

Cultivating Genius in the 21st Century  
By Jonah Lehrer | February 28, 2012 | Wired  
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Most economic growth has a very simple source: new ideas. It is our creativity that generates wealth. So how can we increase the pace of innovation? Is it possible to inspire more Picassos and Steve Jobses?

The answer to that question is hidden in history books. Several years ago, statistician David Banks wrote a short paper on what he called the problem of excess genius: It turns out that human geniuses aren't scattered randomly across time and space. Instead, they tend to arrive in tight clusters. (As Banks put it, talent “clots inhomogeneously.”) In his paper, Banks cites the example of Athens between 440 and 380 BC. He writes that the ancient city was home to an astonishing number of geniuses, including Plato, Socrates, Thucydides, Herodotus, Euripides, Aeschylus, and Aristophanes. These thinkers essentially invented Western civilization, and yet they all lived in the same place at the same time. Or look at Florence, Italy, between 1440 and 1490. In a mere half century, a city of fewer than 70,000 people gave rise to a staggering number of immortal artists, like Michelangelo, da Vinci, Ghiberti, Botticelli, and Donatello.

What causes such outpourings of creativity? Banks quickly dismissed the usual historical explanations, such as the importance of peace and prosperity. (In Plato's day, Athens was engaged in a vicious war with Sparta.) The academic paper ends on a somber note, with Banks concluding that the phenomenon of pockets of genius remains a mystery.

And yet it's not a total mystery: We can begin to make sense of the “clotting” of creative talent. The secret, it turns out, is the presence of particular meta-ideas, which support the spread of other ideas. First proposed by economist Paul Romer, meta-ideas include concepts like the patent system, public libraries, and universal education. Furthermore, by looking at what various ages of excess genius had in common, it's possible to come up with a creativity blueprint for the 21st century.

The first pattern that becomes clear is the benefit of human mixing. It's no accident that past talent clusters were all commercial trading centers, which allowed a wide diversity of people to share ideas. (Urbanization makes this mixing easier.) The same logic still applies: Research indicates that in the overall population, a 1 percent increase in the number of immigrants with college degrees leads to a 9 to 18 percent rise in patent production. Open immigration policies are a feature, not a bug.



Another recurring theme is the importance of education. All of these flourishing cultures pioneered new forms of teaching and learning. Medieval Florence saw the rise of the apprentice-master model, which let young artists learn from veteran experts. Elizabethan England made a concerted effort to educate its middle-class males, which is how William Shakespeare—the son of a glover who couldn’t sign his name—ended up getting free Latin lessons. We need to emulate these ingenious eras and encourage rampant experimentation in the education sector, whether it’s taking the Khan Academy mainstream or expanding vocational training. As T. S. Eliot once remarked, the great ages did not contain more talent. They wasted less.

The last meta-idea involves the development of institutions that encourage risk-taking. Shakespeare was lucky to have royal support for his odd tragedies, while Renaissance Florence benefited from the willingness of the Medicis to support new artistic forms, such as the use of perspective in painting. Many of these ventures failed—Shakespeare wrote several bad plays—but tolerating such failure is the only way to get a Hamlet.

This might seem like an impossibly ambitious agenda. It’s not. Bill James, the pioneer of Moneyball-style statistical baseball analysis, points out that modern America is already very good at generating geniuses. The problem is that the geniuses we’ve created are athletes. As James says, this is largely because we treat athletes differently. We encourage them when they’re young, chauffeuring our kids to practice and tournaments. We also have mechanisms for cultivating athletic talent at every step in the process, from Little League to the Majors. Lastly, professional teams are willing to take risks, betting big bucks on draft picks who never pan out. Because of these successful meta-ideas, even a small city like Topeka, Kansas—roughly the same size as Elizabethan London, James points out—can produce an athletic genius every few years.

We’ve never needed geniuses more than we do now. The good news is that we can learn from the creative secrets of the past, from those outlier societies that produced Shakespeare and Plato and Michelangelo. And then we should look in the mirror. The excess is not an accident.

## Modified AoW Assignment

You will not write a position paper this week. Instead, you will complete all of the following tasks.

1. Complete a SOAPStone analysis.
2. Thoroughly annotate the article.
3. Write a 25-word abstract.
4. Complete APA citation for the article.

Look up all of the following individuals mentioned in the article:

- A. Plato
  - B. Thucydides
  - C. Herodotus
  - D. Euripides
  - E. Aeschylus
  - F. Aristophanes
  - G. Michelangelo
  - H. Da Vinci
  - I. Ghiberti
  - J. Botticelli
  - K. Donatello
  - L. Picasso
  - M. T.S. Eliot
  - N. David Banks
  - O. Bill James
  - P. Paul Romer
5. What does David Banks say about excess human genius?

