</i>
<i>Humor and Creative Performance.....</i>	<i>8</i>
<i>Solitude and Creative Performance.....</i>	<i>8</i>
Nurturing Terminal Curiosity	9
Easy ways to Nurture Curiosity	9
Making Cafe Lattes?	10
Nurturing Critical Thinking	11
Comparing Two Tables.....	12
Being Able to Identify and Refute Logical Fallacies.....	13
Using Visual Aids in Identifying Logical Fallacies	13
Correlation, Causation, and Identity	14
<i>Confusing Correlation with Cause and Effect</i>	<i>15</i>
<i>Confusing Correlation with Identity</i>	<i>15</i>
Defending Your Own Opinions, While Listening to and Respecting Those of Others	16
Nurturing a Fulfilled Life.....	18
Contributing to Society as a Whole	19
<i>Nurturing Thoughtful Future Voters.....</i>	<i>20</i>
<i>Nurturing Thoughtful Future Leaders</i>	<i>20</i>
<i>Shelves of Shampoo Bottles</i>	<i>21</i>
<i>Nurturing Thoughtful Workers.....</i>	<i>21</i>
Conclusion	22

CHAPTER TWO	23
WHAT IS LEARNING?	
Introduction	23
A (very) Brief History of Teaching and Learning in America	24
Characteristics of Learning	26
<i>Purposeful</i>	26
<i>Multi-faceted (synthesis)</i>	28
<i>Result of Experience</i>	28
<i>An Active Process</i>	29
Learning Domains	29
Cognitive Learning	30
<i>Explicit and Implicit Learning</i>	31
Affective (noncognitive) Learning	33
Psychomotor Learning	34
Learning Preferences	35
Errors and Mistakes	35
Analyzing Errors and Mistakes	36
The Role of Assessment	37
Using Kid Speak	40
Pacing	40
Teaching to the Test?	41
Providing Effective Feedback	41
Conclusion	42
CHAPTER THREE	45
WHAT LEARNING LOOKS LIKE	
Introduction	45
The Home-School Connection	45
A Bit of Trivia.....	46
<i>Let Children Play</i>	47
<i>Exhibiting Responsibility</i>	48
<i>Encourage and Foster Intellectual Curiosity</i>	48
The Teacher's Role	49
<i>Coming to School Prepared to Teach</i>	50
<i>Think Like a Child</i>	51
<i>Coaching, Not doing</i>	53
<i>Be Consistent</i>	54
<i>Create Natural Consequences</i>	55
The Saddest "Discipline"	55
The Students' Role	57
<i>Coming to School Prepared to Learn</i>	57

<i>Be Willing to Take Academic Risks</i>	58
<i>Student Accountability</i>	59
<i>Students' Self-Awareness and Self-Monitoring</i>	60
Teacher-Student Collaboration	61
<i>Selecting Relevant Projects</i>	62
<i>Happy Learning Noises</i>	63
The Role of Assessment	64
"Tricks of the Trade"	64
The Purpose of Homework	65
The School's Role	66
Conclusion	66

SECTION TWO

CHAPTER FOUR	69
--------------------	----

LEARNING THEORIES

Introduction	69
Pedagogy: Teaching Children	69
Enhancing and Expanding Cognitive Capacity.....	70
Behavior Modification	71
The Problem with Extrinsic Rewards	71
Constructivism	71
Social Constructivism	73
Behavioristic Skills versus Behavioral Growth	73
Teaching and Learning as <i>Process</i> and <i>Product</i>	75
Learning to Think Critically	76
Andragogy: Teaching Adults	78
Oligogy: combining the Best of Pedagogy and Andragogy to Teach Children	79
<i>The Need to Know</i>	80
<i>The Learner's Self-Concept</i>	81
<i>The Role of (Prior) Experience</i>	81
<i>Readiness to Learn</i>	82
<i>Orientation to Learning</i>	84
<i>Motivation</i>	84
Conclusion	86

CHAPTER FIVE.....	87
COGNITIVE FREE WILL LEARNING THEORY	
Introduction.....	87
Bloom's Taxonomy.....	87
Background to Cognitive Free Will Learning Theory	89
Teaching the "Easy" Kids.....	89
Two Curious Types of "Easy" Kids	90
Students Who Can't Learn	90
Students Who Learn in Spite of You.....	91
The Case of the Invisible Student	92
Dealing With Challenging Students	92
Students Who Won't Learn	92
A Road Well Traveled?	93
Definition of Terms.....	94
What About Resiliency?	94
Building a Resiliency Net	94
Nature and Nurture	95
Cognitive Free Will Learning Theory	96
Maslow's Hierarchy of Need Theory	96
The Four Pillars	97
<i>Safe Learning Environment</i>	<i>97</i>
<i>Relevance.....</i>	<i>99</i>
<i>Adequate Time to Practice.....</i>	<i>100</i>
<i>Motivating Students to Choose to Want to Learn</i>	<i>102</i>
Embracing My Inner Second Grader	102
The Five Fs: Friendly; Finesse: Fun; Fast: Focused.....	103
<i>Friendly.....</i>	<i>103</i>
<i>Finesse.....</i>	<i>103</i>
<i>Fun.....</i>	<i>103</i>
<i>Fast.....</i>	<i>104</i>
<i>Focused.....</i>	<i>104</i>
Conclusion	105
CHAPTER SIX.....	107
THE ROLE OF THE TEACHER	
Introduction.....	107
The Role of the Teacher	107
Teachers' Ten Commandments	108
How You Teach	109
The Role of Reflection	110
<i>Emergent Curriculum</i>	<i>114</i>

People Skills.....	115
The Turning of the Shoe	117
<i>Communicator or Bloviator?</i>	117
Daily Journals	118
<i>Sender</i>	118
<i>Receiver</i>	119
My AHA Moment.....	120
Subject Matter Expert.....	121
Preparing Students to Succeed.....	122
Setting Up the Lesson	123
Our Awesome Thanksgiving Holiday.....	124
Expert Assessor	124
<i>Formative Assessments</i>	126
Ticket Out the Door	126
<i>Summative Assessments</i>	127
Preparing Your Tests	127
<i>Creating Test Items</i>	128
<i>General Housekeeping Tips</i>	129
Conclusion	129
 CHAPTER SEVEN	 131
TEENS AND TWEENS	
Introduction.....	131
Anatomy of the Brain	131
Albert Einstein's Brain	132
How Hormones Can Affect Learning.....	135
Charlie Brown, the Wonder Dog	137
Other Contributing Factors	138
Empowerment versus Entitlement	139
<i>How Empowerment Manifests Itself</i>	140
<i>How Entitlement Manifests Itself</i>	140
Fostering Empowerment in Teens and Tweens.....	140
Exercise and the Brain.....	141
The Movement Grows	143
Playing Games as a Way to Learn.....	144
Other Strategies for Working with Teens.....	145
<i>Be Succinct</i>	146
<i>Use Modeling</i>	146
<i>Be a Coach</i>	146
<i>Be Understanding, Not Judgmental</i>	146
<i>Be Tactful</i>	147

<i>Cut Them Some Slack</i>	148
<i>Sometimes, Just Let Them Sleep</i>	148
<i>Be Clear About the Dangers of Substance Abuse</i>	148
<i>Engage Both School and Community Services</i>	149
<i>A Note About Community Service Hours</i>	149
Conclusion	149
 CHAPTER EIGHT	151
UNLOCKING CREATIVITY	
Introduction	151
Cognitive and Noncognitive (Affective) Skills	151
Product versus Process	152
<i>Using Props</i>	152
<i>Asking Questions</i>	152
<i>Defining "Loud"</i>	153
Student Engagement	154
Partial List of Ideas for Teaching Concepts	156
Critical Thinking	156
Fruitful Mistakes	158
Creative Problem Solving	159
SIOP/GLAD.....	160
Curriculum and Instruction	161
<i>No Child Left Behind</i>	161
<i>Common Core</i>	162
<i>Race to the Top</i>	162
<i>Private and Charter Schools</i>	163
Rigorous Curricula	163
STEM versus STEAM	165
Rubrics	169
Conclusion	172
 SECTION THREE	
 CHAPTER NINE	175
SETTING UP YOUR CLASSROOM	
Introduction	175
What to Expect	176
Planning Field Trips	177
Arranging Your Room	178
Arranging Your Physical Space	179
<i>Diagram the Room</i>	179

<i>Identify Problem Areas</i>	180
<i>Teacher's Desk and Resource Center</i>	180
<i>Classroom Library</i>	181
<i>Small Group Work Table Area</i>	181
<i>Wet Area</i>	181
<i>Back of Room Storage Area</i>	182
<i>Door, Windows, and Counters</i>	182
<i>Front and Center of the Room</i>	183
Preparing Your Mental Space	183
<i>Begin Planning Early</i>	184
Front Loading--Big Picture	184
<i>Create a Blueprint</i>	185
<i>Policies</i>	186
<i>More on Files</i>	188
<i>Know Your Contract</i>	188
Front Loading--Up Close and Personal	189
<i>Preparing Your Work Week</i>	189
Back to School Night	190
Parent-Teacher Conferences	191
Conclusion	192
 CHAPTER TEN	 193
CLASSROOM MANAGEMENT	
Introduction	193
First Day	193
<i>Welcoming Students</i>	194
<i>There is Only One YOU</i>	194
Building a Safe Learning Community	196
<i>Rules versus Values</i>	196
Morning Business	198
<i>Class Meeting</i>	198
<i>Read to Students</i>	199
<i>Ice Breakers</i>	200
<i>Learn Names!</i>	200
Teaching Procedures--Part 1	201
<i>Bringing or Buying Lunch?</i>	204
Teaching Procedures--Part 2	207
First Week	208
Corralling Disparate Energy	210
<i>Seven Ring Circus?</i>	211
Orchestrating the Work Week	212

The Marker Rule	214
Art College.....	215
Conclusion	216
REFERENCES	217
INDEX OF NAMES	227
SUBJECT INDEX	229

INTRODUCTION

As a beginning teacher, it's important for you to understand what you're getting into as you go into the trenches to instruct and influence the lives of your children. Teaching is hard work, but you already know that. Teaching is also quite rewarding, provided you have the wherewithal and support you need to be successful. Unfortunately, that doesn't always happen in today's paradigm. In many cases teachers and children alike are undervalued and unappreciated, and teachers who teach young children sometimes have an antipathy toward them that is systemic and culturally-based.

As a teacher of young minds, you are essentially creating intellectual infrastructure. Children under your care and tutelage are learning how to think deeply and critically, how to contribute to a society that needs them to be able to think clearly and well and, hopefully, as adults, become socially aware and vote.

There are many opponents to the idea of teaching children how to be independent thinkers capable of challenging the status quo. First, there are those who think children are incapable of thinking for themselves and need to be guided in the "right" way to approach solutions to problems they will face. In very simplistic terms this idea can be identified by how young students are taught to solve math problems: For some teachers, there is only one way to answer a problem correctly—their way. Happily, this is changing, yet the ground work has already been laid by generations of grown-ups who believe children should be seen and not heard, and who occasionally project through their behavior that children who want to try things a different way are somehow being disrespectful.

Others who push back against the idea of teaching children how to think independently might range from corporate entities to policymakers to Federal departments within a government. When a child is taught to think deeply and well, they might also be taught to question authority, something not everyone wants. Forgive my cynicism, I believe there are those who want to train some people beginning in childhood to be satisfied with their "lot" in life, basing this assumption on how intellectually savvy a child is (read: how well they can answer questions on a mandated, norm referenced test), the color of a child's skin, or how much burden a child's life will place on society as a whole once they grow up.

Part of the responsibility of learning well includes having one's belief systems and values challenged and checked. When teaching young children in a safe learning environment, you are gently nudging them to own their own words, to think for themselves, to defend their own ideas and ideals, and to be authentic, thoughtful citizens in a global society. The learning goals you have for your students extend far beyond reading, writing, and 'rithmetic; you are teaching them to recognize problems and challenges and solving them using means that are creative and innovative, to be empathic, and to look for ways to be helpful.

This book is broken up into ten chapters, with three broad categories. The first section considers the purpose of learning. In Chapter 1 I begin by making a case for learning, in the first place, exploring its importance in a global sense. In Chapter 2 I ask the question: *What is learning?* and provide a very brief history of education in America, the differences between cognitive and non-cognitive learning and their characteristics, and learning preferences. I also discuss errors and mistakes, and how they differ. I end the chapter with the role of assessment, and what that can look like in a classroom setting. In Chapter 3 I discuss what learning looks like, and the responsibilities placed on teachers and students, as well as the school's role to ensure learning takes place. The role of homework is also considered.

The second section, the theory of learning, focuses on learning theories in general in Chapter 4, as well as my own learning theory, *Cognitive Free Will Learning Theory*, which I developed as a doctoral student, in Chapter 5. Chapter 6 looks more closely at the role of the teacher and the skills I think are needed to be successful working with your students. I present ideas on how to use self-reflection to better hone the art and science of teaching; and to consider how people skills, subject matter expertise, setting up your lessons, and assessing student work fit together. Chapter 7 looks at the special skill set necessary to work with teens and 'tweens, considering brain research that supports how working with this age group can be best utilized. The last chapter in this section, Chapter 8, considers the roles of the teacher, student, and collaboration between them; as well as home-school communication, bringing your students' families on board to best reach and communicate with their children. I end this section by suggesting in Chapter 8, ways to unlock creativity in your classroom.

The third and last section, the practice of teaching, is more practical in nature. I begin Chapter 9 by letting you know some of what to expect on your first day of work, even before your children have entered the room. I make suggestions on arranging your classroom physically in such a way as

to keep your students from unintentionally wandering through "mischief making zones" which can inadvertently be set up by you. I also discuss ways you can prepare mentally to teach: from understanding your contract to storing your lessons in a streamlined manner so they are easy to access to preparing emergency lessons for guest teachers when you need to be absent from class. I end this section with Chapter 10, focusing on classroom management. I suggest ways to train your students beginning on the first day of school how to practice necessary procedures that will empower them to take control of their own learning, making all members of your learning community feel safer and, thus, more willing to take academic risks. The chapter ends with ideas on how to prepare for Back to School Night and parent-teacher conferences.

I hope you enjoy this book and find it helpful. Since it is likely we will continue to have children, it is imperative that we also have teachers who feel prepared to teach.

Cynthia Wheatley Glenn
Newark, California

Dr. Glenn is available to work with your organization.
She can be contacted at cynthia@cwglennconsulting.com.

SECTION 1:
THE PURPOSE OF LEARNING

CHAPTER ONE

MAKING A CASE FOR LEARNING

The object of education is to prepare the young to educate themselves throughout their lives.

—Robert M. Hutchins

Introduction

"Why do I need to know this?" "Will this be on the test?" are two questions that glare a harsh light on what learning isn't. As a new teacher it is imperative to understand the importance of learning for its own sake, and how doing so will help children maintain their natural curiosity throughout their formal education, well into adulthood.

Education sets up for life the way children will address and solve problems. Therefore, it is imperative that they be taught the skills to confidently seek out on their own information and research that supports what they want to know and do. As children, that means learning how to learn. But it also means as adults learning how to learn, be it purchasing a car or leading a multi-national project at their place of employment.

Education in general—particularly public education—and teachers, specifically, are under attack (Wheatley 2017) by market-oriented education policies such as highly standardized curricula, high-stakes testing, and teaching to the test—all considered to be inferior practices—leading the way to how schools in America are operated. Chatterji (2017) states that more and more schools are being run as businesses using a market-based structure that discourages technological innovation and a lack of productivity gains for students in the K-12 sector.

Corporate-oriented policymakers have introduced terms that reflect the values and principles of markets and manufacturing, replacing time-honored and effective educational practices such as play and problem-based learning that addresses the whole child, with an impetus toward preparing workers to enter the business world in the capacity of unblinking allegiance to completing unthinking tasks handed down to them to complete within a specified allotment of time. Innovation and creative problem solving is encouraged for only the "best and brightest"; the rest, it

seems, are expected to "toe the company line" and be comfortable with rote learning.

Taking a close look at the narrative that has been woven for the American public over the last three decades can be summed up by this example provided by Wheatley (2017), with the statements within quotation marks being those stated most often and most effectively:

"Everything works better if you run it more like a business," and "education is just like any other business," so to fix "failing public schools," we must "run them more like a business." That means setting "higher standards"; focusing on "rigorous academics" and "a common core of measurable student outcomes" all aimed at "developing marketable job skills" so that our students can better "compete in the global economy." Teachers must use "evidence-based practices" and we should "measure student achievement" using "objective tests." To motivate teachers and students, we need to "incentivize excellence" using "value-added measurements" of teacher effectiveness and "hold everyone more accountable" for results. Overall, we need "market-based solutions" emphasizing "standardization, efficiency, competition," and "school choice." And don't claim that your students' test scores are lower just because your students are poor: "Poverty is just an excuse" and we don't accept any excuses. (p. 10)

By introducing a conceptual reframing of the educational paradigm policymakers and sympathetic politicians can, by repeating fallacious statements such as "failing public schools" reinforces the idea that what is failing is a public-sector institution, which is not the case at all. Wheatley maintains the language that has systematically been introduced to the ongoing public conversation and debate regarding children's educational success hinges upon the rhetoric that powerfully influences which policies and practices seem sensible and which seem unwise or even unthinkable.

This branding has become so pervasive that very few individuals even notice. I have personally been told by dozens of people over the years how "horrible" teachers are, yet who profess high regard for my skill as a teacher. To borrow a quote from Michelle Obama (2018), "It's hard to hate up close." Because of this mindset, we as teachers have a greater responsibility to buck the trend of those individuals and even institutions who would like to see us and our students fail. We could give up, of course, and leave education altogether, moving into the more lucrative and higher respected fields or we can accept that our job is harder than most and jump into the fray determined to teach our young charges the importance of thinking deeply and critically so that they, as adults, can continue to fight the good fight and work on behalf of their own children when it comes to teaching and learning.

What can be done to address this assault on child-centered and problem-centered learning? Let's consider some of the things we can do as teachers to encourage creativity in our students, which will make learning more fun and, as a result, teach our kids tenacity as they master content.

Psychological Capital and Creative Performance

Psychological capital is a spectrum of individual beliefs and practices that, when combined, enable a person to successfully complete difficult or challenging tasks in a creative or innovative fashion. Psychological capital predicts creative performance in general, and idea generation in particular.

If you look at individual components that comprise psychological capital you will find on that list patience, self-efficacy, hope, optimism, resiliency, humor, and solitude. Each one of us is born with these traits embedded in our personalities, yet how we nurture each skill set item can be manipulated by outside circumstances, whether good or bad. Let's analyze how psychological capital impacts creative performance.

Patience and Creative Performance

The ability to be patient is the cornerstone of having and exhibiting creativity. It takes a lot of time to master a skill and those who are patient are typically more successful doing so. Consider any worthwhile hobby, which is often a life-long endeavor and avocation. For some, the hobby may eventually become a paying job or career path yet for most, it is a pleasurable diversion from the everyday sameness of work.

Reminding, or even teaching your students to be patient will help them become successful adults. Too much pressure is placed on children to want and expect instant gratification. Likewise, too many students are coddled and not allowed to graciously learn how to fail in a safe environment. A person who remains calm while attempting different ways to solve a problem gives himself permission to try various, perhaps more outlandish approaches to face challenges and seek solutions. By providing adequate time for students to practice a skill, to fail prior to being successful, they learn how to persevere, which nurtures creativity.

Self-efficacy and Creative Performance

Self-efficacy relates to a person's perceived capacity for carrying out a task (Bandura 1997), and is not directly related to actual skills. Those with high self-efficacy tend to be risk-takers, approaching challenging activities as tasks to be mastered. In a phrase, an individual with a high level of self-efficacy rarely questions his or her ability to do something; they just jump

into a project or activity knowing that they'll be able to figure things out. This ability frees them to try different approaches when facing a challenge, and they tend to not get discouraged in the process.

Hope and Creative Performance

Snyder, Irving, and Anderson (1991) take self-efficacy to the next level, to what they call hope, noting that hope does not need to be defined as a spiritual experience. They define hope as a "positive motivational state that is based on an interactively derived sense of successful agency (goal-directed energy), and pathways (planning) to meet goals" (287). People with hope as per their definition have will power and motivation, as well as the ability to create and change paths toward goal attainment.

You might compare this to the intellectual equivalent of a gifted athlete who, during the course of plan in, say, a basketball game, remains on the balls of his feet, ready to move in any direction quickly. Because he has set himself up to maneuver easily, changing course doesn't leave him off-balance; he just "goes with the flow" of what he deems necessary in the heat of the moment while playing.

So, while efficacy relates to one's personal beliefs about what they can do with their skills, hope relates to the willpower to use those skills along with generating multiple others, if necessary, to achieve their goals. Another way to state the difference between self-efficacy and hope would be to ask two slightly different but important questions:

1. Can I do this? (Self-efficacy)
2. How many different ways can I think of doing this, and do I have the will power to accomplish it? (Hope)

Keep in mind that hope is not wishful thinking. Hopeful individuals are generally independent thinkers and highly autonomous. They go after their goals in a proactive manner, believing in their ability to be successful.

Optimism and Creative Performance

Continuing to build upon these precepts, the next piece of the puzzle is to tie optimism to creativity. Carver and Scheier (2002) state that "optimists are people who expect good things to happen to them, while pessimists are those who expect bad things to happen to them" (231). Optimists believe success can be replicated and controlled. In order to be effective, though, it must be realistic.

Hope and optimism can occur together, but are conceptually distinct. Utilizing an expectancy framework, optimists produce self-fulfilling

prophecy wherein positive explanations become reality. Realistically optimistic individuals expect success when faced with challenges. As teachers, we set the stage for our students that they have the capacity to be successful in creatively facing challenges and solving problems.

Resilience and Creative Performance

Luthans (2002a) defines resilience as "a positive psychological capacity to rebound or 'bounce back' from adversity, uncertainty, conflict, failure, or even positive changes, progress, and increased responsibility" (702). It enables people to feel at ease outside their normal comfort zone, and to challenge personal assumptions and build further resilience through positive adaptation. Resilience is a cumulative and interactive process.

Looking for Leprechans

It was St. Patrick's Day and I was briskly walking my line of second graders across the playground to visit the classroom of one of my teaching colleagues. Her classroom had been magically "vandalized" by a marauding band of leprechans during the night, and we were off to see the mischief that had been wrought.

As a general rule I tended to buck the school's tradition of having students walk in single-file lines like so many quacking ducks, but this morning we did. I was at the head of the line with my ever-present cup of coffee in my hand. As usual, my kids and I were chatting and laughing. I walk at a pretty good clip and because my head was turned and I wasn't watching where I was going, I ran into a basketball hoop standard.

Hard.

It completely jolted my entire body, and we could all see my coffee literally arcing out of its cup and landing on the ground in front of me. Since I was looking behind me it was easy enough to see my students' collective reaction, which was absolute shock. I knew in an instant that how I reacted would impact my credibility as someone who takes learning-but not myself-seriously.

I did the only appropriate thing I could think of: I laughed. Once they knew it was safe, my littles also laughed, about as hard as I did. I'm glad we were all a pretty far distance from any other class because we probably would have gotten in trouble had any "real" grown-up caught us having so much fun at my expense. To this day, that moment remains one of my favorite memories, both as a teacher and as a human.

Resilience is more reactive in nature, sustaining creativity rather than initiating it, as do self-efficacy, hope, and optimism. A curious feature of resilience is how each unique individual's reaction to situations can be at any given time. This leads me to believe that resilience, more so than other features of psychological capital, is hard-wired into one's personality.

Two children who are born and raised in the same family by the same set of parents will more than likely have differing and distinct levels of resiliency, based on each child's innate personality and life experiences. These differences can be attributed to each child's reaction to intentional or unintentional acts of sexism ("You can't do this, you're just a girl."), shame, guilt, or even encouragement ("If you can read, you can do anything.") that is evident within the family structure.

Humor and Creative Performance

How ticklish one's funny bone is can impact creativity. If an individual is "wired" for humor, meaning, if everything that happens in life is looked at through the eyes of someone who doesn't take herself too seriously, she is free to try seemingly crazy things to face and address a challenge.

Young children are masters of this, and it typically takes very little time in a formal educational learning environment to beat this humor out of a youngster. To most littles, pretty much everything is funny. It is a rare teacher indeed who not only laughs a lot during the school day, but who actively encourages students to do so, as well.

Solitude and Creative Performance

I talk about daydreaming and its importance to children in Chapter Eight. This section is directed more to you—the teacher—and how pulling away from the noise of your work and life can help enable you to be a better teacher.

Teaching is really hard work because you're always "on." I've said this before but it bears repeating, teaching, particularly at the K-6 level, is like planning a birthday party every day for thirty kids. This can be exhausting! If you don't protect yourself and guard your boundaries, if you don't stand down occasionally and be still, if you don't "rub elbows" with other creative people on a regular basis, you will break.

This doesn't necessarily require you to go out of town for days at a time (although that does sound lovely, right?). You can take a walk in the afternoon, or curl up in a favorite chair and eat cookies and drink a cup of tea and actively choose to stop grading papers for the evening. The beauty of work is this: It waits patiently at your desk while you're away, and can often thoughtfully multiply in your absence. My point is the work NEVER ENDS, so do everything in your power to not let teaching become your master. It is a wonderful and rewarding career, but no job is worth losing yourself over.

As a teacher it is likely you'll carry your students around in your heart, anyway, so go ahead and let them mentally tag along occasionally. If I

didn't feel comfortable (at first!) going to a museum by myself, I would take a teaching colleague with me and together we'd do reconnaissance on how a specific exhibit might fit in with a unit we were preparing to teach to our students. Balancing your own life makes a case for learning. Being away from your school kids and the challenges you face as a teacher will help you to recharge your own batteries in modeling what learning is about, and helps you to be available to your students when you are with them in class.

Nurturing Terminal Curiosity

Children are born curious, and learning for them is fun—at least, prior to being placed in a formal educational environment where the awe of wonder is too often replaced with sitting at a desk for hours at a time, filling out worksheets. Children, young children especially, take delight in running around, playing make believe, and having fun. Since this is the case, you as the teacher can be the architect for bringing fun into classroom learning.

Stacey (2009) calls the practice of teacher-as-facilitator emergent learning, and explains it as a means for teachers to draw their learners into the process of learning as co-explorers on a fun adventure. There are several things you can do as a teacher to nurture curiosity among your students. First and most important, remind your children on a daily basis that learning is fun, and that knowing stuff is *cool*. Children, in general, have very little power, but being curious can help a child (or a grown-up, for that matter) distance herself from the tyranny of the urgent by enjoying the *process* of learning.

Easy Ways To Nurture Curiosity

1. Don't grade every assignment.
2. Allow children access to explore their texts, teaching them how to use the Table of Contents and Index.
3. Allow children to fail on assignments and tests, occasionally providing opportunities to re-do poor work and earning partial credit.
4. Provide variants to the traditional written term paper to show mastery of a given topic or project: Examples might be creating songs or raps, plays or skits, videos, visual art projects, etc.
5. Allow students to conduct research on a topic of interest outside the parameter of what you're studying as a class, and encourage them to present their findings to their classmates when their project is completed.
6. Have "classroom buddies" with students in another grade level, and have the students in both classes collaborate on a single project.

If you provide ample time and plenty of opportunities for children to explore a new concept, this front loading will be rewarded many times over in that you and your students will have a larger baseline of understanding when considering new concepts in class. Most, if not all teachers will respond to this idea by saying there just isn't enough time in the school day to allow such a luxury. With due respect, I disagree. Whenever you overlap content material into a single project, you are in essence buying time because your students are studying more than one discipline simultaneously. Likewise, their studies will be more authentic because combining subject disciplines will give your students a better idea of what Real Life will look like in the future.

Making Cafe Lattes?

Although a "grown-up" example, this can easily translate to the idea of incorporating multiple subject disciplines into a single project:

I was recently making coffee for myself and my grown son. I am trying to be more accurate in measuring the amount of coffee I use because I found I was wasting quite a bit and having to throw out perfectly good (and expensive) leftovers (I know. I could drink the leftovers and I do, but only for one day—never for two.). I needed to convert grams of coffee beans used to a lesser amount of milliliters of water and still maintain the same coffee strength. By doing this conversion, I combine two disciplines, math and cooking (I know there's a lot of math in cooking, but they're still different.). I also incorporated speaking and listening because while I did mental math for the conversion, my husband pulled out a calculator to check my numbers.

For your students this could look like creating cow mobiles that are constructed of pint, quart, half gallon, and gallon milk containers. If space is at a premium in your classroom, have groups of children make single mobiles, or use pictures of milk cartons so the finished product is two-dimensional. The whole thing could then be glued to poster board and hung on the wall.

You will find that your subject matter content tends to overlap a bit, anyway, so it is not all that difficult to mix disciplines once you've practiced doing so. After a while, you will easily see where *this* will fit well with *that*. For example, you may be studying photosynthesis in science this month, and there may be a story about community gardens coming up in your language arts literature material next month. Could you possibly switch the order of the stories you're reading so that the garden can align with your photosynthesis unit? While you're at it, you can sprout beans in class for a few days then plant them in some dirt outside once they're big enough.

I respectfully recommend that you ask your students what interests them, then work from there. If you bear in mind that you are teaching concepts rather than specific lessons, you will find that you have much

more freedom to be creative and, therefore, nurture curiosity among your learners. I don't know a person who prefers to learn about something that *doesn't* interest them over something that *does*. Again, who cares what you study? There are exceptions to this as there are mandates that require children reach mastery of understanding of certain things at particular grade levels; that's not what I'm talking about. I'm saying, if you're teaching the concept of, say, how to write an expository essay and your students aren't interested in writing about how an elevator works, but they are very interested in knowing how radio signals are transmitted, then why not teach the concept around their learning preference?

Another advantage I've found in mixing things up is it keeps teaching and learning fresh for you and your students, and you can better tailor your lessons to your own unique learning community. Book publishers should not be the only ones to cater to your students' interests. Your kids will learn more because the topic is more interesting to them, and you as the teacher will be more energized and have more fun because your kids are more engaged in what is being taught. Content that is relevant to a learner will be internalized more efficiently and will have better staying power.

I have found that there is actually quite a bit of "wiggle room" in the content you present if you know your curricula well enough to move things around. It is best, though, to try and stay within the same units, if possible, especially if there is mandated testing involved across grade levels. You don't want to sacrifice your students' performance on any District- or state-wide assessment. The end result might be dealing with extremely anxious parents or administration, and that is rarely a good idea.

Nurturing Critical Thinking

Thinking deeply and critically is an extremely important life skill to possess; I would even go so far as to state it is the most important. Critical thinking is to a successful student as consuming vegetables is to a vegetarian. If a student is incapable of thinking on his own and solve problems, he is doomed to depend on someone else to do his thinking for him.

Critical thinking is defined by disciplined thinking that is clear, rational, open-minded, and informed by evidence. Individuals with a high level of critical thinking ability are able to identify and recognize when information they are given is erroneous in nature, or skewed in such a way as to confuse understanding. A good example of data that are easily manipulated would be graphs charting statistical analyses. Depending on how data are presented, it is possible to pretty much make information say

anything you want it to say. Some people attribute the quote, "There are lies, damned lies, and statistics" to Mark Twain, although the origin is actually debatable. The idea, though, is accurate. By changing information in either the x- or y-axis of a graph, it is possible to measure different things. Please see Figure 1.1.

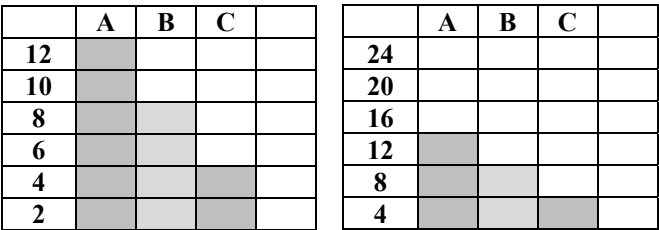


Figure 1.1 Comparing Two Tables
Source: Cynthia Wheatley Glenn

If I were to merely glance at the two tables, above, it would appear that the first one was better because the bars go higher. Although I have exactly the same data graphed in the second table, because it's shorter, the unobservant analyzer might incorrectly think that the data are somehow different. They are not; the same information is shown in both data sets.

It isn't likely that most people would tell you analyzing data is an important skill for a young student to possess, yet I again respectfully disagree. My second grade students have had a lot of fun learning how to graph and analyze data on topics that are relevant to their lives. Primary students may not be able to successfully analyze legislation presented to the general electorate, but I have it on very good authority that they're quite able to do so when comparing favorite flavors of ice cream. Keep in mind that your goal is to teach your students to think critically, and to cement the concept in their brains so their ability can grow with their mental and social development. Like every complicated concept or important life skill, it is a process that takes a long time to master.

Thinking critically isn't relegated only to math class. I've taught my students to think critically in all manner of classroom situations, from figuring out on their own how to sharpen their pencil without interrupting anyone else's work, how to build a puzzle, how to create a five-paragraph essay, or how to look up an answer in a textbook by using the index, to name just a few. Let's look at some of the more important features of thinking critically, beginning with being able to identify and refute logical fallacies.