Introduction—Why Manage Your Classroom

We need to prepare students for THEIR future not OUR past.

—Ian Jukes

There has been a push as of late in education to be teaching students what is termed *21st century skills.* You might ask why this sudden focus on 21st century skills given that we are well over a decade into the 21st century. According to Thomas Friedman and his similarly titled book, it is because the world is becoming flat, that is, the world is not the gigantic place it once was. It was not that long ago that in order to correspond with someone overseas cheaply you had to write him or her a letter. If you were lucky, you could exchange four to five pieces of correspondence in a single year. With the advent of increased communications technology, it is not unreasonable to be connected with someone from any part of the world cheaply in seconds.

A lot has changed in just the last 30 years in the global community, and yet how much has changed in the way we teach our students? If someone were to invent a time machine and travel back 30 years to a school, how much different would it look? Sure you might be surprised at a blackboard as opposed to the white boards in most modern classrooms, but the class would probably still be taught in the same fashion with the teacher standing at the front giving the students information they will be tested on later. Why don't we update our methods of teaching along

with everything else that has advanced in the past 30 years? Because it is comfortable to teach in this manner. It is the way we were taught and is the way we have been taught for hundreds of years. "Why fix it if it ain't broke," as the saying goes. The problem is, recent statistics have shown, it may be broken.

Since we are on a more global playing field, it makes sense to compare students from the United States to students from other countries. So how does the United States stack up (Institute of Education Services, 2011)?

Math		
4th Grade Math	**8th Grade Math**	**12th Grade Math**
1. Singapore – 625	1. Singapore – 643	1. Netherlands – 560
2. Korea – 611	2. Korea – 607	2. Sweden – 552
3. Japan – 597	3. Japan – 605	3. Denmark – 547
4. Hong Kong – 587	4. Hong Kong – 588	4. Switzerland – 540
5. Netherlands – 577	5. Belgium – 565	5. Iceland – 534
6. Czech Republic – 567	6. Czech Republic – 564	6. Norway – 528
7. Austria – 559	7. Slovak Republic – 547	7. France – 523
8. Slovenia – 552	8. Switzerland – 545	8. New Zealand – 522
9. Ireland – 550	9. Netherlands – 541	9. Australia – 522
10. Hungary – 548	10. Slovenia – 541	10. Canada – 519
11. Australia – 546	11. Bulgaria – 540	11. Austria – 518
12. United States – 545	12. Austria – 539	12. Slovenia – 512
13. Canada – 532	13. France – 538	13. Germany – 495
14. Israel – 531	14. Hungary – 537	14. Hungary – 483
15. Latvia – 525	15. Russia – 535	15. Italy – 476
16. Scotland – 520	16. Australia – 530	16. Russia – 471
17. England – 513	17. Ireland – 527	17. Lithuania – 469
18. Cyprus – 502	18. Canada – 527	18. Czech Republic – 466
19. Norway – 502	19. Belgium – 526	**19. United States – 461**
20. New Zealand – 499	**28. United States – 500**	20. Cyprus – 446
Grade Average – 529	Grade Average – 513	Grade Average – 500

Source: Trends in International Mathematics and Science Study (TIMSS), 2011.

According to the Trends in International Mathematics and Science Study (TIMSS, 2011), not so good in mathematics. We are 28th with our eighth graders and near the bottom of the list for twelfth grade. In both, we are below the international average.

Science results are not much better (Institute of Education Services, 2011).

We start strong in the fourth grade but then fade fast, becoming below average by the twelfth grade. Some would argue this is because we have

Science		
4th Grade Science	**8th Grade Science**	**12th Grade Science**
1. Korea – 597	1. Singapore – 607	1. Sweden – 559
2. Japan - 574	2. Czech Republic – 574	2. Netherlands – 558
3. United States – 565	3. Japan – 571	3. Iceland – 549
4. Austria – 565	4. Korea – 565	4. Norway – 544
5. Australia – 562	5. Bulgaria – 565	5. Canada – 532
6. Netherlands – 557	6. Netherlands – 560	6. New Zealand – 529
7. Czech Republic – 557	7. Slovenia – 560	7. Australia – 527
8. England – 551	8. Austria – 558	8. Switzerland – 523
9. Canada – 549	9. Hungary – 554	9. Austria – 520
10. Singapore – 547	10. England – 552	10. Slovenia – 517
11. Slovenia – 539	11. Belgium – 550	11. Denmark – 509
12. Ireland – 539	12. Australia – 545	12. Germany – 497
13. Scotland – 536	13. Slovak Republic – 544	13. France – 487
14. Hong Kong – 533	14. Russia – 538	14. Czech Republic – 487
15. Hungary – 531	15. Ireland – 538	15. Russia – 481
16. New Zealand – 531	16. Sweden – 535	**16. United States – 480**
17. Norway – 530	**17. United States – 534**	17. Italy – 475
18. Latvia – 512	18. Germany – 531	18. Hungary – 471
19. Israel – 505	19. Canada – 531	19. Lithuania – 461
20. Iceland – 505	20. Norway – 527	20. Cyprus – 448
Grade Average – 524	Grade Average – 516	Grade Average – 500

Source: Trends in International Mathematics and Science Study (TIMSS), 2011.

such a large population and a policy of No Child Left Behind, while other countries test only their best and brightest. If that is indeed the case, we should compare the data using only our top students. Then it might tell a different story (Institute of Education Services, 2011).

Grade 12 Top Students	
Grade 12 Advanced Math	**Grade 12 Advanced Science**
1. France – 557	1. Norway – 581
2. Russia – 542	2. Sweden – 573
3. Switzerland – 533	3. Russia – 545
4. Australia – 522	4. Denmark – 534
5. Denmark – 522	5. Slovenia – 523
6. Cyprus – 518	6. Germany – 522
7. Lithuania – 516	7. Australia – 518
8. Greece – 513	8. Cyprus – 494
9. Sweden – 512	9. Latvia – 488
10. Canada – 509	10. Switzerland – 488
11. Slovenia – 475	11. Greece – 486
12. Italy – 474	12. Canada – 485
13. Czech Republic – 469	13. France– 466
14. Germany – 465	14. Czech Republic – 451
15. **United States – 442**	15. Austria – 435
16. Austria – 436	16. **United States – 423**
Grade Average – 501	Grade Average – 501

Source: Trends in International Mathematics and Science Study (TIMSS), 2011.

As you can see, the story remains the same. A twelfth grader in the United States is still below average in both advanced science and math.

How do we better prepare our students to compete in the global economy? Should we better train them for specific jobs? Unfortunately, that is not the answer. In Linda Darling-Hammond's book *The Flat World and Education* (2013), she points out that "the top 10 in-demand jobs projected for 2010 did not exist in 2004" (p. 2). That means schools have the difficult task of preparing students for jobs that do not even exist yet.

How does one do that? By teaching skills that would apply to any job. That is why you manage your classroom rather than teach it. If you manage students to think for themselves, be creative, problem solve, and take responsibility, you are teaching them a skillset that would be valued in the business world and translate to almost any position. Darling-Hammond describes the ideal 21st century skills classroom as one that would "enable students to learn how to learn, create, and invent the new world they are entering" (p. 3). That is why you manage your classroom: to create such students.

The business world is calling for these 21st century students. They are looking for a particular skillset that the traditional classroom might not be preparing them for. Clay Parker, CEO of BOC Edwards Chemical Management Division has stated,

> Our business is changing, and so the skills our engineers need change rapidly, as well. We can teach them the technical stuff. But for employees to solve problems or to learn new things, they have to know what questions to ask. And we can't teach them how to ask good questions—how to think.
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> (Wagner, 2008, p. 2)

Ted McCain and Ian Jukes add to this when they say,

> In the good old days, what you learned in your youth prepared you for your single career. Today, learning has become a lifelong process. Given the rapidly changing nature of our world, people of all ages must constantly learn and relearn what they need to know. What they learned yesterday may no longer be valid in tomorrow's world. Tomorrow they will have to learn again because today's information will already be out of date.
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> (McCain, 2001, p. 89)

In short, the global community is looking for thinkers. That is why there needs to be a shift in the educational philosophy that dominates many of our schools. The traditional classroom is designed to create memorizers. These are students that can remember content long enough to be tested on it. But are students gaining enduring understanding? Are they able to think and adapt the content to fit their needs? Traditional classrooms are designed to teach content, not skills such as thinking. Should we not be focusing more intently on skills so that we can create the thinking student that Darling-Hammond envisions?

This book will help you to manage your classroom so that your students become life-long learners who gain an enduring understanding through these 21st century skills. Not only will this make your students better thinkers, but it will also make you a better teacher. Each chapter will show you what this process of managing your classroom looks like and strategies for employing it. Chapter 1 explains what it means to manage your classroom and the advantages of doing so. Chapter 2 goes over the valuable 21st century survival skills that can be taught using this method that will better prepare students for the real world. Chapter 3 explains how to set it up, providing concrete examples for how this can be used in the classroom. Because teachers and students are accountable for the content standards in any given subject, it is important to center projects around these, and Chapter 4 shows how to do this. In order for this type of classroom to work, students must learn to work in groups and collaborate. This does not just happen, so Chapter 5 will provide strategies for guiding students through successful work in groups. Chapter 6 looks at risk management and how to prevent problems before they even happen. Chapter 7 looks at some different types of products that can be produced, while Chapter 8 discusses how to assess these products. Chapter 9 will talk about orienting the students as well as the teacher's role in the managed classroom and how it looks different than the traditional role teachers usually play. The afterward will wrap it all up and remind you of the type of student you will be creating using this method, the 21st century student. In the appendix, you will find blank forms that will aid you in your journey to transforming your classroom.

It is an exciting time to be a teacher right now. With Common Core State Standards and the increase in school technology, we are advancing our students into the 21st century and beyond. The question you have to ask yourself is, are you going to join them, or remain in the past?