2016

We Need Creative Classrooms (Chapter One of Launch: Using Design Thinking to Boost Creativity and Bring Out the Maker in Every Student)
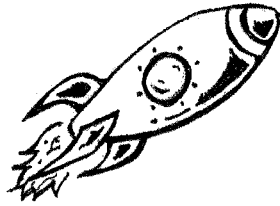
John Spencer

A.J. Juliani

Chapter 1
We Need Creative Classrooms

Never believe that a few caring people
can't change the world.
For, indeed, that's all who ever have.
**- Margaret Mead**

You've seen them. The most successful people in the world aren't defeated by change; they thrive on it. They build solutions and problem-solve on the fly. They make products that serve thousands, even millions, of people. They are creative.

And their creativity helps them navigate new technology, new problems, and new environments. Their creativity gives them the tool set to succeed in a world where there is no proven path and no guarantee that anything will stay the same.

This is why so many people have pushed for more creative classrooms. It's why videos about creativity in education go viral. It's why the Maker Movement has filled schools around the world, inspiring young minds to build, tinker, and play.

Yet, as a classroom teacher or school leader, you know that after years of honing standardized, formulaic processes, making the shift to innovative teaching and learning is not as easy as snapping your fingers and saying, "*Voilà!* Let's put creativity back into our schools!"
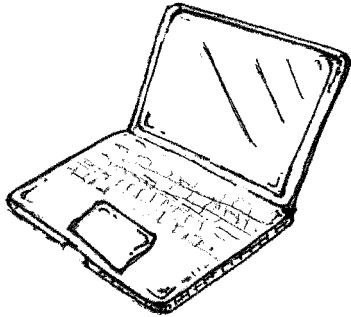
THE NEW DIGITAL DIVIDE IS LESS ABOUT ACCESS AND ALL ABOUT CREATIVE OPPORTUNITIES.

When we talk with teachers around the world about creativity, here's what we hear:

- "Yes, I want my students to be creative, but I don't have enough materials. Do you know how much that technology and maker equipment cost? My school doesn't have the funds for that!"

- "How are we supposed to be doing creative work when following a scripted curriculum? It seems impossible to cover all the standards and prepare my students for these assessments, let alone give them *time* to create and make."

- "I see all of these examples of creative work students are doing on Twitter, blogs, and education conferences, but I don't know how to actually pull that off in my classroom. I've never been trained on these methods, and it seems hard to make it all work smoothly."

- "I've done creative projects and innovative learning in my classroom before, and I've gotten into trouble for it. I've had parents saying I'm not teaching. I've had principals say my classroom was a mess. I don't have the support and permission from my school to do this type of creative work."

- "I know that my students should be doing project-based learning, making, and creating, but I'm just not a creative person. I'm a good teacher, but I don't think I can keep coming up with all kinds of creative ideas for my students."

- "My students are too young to be designing things. We should really just focus on the fundamentals."

- "Creativity is important, but I don't know if that would work in my subject area."

We want to say it loud and clear: We hear you! These issues are real. Change is often difficult, confusing, and even painful. But we also know that our world is changing. With the proliferation of digital devices, we now have the ability to connect to the world anywhere at any time. We now carry around powerful

devices that allow us to create content that had previously been costly and cumbersome.

In the past, we heard about the "digital divide" between those who had access to technology and those who didn't. We are now seeing a new divide emerge—a Creative Chasm between those who passively consume and those who actively create. We see it with the students who spend hours watching videos on their phones, while a few bold students create their own YouTube channels where they film, edit, and launch to an authentic audience. We see it with students who download games, while a few students design their own video games.

Our current model of schooling amplifies this Creative Chasm. From the bell schedule to the grading system to the lesson planning and pedagogy, our students inhabit factory-styled schools. Phrases like "content delivery" and "delivering a lesson" treat education as a commodity to be collected and then used in the future. This model might have worked in developing compliant factory workers. So here we are now, well into the twenty-first century. The factories are gone. The jobs have moved overseas. Yet, this industrial school model remains.

Here's what happens: students grow up immersed in a consumer culture and then attend schools where they consume rather than create knowledge. The chasm widens and students graduate without the creative capacity to navigate the ever-changing landscape of a globalized economy. On a more personal level, they miss out on the deeply human joy of designing and making.

How do we bridge this divide? How do we create innovative spaces where all students can thrive? How do we transform classrooms into bastions of creativity and wonder? And how do we do this when we have limited resources, scarce time, and the constant bombardment of high-stakes testing? These challenges are real, but they aren't insurmountable. We have both experienced these challenges ourselves as public school educators.

But we've also learned something along the way: behind each of these challenges is an opportunity to innovate.

What about the Test?

We live in an era where test scores are mistaken for learning. Teachers are afraid of low scores. They're afraid of being judged. Innovation is risky in a culture that values compliance over creativity.

We realize that the risk is real. We have experienced this ourselves. However, we also know that design thinking isn't about abandoning the standards. It's about raising the standards and challenging students to think at a deeper level. In our experience, when students are thinking creatively, they are fully engaged in their learning. This increased student engagement often leads to more buy-in from students and ultimately deeper learning. Although they still hate the tests, they often view testing as something easy and annoying, because they have already experienced authentic challenges that pushed their thinking to go beyond filling in bubbles.

There is no guarantee that creative thinking will increase test scores, but who would you rather have take a test: a disengaged trained test-taker or a fully engaged creative thinker?

What If There's Not Enough Time?

You might have a rigid, fast-paced curriculum map. While you would love to do creative projects, you find yourself tossing these into the spare moments you have. So you do a culminating project or a special day before a holiday break. In the process, creativity is a side dish or maybe even dessert, while the "real content" is your main dish. But what if creativity isn't a dish at all? What if creativity is a totally different way of cooking? What if creativity means you abandon pre-packaged meals and empower your students to be the chefs?

In this book, we'll explore design thinking as a framework for learning. It isn't a separate subject that you need to squeeze into an already busy schedule. Instead, it's a different way of doing things that will actually free up your time.
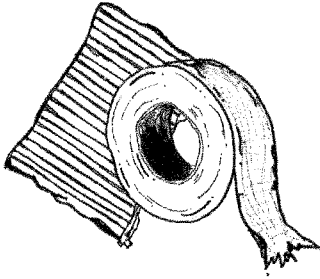
SOMETIMES THE BEST "TECHNOLOGY" IS A ROLL OF DUCT TAPE.

What If I Don't Have Enough Resources?

You don't need a makerspace or a 3-D printer to do creative projects in your classroom. You don't need the latest gadgets or the most cutting-edge apps. Some of our favorite materials have been duct tape and cardboard or a notebook and pencils. We love technology, but the greatest creative asset you have is the human mind.

We noticed this recently when we launched the Global Day of Design. We developed this as a way for teachers to try out the LAUNCH Cycle in a single day. To our surprise, teachers who had never used design thinking began using the resources months before the official Global Day of Design. Their classrooms became hubs of innovation. These teachers were leading creative movements within their districts.

And yet few of these classrooms were "techie" in the traditional sense. They weren't one-to-one. They didn't have 3-D printers. However, they were launching their students in

creative projects using whatever resources they had, and the results went far beyond their expectations.

What If I Fail?

You will fail. It's going to happen. You will have moments when your students get frustrated with the design process. You will have class periods that tank. However, failure is a part of the process for innovative teachers. Each mistake is simply another iteration on the journey toward success.

See, you are a trail blazer and the only way you blaze a trail is by taking risks and failing forward. With design thinking, you have the tools and you have a map. But you are navigating tricky terrain. You are going where the roads aren't paved and danger lurks at every corner. However, it's an epic adventure. Your students will be forever changed.

EVERY MISTAKE IS
SIMPLY ANOTHER ITERATION
CLOSER TO SUCCESS.

What If I'm Not Very Creative?

When you consider the word "creative," you might think of a painter, a playwright, an author, a photographer, a filmmaker, or a chef. In other words, you might think of people who make things. I think it's what we mean when we use a label like "creative type."

But there is no such thing as a creative type. We are all creative. Every one of us. We just need a bigger definition of creativity.

Yes, creativity involves making things. But it can also mean mashing up ideas in innovative ways. It can mean geeking out on data and finding unique solutions to practical problems. It can mean hacking systems and tweaking things in unusual ways. It can mean exploring ideas and navigating information until you become an expert curator. It can mean designing systems that empower the creative work of others. It can mean creating change in the world by speaking truth and leading movements and interacting with people. See, each of these creative approaches shapes our world in profound ways.

And the more we see the creativity all around us, the more we are able to appreciate the creativity inside ourselves. As a teacher, this means you can work out of your own creative strengths while tapping into the creative potential of your students. In other words, you don't have to be a "creative type" to have a creative classroom.
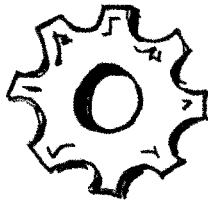
CREATIVITY IS FOR ALL OF US.

THE SURPRISING TRUTH ABOUT CREATIVITY

The problem is that almost everything you've heard about creativity in our schools is wrong. These myths about creativity that pop up in business books, TED talks, and the evening news all make it seem like something unattainable—unless you have

a big breakthrough idea and are letting your students be free to create at all times.

It's time we stop listening to the myth that creative work is for the select, gifted few. Let's work together to break down the barriers that keep us—and our students—from unleashing our creative minds.

Creativity is for all of us. And in this book, we'll show you how to boost creativity and spark innovation in yourself, your school, in any classroom, and with every student.

As classroom teachers, we each spent hours and hours trying to unlock the creativity inside our students. Through project-based learning, inquiry-based learning, genius hour, independent projects, authentic learning experiences, and challenge-based learning opportunities, we saw firsthand what worked—and what failed.

If you are frustrated by the barriers and obstacles in your way right now, don't try to put them to the side. Don't try to hide them. Embrace the frustration and use it to motivate your creative spirit and innovative approach to teaching and learning.

Creativity Is a Process That Requires Structure

The word *structure* gets a bad rap as being part of some sort of rigid process that takes away from authentic and creative learning. That's simply not the case. Structure provides the outline for a song, the dimensions for an architectural wonder, and the steps for a successful launch into space!

Forget what you have been told about creativity and innovation. Forget the notion that structure limits this type of work. Forget the idea of the lone creative genius with complete freedom changing the world. In the coming chapters, we'll introduce you to a specific process and practical framework that will immediately impact the creativity in your classroom.

Design Thinking Is the Process

Design thinking provides a way to think about creative work. It starts with empathy, working to really understand the problems people are facing before attempting to create solutions.

The LAUNCH Cycle Is the Framework

The LAUNCH Cycle is not a formula. It is not a step-by-step guide to being creative. However, we've used the LAUNCH Cycle framework to make creativity an authentic experience time and time again in our classrooms.

The LAUNCH Cycle outlines creative work from start to finish. From listening and learning, to navigating ideas, to highlighting what works, the LAUNCH Cycle builds capacity and clarity for teachers and students who are making, building, tinkering, and creating. The final piece of the LAUNCH Cycle is what sets it apart: actually launching your creation out into the world!

IT'S TIME TO THINK INSIDE THE BOX

The students gather around nervously before the movie. The place is packed and buzzing with anticipation. The filmmakers can't wait to see their movie on the big screen at this Grand Rapids movie theater. But it's not a Hollywood Blockbuster, and the men and women walking down the red carpet aren't the elite actors and actresses you might expect. Instead, the guests of honor are World War II heroes, and the filmmakers are high school students from Kent Innovation High School.

The students have spent months on this project, but the journey was worth it. As the stories unfold on screen, the students look around and see the crowd laughing and crying—success! The night is an unforgettable experience that they will treasure for a lifetime.

People typically think of creativity and innovation as something that happens "outside the box." But the research and people we profile in this book, like the students from Kent Innovation High School, would disagree. The most creative and innovative work comes from circumstances that force a new type of thinking for solutions *inside* the box. If you're skeptical that creativity can thrive despite limitations, consider this: The World War II documentary project was a huge success. And as you'll read in a moment, that success wasn't confined to a single night. These students didn't have fancy gadgets or 3-D printers; they shot their videos with cell phones. And just like your students, the kids at Kent Innovation High School had to take standardized tests.

The teachers at Kent Innovation understood that their greatest assets weren't shiny new pieces of equipment or a slick set of software. It was the creative genius of their students. It was the power of design thinking that unleashed the creative potential in every student. It was the power of a *launch*—of telling a real story to a real audience and thus empowering the students to see themselves as storytellers, creators, makers, and historians.

THE MISSING PIECE TO THE CREATIVE PROCESS: LAUNCHING

A year after the screening, I (John) visited with student filmmakers and talked with them about the project. One student mentioned that the daughter of one of the soldiers had contacted him. The former soldier had passed away, and the family wanted to share part of his story at the memorial service.

"She said that he had never shared his story with the family, and she wanted to thank me for telling it," the student said. He paused for a second and then continued, "It hit me that this is why we made this film. If we hadn't, the stories would have disappeared forever."

Isn't that kind of meaning and purpose what we want for our students? Don't we want total student engagement? Don't

we want students to be empowered to own the learning process? Don't we want students to view themselves as makers and creators?

Sure we do. But what do we do with all the things that keep us from innovating? What do we do, for example, with the self-doubt that stifles our creative ideas?

See Creativity for What It Is

When you see creativity as something to find or acquire, it becomes an act of hoping and wishing for a great idea or moment. In contrast, when you understand that creativity is something you can unleash and bring out of yourself, it becomes an internal act of opening up and using those creative muscles that every one of us possesses.

Creative teachers aren't *only* the teachers whose students work in makerspaces, build apps and websites, do artwork, and act in productions.

Creative students aren't *only* the students who have high IQ scores, tend to be extroverts, and spend time making projects on their own.

Creative teachers are coaches, club sponsors, and classroom leaders who challenge their students daily to think deeply, argue critically, and solve problems. Creative students may be quiet, can often work better as a team member, and tend to respond to intrinsic challenges. Remove the bias about who is creative and who is not creative. You might just surprise yourself.

Making without launching is like cooking a four-course meal and eating it alone. It may taste phenomenal, but you'll be the only one who knows. How sad for others to miss out on the flavor explosion! And how unfortunate that you'd have no validation from anyone else on the planet as to whether the meal tastes as good to another person.

Yet this is what we do time and time again in our schools. We consistently ask our students to make art for themselves, put on play productions for their class, and write poems that only the teacher will read.

What if instead of taking that piece of artwork created in second grade home to Mom and Dad to put on the fridge, we took our students to a nursing home and had them share their art with our elders? What if instead of putting our students' haiku on the bulletin board outside of our room, we compiled them into a Kindle book and launched it on Amazon? What if instead of having our students present a book report in front of the class, we live-streamed it on YouTube and shared it with the author's fans?

When we go through the creative process and stop it after students make something, we are missing out on the biggest opportunity for authentic learning to happen. Launching our work into the real world and in front of an actual audience is what makes creative work so scary, but also so rewarding.

We wrote this book to help you unlock the creativity in your classroom and take it to the next level. We want to make it real, refreshing, and empowering to all of your students—and you, as well! And guess what? We want to show you the exact process, framework, and structure that we've used with students of all ages to unleash creativity. The process and framework we uncover has catapulted businesses, organizations, and entrepreneurs into success because it works in so many different situations with so many types of people and products.

As you continue reading, you'll find that creativity is very inspiring but also very practical. You'll find that innovative work is less spontaneous and more process driven. You'll find that frameworks and limitations help the creative process rather than hindering its potential. Most of all, you'll find that creative work is fun and doable in any type of classroom.

The Silver Lining: Innovation out of Frustration

A few years ago, I (A.J.) was frustrated by the fact that the only thing my eleventh grade students cared about in my class was their grade. Because of this frustration, I decided to launch a 20% project[1]. Taking a cue from Google, I allotted 20 percent of our class time to exploration. I told students to follow their interests and curiosity, research a specific topic, create a product out of that research, and share it with the world in TED-talk-style live-streamed presentations. Students were more motivated than I'd ever seen in all my years of teaching because it was coming from a place inside themselves, not from an extrinsic reward. They learned sign language, made computers, rebuilt car engines, and learned how to play the guitar. One student even tried to clone a carnivorous plant! The project was successful because it empowered students to learn and create based on their interests and passions, not our (adult) needs and curriculum.

Like frustration, desperation can be the trigger for innovation. Human rights violations and genocide are tough topics. Having students read articles and watch a few videos wasn't cutting it. Invariably, after discussing these heart-wrenching issues, students always feel the need to "do something" to help. Out of my desperation to find a better way to teach this unit, my students and I established a collaborative project called *Project: Global Inform*.

The original idea was to send letters and e-mails to senators about human rights violations, but my students took that idea

and turned it into something far better. They partnered with other students in their school who were passionate about the same issues to create an awareness campaign. Using multi-media presentations and social media, they worked to inform their classmates, school, community, and larger global audience about these difficult issues.

Innovation can benefit *any* area of education. For example, staff members at Wissahickon school district felt frustrated about having to spend an in-service day learning about a tool they were already using. Their very appropriate question was, *Why have the same training when everyone is on different levels?* We developed our *game-based professional development missions* in answer to that frustration.

A fantastic teacher with whom I work with was frustrated that "Industrial Arts" (shop class) still looked, for the most part, like it did when he was in high school. After a lot of hard work, he turned that frustration into a new ninth-grade course, Creative Design and Engineering, and a reworking of the entire scope and sequence to create a true Maker Department at our high school.

The lesson? If we allow frustration to get the better of us, we miss the silver lining: Innovative ideas can often come out of working through frustration to a creative end.

WHICH PATH WILL YOU CHOOSE?

You've seen it before. Someone launches a program or an app that promises to revolutionize education. "This is the future of learning!" a pundit will proclaim. Suddenly, articles pop up promising that this new product will replace teachers and change education forever.

We know better. The future of education can't be found in a gadget or app or program or product. It doesn't require a think-tank full of pundits. No, the future of education can be found in your classroom. Your classroom is packed with creative

potential. You have all the innovation you need right there in your room. You have the power to make it happen.

It's what happens when you experiment. It's what happens when you give your students voice and choice. It's what happens when you abandon the scripted curriculum and take your students off-road in their learning. It's what happens when you teach to your students rather than teaching to the test. It's what happens when you unleash the creative power of all of your students, when you make the bold decision to let them make things, design things, and solve problems that they find relevant.
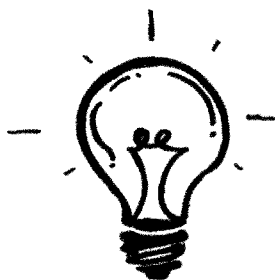
THE FUTURE OF EDUCATION IS ALREADY INSIDE YOUR CLASSROOM.

Sometimes it's messy and even confusing. It often looks humble. But understand this: Every time your students get the chance to be authors, filmmakers, scientists, artists, and engineers, you are planting the seeds for a future you could have never imagined on your own. And that right there is the beauty of creative classrooms. That's the power of innovative teachers. And the truth is, that is why the future of education is *you*. You are the hero of your classroom's story. You are the one who can transform the learning so that all of your students can reach their creative potential.

Design thinking isn't the answer. *You* are the answer. You are the one who can make it happen. The LAUNCH Cycle is a powerful set of tools that you can use as you build the type of learning spaces your students need. But the solution is still you. We are sharing some great tools, but ultimately, the tools are still in your hands.

Too many educators believe they have lost their creativity—or that they were never creative in the first place. Maybe they stopped creating because they didn't think they had the time, energy, or mental capacity for new ideas. We don't buy it. Not creating is a choice—and a poor choice at that. And in truth, every time you come up with a new idea for a lesson, you *are* creating. Every time you think of a way to handle that super-challenging student, you are creating. Every time you collaborate with a colleague, design your classroom, set up the desks in a new way, or do something different—you are creating! What would it mean to take that creativity to the next level?

This book gives you a framework to see creativity and innovation in the classroom through a new lens. This lens empowers you as the teacher and leader to build creative capacity, set structures that increase opportunities for innovation, and set your students up to launch their work to an authentic audience.

The choice is yours. Come alongside us, join the creative revolution, and LAUNCH into learning!

Visit TheLaunchCycle.com to get more information and resources as you read the book. Join the discussion online using the hashtag #launchbook.

Notes

1. http://ajjuliani.com/20-time-guide