Chapter 1

The Rise of the Creative Class(room)

Why Is Creativity No Longer a "Nice Extra" in Education?

In order to navigate the New Realities you have to be creative—not just within your particular profession, but in everything. . . this is true for everybody. Janitors, receptionists, and bus drivers, too. The game has just been ratcheted up a notch.

—Hugh MacLeod (2009)

Why Does Apple Have So Much Money?

How does that $600 you just spent on your last Apple iPhone get distributed among those who participated in its production? According to one study (Kraemer, Linden, & Dedrick, 2011), only about 40 percent of what you

paid for the device was for materials, labor, and shipping. Apple and its shareholders got the rest—as profits.

Primarily for being creative.

Creativity = making money.

Creativity is a vocational skill.

Creativity may be the only way people can stay employed in good jobs in a postindustrial, automated, global economy. Like it or not.

Gone Missing

There are a number of workers I just don't see much of anymore . . .

- I don't see human attendants when entering or leaving parking lots.
- I don't talk to check-in people at the airline counters anymore. My credit card talks to the machine that prints out my boarding pass.
- I am seeing fewer bank tellers and supermarket clerks.
- My children think I am telling tall tales when I tell them that I once had "people" who pumped my gas, washed my car windows, filled my tires, and sometimes even gave me a free drinking glass as a gift when I went to a gas station.
- I don't hear the voice of a human telephone operator, tech support, or reservation clerks until I've waded through a half dozen phone menus who politely, but often maddeningly, give me the information I'm seeking.
- I don't know many people who work in manufacturing now who don't program the robots that do the repetitive tasks more precisely than humans ever did.

It's not like we've not seen this coming. Way back in 2004, professors Frank Levy and Richard Murnane (2004) studied the kind of jobs that had already been increasing and decreasing in the years between 1969 and 1999. They found that jobs requiring "complex communications" grew by nearly 15 percent and jobs requiring "expert thinking" grew by about 6 percent, while jobs requiring "routine cognitive work" and "routine manual work" declined. This study was updated in 2013—and the findings are still accurate (Autor & Price, 2013).

The people whose places have been taken by automatic tellers, self-service equipment, robotics, and menu-driven telephone help trees fall into the "routine" categories. The information given and processes performed are

standardized—multiple-choice answers, if you will. For any situation that arises that calls for something more than an A, B, C, or D response, a supervisor must be found—one who can think "expertly" and be a creative problem solver.

In today's economy, machines or workers in developing nations do simple things less expensively—and often more precisely. And do we really want our students aspiring to mindless, repetitive work?

Right Brain Skills, the Creative Class, and Luddites

In his book *A Whole New Mind: Why Right-Brainers Will Rule the Future*, Daniel Pink (2006) asks the reader if his job can be done better by a machine or less expensively in another country. But the most interesting question he asks is this: "Am I offering something that satisfies the nonmaterial, transcendent desires of an abundant age?" (p. 232).

In other words, Pink predicts that when one has the money and is given a choice, a consumer will purchase a product that not only works, but has something value added. An aesthetic appeal, for example. It will be these creative folks, those who use the right sides of their brains, who are less likely to lose their jobs to factory workers in China or to a robot.

Richard Florida (2003) writes about the group he calls the "Creative Class." He estimates that about 30 percent of the US workforce can be categorized as creatives, divided between the Super Creative Core and Creative Professionals. (Remember these distinctions when we examine Big-C and little-c definitions of creativity in Chapter 4.) These people and their companies earn enough money that cities attempt to lure them as residents—as opposed to trying to have their jobs outsourced to Bangladesh.

The outsourcing and automating trend is now impacting a new set of workers: those in traditional white-collar jobs. *New York Times* economics columnist Paul Krugman (2012) thinks Luddites, the 18th-century English textile workers who were threatened by automation, got a bad rap. He writes that "the workers hurt most were those who had, with effort, acquired valuable skills—only to find those skills suddenly devalued." Today's "Luddites" are x-ray technicians, legal researchers, computer programmers, and other skilled occupations. A college degree alone no longer offers a lock on full-time, lifelong employment at a good salary.

Business gets this. In response to this rapidly and dramatically changing economic landscape, the 2010 IBM poll of 1,500 CEOs identified creativity as the number one "leadership competency" of the future (IBM, 2010).

We as conscientious educators cannot ignore these employment trends.

What Do Our Educational Standards Say?

Obviously I am not the only, and certainly not the first, educator who has figured out that schools need to start thinking about creativity as an important skill students must develop.

In 2000, Benjamin Bloom's famous taxonomy of learning objectives was revised by some of his previous students (Anderson & Krathwohl, 2001). *Creating*, with its sub-descriptors of designing, constructing, planning, producing, inventing, devising, and making, became the highest of the higher-order thinking skills.

The International Society for Technology in Education (ISTE; 2007) in its widely used National Educational Technology Standards require students to "demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology."

The American Association of School Librarians's (2007) standards demand students "demonstrate creativity by using multiple resources and formats" and "use creative and artistic formats to express personal learning."

The International Baccalaureate program (2014) core requirements include CAS—creativity, action, and service—stating "creativity provides students with the opportunity to explore their own sense of original thinking and expression."

In their Framework Definitions document, the Partnership for 21st Century Skills (2011) lists "Think Creatively," "Work Creatively with Others," and "Implement Innovations" as key student outcomes.

Look carefully at thoughtful, forward thinking, recognized standards in your region or organization. Do they recognize creativity as a valuable skill students will need to be successful in education, in their careers, and in life?

Creativity and Engagement

In the workshops on "Net Generation learners" that I give, I ask participants to describe some ways today's kids' lives, values, and experiences are different from when we were children. One common response is that "today's kids need to be constantly entertained."

I would challenge that observation because too many of us confuse the terms *entertainment* and *engagement*. Here is how I differentiate the terms:
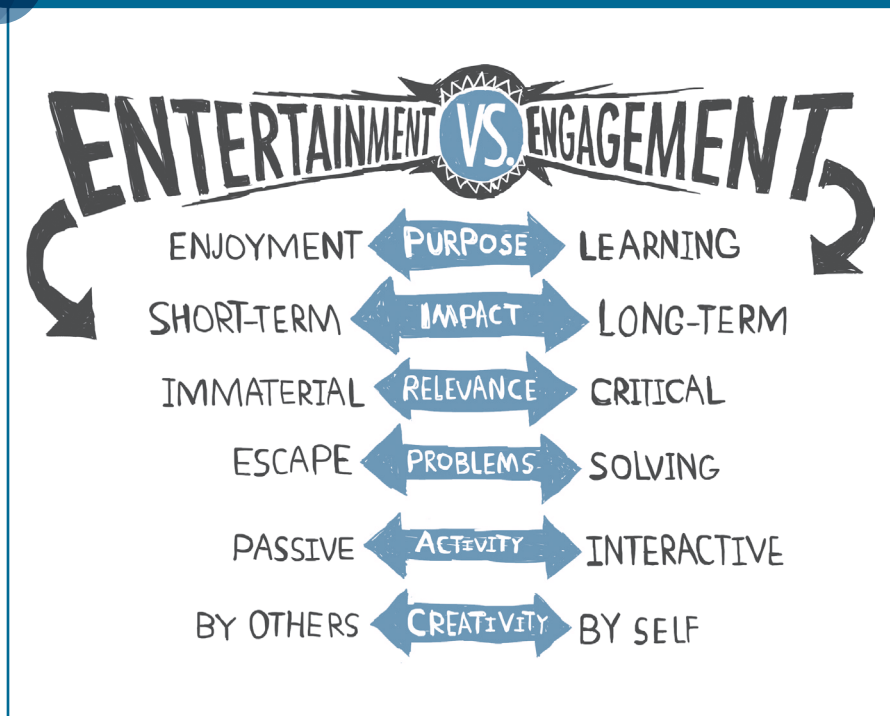
- Entertainment's primary purpose is to provide an enjoyable experience; engagement's primary purpose is to focus attention so learning occurs.

- Entertainment is ephemeral, often frivolous; engagement creates long-lasting results and deals with important skills and subjects.
- Entertainment needs have little relevance to the reader/watcher/listener; engaging experiences most often relate directly to the learner.
- Entertainment is an escape from problems; engagement involves solving problems.
- Entertain is often passive; engagement is active or interactive.

and especially

- Entertainment is the result of the creativity of others; engagement asks for creativity on the part of the learner (see Figure 1.1).

Figure 1.1

ENTERTAINMENT VS. ENGAGEMENT

ENJOYMENT	PURPOSE	LEARNING
SHORT-TERM	IMPACT	LONG-TERM
IMMATERIAL	RELEVANCE	CRITICAL
ESCAPE	PROBLEMS	SOLVING
PASSIVE	ACTIVITY	INTERACTIVE
BY OTHERS	CREATIVITY	BY SELF

As an increasing number of students carry in their pockets or backpacks devices that can both entertain *and* engage, teachers need to know and remember the difference between the terms. Allowing or asking students to create—and not simply consume—turn these devices into tools for

education. True, kids may still be distracted from our lectures and worksheets, but when in the act of creation, they will at least be productively distracted. We'll visit this topic again in Chapter 7.

Completing an education that allows entry into both the workplace and society is critical for every student today. When our society truly can no longer afford to leave any child behind, it will be engagement by encouraging creativity in learning that may help us reach every child.

The Most Important Reason Kids Need to Learn to Be Creative

So far, we've looked at creativity as a vocational skill, a work skill, a means to secure good jobs.

But idealist that I am, I also want students who feel empowered, knowing at heart that they have the ability to be sufficiently clever. That they can solve any problem they encounter. That they don't have to simply take what life throws at them and live with it. That there is always a way, if one is sufficiently innovative and persistent, to get around, over, under, or through any obstacle.

As both a parent and teacher, my primary objective is for my children to be able to get along just fine without me.

Far too many children leave school without the confidence or even realization that they have the ability to solve their own problems. They rely on parents, teachers, or perceived leaders to present "the solution" to issues that trouble them. As we'll examine in Chapter 10, schools have had the historic societal charge to create conformists, order takers, and in-the-box thinkers. But as David Brooks (2014) observes about that student who has a perfect academic record applying for a job,

> this person has followed the cookie-cutter formula for what it means to be successful and you [as an employer] actually have no clue what the person is really like except for a high talent for social conformity. Either they have no desire to chart out an original life course or lack the courage to do so. Shy away from such people.

As a lifelong educator, my mantra has always been that my mission is to create thinkers, not believers. A large part of thinking should be thinking creatively as a means of solving our own problems, solving the problems of society, and understanding that we all have the power to choose the paths we take in life.

I love the everyday MacGyver-like innovators I encounter—both children and adults. I respect those individuals who see an obstacle as something akin to a jungle gym—a chance to not just climb but to get joy and satisfaction in

doing so. I admire people who see their lives not as something into which they were born, but something they've created.

Can you think of a better reason that students need to practice creativity?

How Are Schools Doing in Creating Creative Students?

Sadly, studies show that schools in the United States have not succeeded in helping foster creativity but are doing just the opposite. We're crushing the creativity right out of kids. According to one study, creativity scores had been going up, paralleling IQ scores until about 1990. Then boom—down they went. Says the study's author Kyung Hee Kim, "It's very clear, and the decrease is very significant." It is the scores of younger children in America—from kindergarten through sixth grade—for whom the decline is "most serious" (Bronson & Merryman, 2010). She observes further (Townsend, 2014) that

> children have become less emotionally expressive, less energetic, less talkative and verbally expressive, less humorous, less imaginative, less unconventional, less lively and passionate, less perceptive, less apt to connect seemingly irrelevant things, less synthesizing, and less likely to see things from a different angle.

Our educational system does a good job of rewarding social conformity and building a one-right-answer mentality. In his book *Savage Inequalities*, Jonathan Kozol (1992), after examining schools in East St. Louis, Chicago, New York City, Camden, Cincinnati, and Washington, DC, concludes that two separate public school systems operate in the United States:

> Children in one set of schools are educated to be governors; children in the other set of schools are trained for being governed. The former are given the imaginative range to mobilize ideas for economic growth; the latter are provided with the discipline to do the narrow tasks the first group will prescribe. (p. 176)

The obvious culprit, of course, is our American obsession with testing. Drilling students ad nauseum—that there is always one right answer. While it is a noble goal to make sure all students, regardless of social class or ability, can demonstrate the basics of reading, writing, and mathematics and have core knowledge about science and the social sciences, this bar is set too low and two narrowly. Basic skills without the confidence to apply them in new situations will still leave children behind.

Testing, however, is a topic for another book. Instead of looking for excuses, let's look for some solutions.

Up for Discussion

1. Do educators need to reexamine their perceptions of what skills students need to be successful in today's economy? How are today's skills and dispositions different from those needed by previous generations?

2. Can judging whether graduates are "career and college ready," the worthy goal of many K–12 schools, be done solely on the basis of standardized test scores? Do teachers need to assess more than the basics?

3. Does the attention given to creativity in a school system separate graduates into the categories of "the governors" or "the governed"? Can it be argued that developing self-sufficient, empowered individuals who have both the skills and confidence to solve their own problems is the hallmark of an effective school?