

Education, Creativity, and Economics: What Future Do We Want?

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What is the “creative economy”? And how does it relate to the goals of the Philadelphia Academies? Let me talk a bit first about the idea of the “creative economy”, and then move on to how the themes behind that might be infused into the Philadelphia Academies’ areas of engagement: mechanical science, aerospace, business, communications, applied electrical science, environmental technology, health, horticulture, hospitality, information technology, law / criminal justice / public administration, petrochemical science, urban education, and your middle school program.

The “creative economy” is best known, perhaps, through a book by Richard Florida, a professor of public policy at George Mason University, entitled *The Rise of the Creative Class*. In that 2002 book, Florida points out that in the late nineteenth century, it was the factory worker who was the key player in society. In the 1950’s, it was the “company man” — the person who spent his life working for one corporation. Now, the most important class, Florida argues, is the “creative class,” which includes visual artists, musicians and performers, high-tech workers, designers, and so on. Florida's theory states that metropolitan regions (such as San Francisco, Austin, Seattle, etc.) with high concentrations of these people have a higher level of economic development. Moreover, in his book, he says that cities would do well to attract this “creative class”, and that the people of this class will comprise a “creative economy,” which will replace the old industrial and information economies.

Richard Florida’s ideas have led to a great deal of debate as to whether his recipe for economic success is sound or not. But in fact, the question is much more complicated than the one Florida presents...

In the spring of this year, I was asked by The University of the Arts to investigate this idea of a “creative economy”. I was given Florida’s book to read, and I subsequently read a number of other works on the subject. I also thought about how cities really work —

I've lived in Philadelphia, San Francisco, Toronto, Rome, Lisbon, London, Tokyo, Taipei, and Sao Paulo — and the question of who creative people really are and what they do, and what an “economy” truly means. In the end, I came up with a rather different idea about the “creative economy”.

What I had realized was this:

What Richard Florida was talking about was taking creative people and having them live and work in what was really the *existing* economic model. They would sell their services — in art, design, technology, whatever — for a living, and often a rather modest living at that. A city might attract creative people, indeed, but those people would end up (as many our University graduates end up) as “functionaries” in large, rather anonymous organizations and corporations. Same old model.

Richard Florida also put forward the idea, as a colleague recently pointed out to me, that the “natural resources” required for the industrial age — steel, coal, and so on — have been replaced with the “natural resource” of the “creative class” itself, which has become a resource that is competed for just like any other. And just as steel, coal, and oil were needed to build strong, competitive companies, so now are creative workers need to give a company the adroitness and edge to survive in an even more competitive environment. In this sense, Florida has a valid point, although we can't deny that those old natural resources, alas, are as important as ever.

And as for the “creative class” as a resource... Well, the problem, I realized, was that creative people are brought in at the bottom level, into an existing, antiquated structure. They are not brought into the *top* level, where their talents could make a difference — that is, in leadership in business and politics, in entrepreneurship, and most of all in creating totally new paradigms about governance, education, the environment, and so on. We shouldn't have underpaid designers drawing up designs for yet another Nike® sneaker — the world doesn't need another sneaker, anyway. We should have designers re-designing the whole way we think about products and consumerism.

Far away as I had moved from Richard Florida's ideas, I still felt that the term “creative economy” could work. Again, Florida talks about the “creative economy” as the economics of people in creative fields (arts, culture, and so on). But the actual word “economy” has more interesting roots: from the ancient Greek *oikos*, meaning “house” or “settlement”, and *nomos*, meaning “law” or “principle”. So the “creative economy” is really about creativity and innovative thinking applied to the *oikos* — the whole “societal household”, *all human settlement*. And it's really about building a new *nomos* — new laws and principles and paradigms — for that society.

I went on to write up a mission statement for The University of the Arts' new Center for the Creative Economy:

The Center for the Creative Economy (CCE) at The University of the Arts seeks to define, research, and promote the creative process as a transformative force for society.

The key here is “transformative force,” because we face a big challenge, a world that needs transforming. We live in a global society —but one that still operates on nineteenth-century principles and with nineteenth-century methods. That’s right — not twentieth century, but the century before *that*. Our education system, our modes of employment, our attitude towards the environment, and our systems of governance and foreign policy — all are locked in stiff, barely adequate nineteenth-century forms.

They don’t serve the enormous challenges we face today, nor do they serve to open up possibilities for a more interesting future. They simply promise more of the same: conflict, poverty, and uneducated and displaced masses.

It is *here*, then, at the top, where we need creative people, to transform these fundamental elements of society. We need creative people in leadership positions, as drivers of businesses and government, to transform — perhaps even discard — those institutions.

This means a new understanding of creativity — as something beyond the “creative” fields of visual arts, music, and so on.

The prior understanding of creativity was one of what might be called “applied creativity” — innovation to create the tools and systems that define modern, technological society: airplanes, automobiles, telephones, and so on. Through this model, creativity came to be rather narrowly defined: artistic creativity and the creation of visual and performing arts, and scientific/technological creativity and the invention of “things”. The problem of this model is that it is highly compartmentalized: creativity only exists in certain venues, and for certain purposes — namely, highly intellectualized artistic activity, and or very business-oriented technological innovation.

The new definition of creativity is going to be something along the lines of a new way of analyzing problems, solving problems, and building paradigms — i.e., new ways of thinking about education, employment, work, and so on. The new definition of creativity is going to be about applying the creative process to *systems*: the way we think about the purpose of human activity.

So, how does this relate to the mission of the Philadelphia Academies? Well, we can start by looking at the different areas and see how creative and innovative thinking could play a role:

applied automotive and mechanical science — are there new ways of thinking about transportation and the role of the automobile in society (note how much it has shaped our society so far)? is there still room for the innovative independent inventor these days, as there was in the early days of the automobile?

aviation and aerospace — how do we use aviation? who flies and for what reason? is flight only for the wealthy? and aerospace: will space travel become privatized? is there room for creative entrepreneurship there?

business — what new models of business might there be? how might ideas like “fair trade coffee” be expanded to other businesses? is the basic model of capital functioning well? are we answerable to our customers, our employees, our stockholders, or the society?

communications — what is role of media and communications in our society? are things like the Internet really being used in ways that are creative and innovative?

applied electrical science — what innovations has the electrification of society brought? how do societies (and there are many) that do not have electrification function? what is the future of electrical science and its implications of a highly “developed” society?

environmental technology — our relationship with the environment has remained relatively unchanged since the industrial revolution: the environment is a resource for use to exploit... but what are more creative ways we can look at the environment? what are longer-term, more sustainable relationships we could develop?

health — our model of health is one that is largely based on an illness-treatment model, but are there other models? and what do we really mean by “health”? couldn’t we take a more innovative, holistic approach?

horticulture — what is our exposure to the natural world in such an urbanized environment as Philadelphia? how could we make people better understand our close inter-connection with plants and the natural world, especially when we are often separated from it during our daily, urban lives?

hospitality — some years ago, someone came up with the idea of “eco-tourism”; are there similarly creative approaches to tourism and hospitality out there that we are missing?

information technology — much is said about the “information revolution” and the technology that brought it to us; but do we really use this information to be creative and innovative, i.e., to solve problems of communication and education?

law, criminal justice, and public administration — the U.S. has the highest prison population in the world; the criminal justice system is begging for a more creative solution to both the problem and definition of criminality; how are other countries and cultures dealing with these challenges?

petrochemical science and technology — an easy one: the need for a creative solution to our oil dependency is in the news every day; what are the realities of a culture that is dependent on petrochemicals, and how might we change?

urban education — does our educational system really produce creative thinkers, people who will be able to address the problems of the future? how do we educate, especially in an urban setting that is afflicted with the challenges of funding, crowded classrooms, and lack of support?

The big question — one that often does not get asked in discussions in educational institutions (even this one) — is “What are we really preparing our students for?” Perhaps the question is too difficult, too plagued with unknowns, or just too uncomfortable. We are living in a post-industrial, post-service, post-information age. What’s left? In a way, we are back at the beginning, not much different from a developing country, where those who succeed do so on the basis of their own initiative and entrepreneurship.

What exactly, by the way, is creativity and the creative process?

There are many ways to talk about creativity, and one can use terms such as “genius,” “inspiration,” and “serendipity,” or the more modern (yet already well-worn) phrases such as “out-of-the-box thinking.” Some time ago, I put together a list of what I call “Themes and Characteristics of Creative Work,” what I saw as key aspects of creative thinking. These run as follows:

Analogy and Metaphor — There are not only useful for visualization, but also for problem-solving: if we can resolve an analogous situation or issue, we can perhaps then solve the particular challenge we are facing.

Perception — In the creative sense, perception means the ability to see patterns where others are unable to do so.

Simplicity — Often the most creative solution is that which is most simple.

Adversity — The human mind deals with obstacles in two ways: retreating from them, or seeing them as challenges. The creative mind will often use the difficult or hostile environment as a chance to solve problems and display innovative thinking. The Roman writer Seneca stated: "The good things of prosperity are to be wished; but the good things that belong to adversity are to be admired." Our own Philadelphian, the celebrated Benjamin Franklin, put it even more concisely, writing, "The proof of gold is fire."

Technical Mastery — Creative problem-solving demands the proper tools, techniques, and methods. Creativity can only come flourish if there exists the appropriate "vehicle."

Persistence — Many creative ideas meet resistance. New ideas, new art, new discoveries, and inventions often defy traditional concepts or aesthetics, and are not readily accepted. But creativity can demand of the innovator that he or she persist despite such obstacles. Richard Feynman, the Nobel Laureate physicist, believed in doing lots of experiments and working through many possible solutions in attempting to find the right one. He said: "To develop working ideas efficiently, I try to fail as fast as I can."

Although I wrote down these ideas several years ago, I still believe that all of these are key components to the creative process. But I also believe that there is an underlying element to all of these that is vital: the fact that there is a *process* in creativity.

In business, when a new product or service is introduced, or in academic institutions when new curricula or policies are discussed, there is often the idea that a simple round-table discussion or a committee will generate a creative idea. We have seen in this country a number of failures that are a result of this thinking: the troubles of an auto industry that let Japanese innovation overshadow their own, the struggles of an education system that has not adequately prepared a new generation of young people.

These failures come from the inability to see that the creative, innovative ideas that society needs are the result of a process. This process can be one of solving problems (as it often is in science), providing new ways of seeing the world (in art, but also again in science), and building new connections. Certain skills or practices often support creative behavior, including an ability to visualize, use of the imagination, expressiveness, and openness. As we examine creative insights, we can see that all of them are based on new

ways of thinking, seeing, and understanding. But these "new ways" need a structure in which to grow, and that is what I mean by "process." The process might be something like this:

- (a) articulation of the problem
- (b) gathering of a group to discuss the problem
- (c) a re-defining or "refining" of the problem
- (d) individual reflections on the problem
- (e) presentations of possible solutions to the problem — visual, textual, tactile, and so on
- (f) integration/selection of solutions

What is important here is to agree that there is a process at work. Process is essential to the clear stating of the creative issue at hand (in the example above, that issue is some kind of, let's say, design problem), and the construction of a solution — even if that solution is very open-ended. Only through process can the input of creative people be fully understood and fully utilized. Simple round-table discussions can be enormously frustrating and tedious for the creative person; they want to see the A, B, and Cs of the creative "act" — they want to know how are we going to do it, and when are we going to start!

So what? Why is creativity important to us? The factory culture is dead. We want to cultivate our own, not import. We want skills, but also creative thinking, and the accompanying qualities of focus, self-discipline, and vision.

As part of this, we need to re-examine the intellectual versus the vocational. The purely intellectual may *not* be what we need at this point — just because you have an advanced degree might not put you on the road to success. And vocational can no longer be thought of as merely training to be a low-level employee doing work that requires no intellectual capacity. We need, for one, to give higher value to "hands on" work, and ask questions as to why someone who does that work often is not given the social (or monetary) evaluation as is someone who is university-educated. At the same time, we need to begin examining new, integrated or even radically different paradigms of education.

To do that, we need to think about what direction we want to move our society in; we need to ask what kind of future we want. Only then can we educate our youth in any kind of meaningful way. Truly creative thinking is about asking these kinds of questions.
