

INTEGRATING CREATIVITY SCIENCE
WITH GIS TO CREATE SUPERIOR
GEOSPATIAL PRODUCTS



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The Practiced Components of Creativity

CREATIVE PERCEPTION

Working through an especially difficult problem with your left-brain processes may not yield creative answers because your left-brain is only looking for conventional solutions. Your left-brain wants to find a pattern that fits with what it has encountered in the past. This is helpful for many tasks but not for discovering truly novel approaches.

While a problem is “on your mind” you want your senses to be tuned in to collecting bits of information that previously would have been filtered out. Suddenly, things that would have been deemed irrelevant become important in your quest for a solution.

Keep your eyes and ears open by recognizing what seems like coincidence for what it really is – the product of being tuned to the right frequency. Once you realize it isn't random, you will start to notice even more.

POSTPONE JUDGEMENT

Allow your seemingly ridiculous ideas to have a moment. Take them a step further than you used to. Don't shoot them down right away as being too far-fetched.

When someone comes to you with an idea, ask questions first, make suggestions second. When ideas are stopped at their very start you will wind up with fewer ideas.

How could we present
this to the IT staff?

NOT

IT would never approve
the new technology

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FLEXIBLE ASSOCIATION

Practice making connections where there is no obvious link. A surprise twist may lead to an innovative solution.

Think of two GIS datasets that don't seem related. In 5 minutes or less, jot down 2 additional datasets that could be used to link the original datasets in some way. Even if the end product doesn't make sense, the exercise will increase your associative skills. see example, below



IMAGINATION

Give yourself time to visualize solutions. This can be done through meditation, staring at a wall, taking a shower, or wherever you do your best unstructured thinking.

We cannot take concerted action if we can't visualize ourselves carrying it out. A picture is worth a thousand words. Group-think solutions don't always get implemented because nobody goes back to their desk and actually visualizes the solution in action – it was all just words.

This association will have no real-world applicability or usefulness but allowing my brain the freedom to connect these disparate datasets revs up the right-brain for a day of difficult analytical work.

Why you need to drum-up some new ideas

A CASE FOR CREATIVITY

By coupling the creative brain with the analytical brain it is much easier to create truly superior products that leave positive lasting impressions than by using one's analytical brain alone.

“Every great advance in science has issued from a new audacity of the imagination.” –
John Dewey, philosopher

The geospatial profession is growing. There is still a lot of room for ingenuity in everything from web map design to creating new spatial statistics to applying the technology to new fields.

SEEING AND DOING

A typical painting class goes back and forth between demonstrations (seeing) and student practice (doing). As GIS professionals, we already practice the “doing” aspect in our daily work by making maps, designing programs, discovering new analytical pathways, and so on. However, GIS professionals are often lacking in the realm of actively and deliberately observing and absorbing the imaginative creations of others.

Places to *see*

SMITHSONIAN AMERICAN ART MUSEUM

www.americanart.si.edu

NATIONAL GALLERY OF ART

www.nga.gov

THE LOUVRE

www.louvre.fr/llv/commun/home.jsp

DAVID RUMSEY HISTORICAL MAP COLLECTION

www.davidrumsey.com

THE MUSEUM OF MODERN ART

www.moma.org

Additional Creativity Resources

SHORT ARTICLES FOR INSPIRATION

Life in the Slow Lane
by Glenn John Arnowitz

www.dynamicgraphics.com/dgm/Article/28924

The Artful Dodger
by Diane Root

www.nytimes.com/2008/10/19/magazine/19food-t.html

PRESENTATION ON CREATIVITY



The powerful link between
creativity and play
by Tim Brown

www.ted.com/index.php/talks/tim_brown_on_creativity_and_play.html

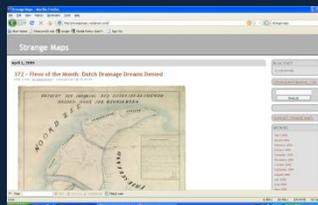
WEBSITES TO BOOKMARK



www.smashingmagazine.com



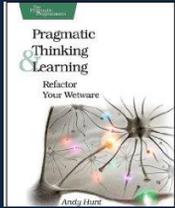
www.colourlovers.com



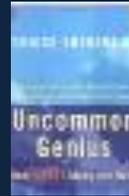
www.strangemaps.wordpress.com

Additional Creativity Resources

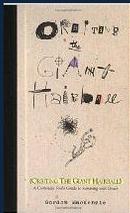
EXCELLENT BOOKS



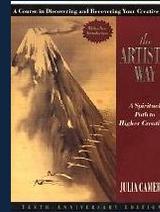
Pragmatic Thinking & Learning:
Refactor Your Wetware
by Alan Hunt



Uncommon Genius
by Denise Shekerjian



Orbiting the Giant Hairball
By Gordon MacKenzie



The Artist's Way
by Julia Cameron



Emotional Design
By Donald A. Norman



creativity Today
by Ramon Vullings, Godelieve
Spaas, Igor Byttebier