Spoon feeding in the long run teaches us nothing but the shape of the spoon — E. M. Forster

The technicalities matter a lot, but the unifying vision matters even more — T. Nelson
Creative Educators Summit

Thanks
A bit about me

... my dream
... my dream
Creativity
Creativity
challenges
challenges
Creativity
Defining Creativity
I know it when I see it!

(Justice Potter Steward 1964)
Creativity
Creativity
Novel

Fresh, unusual, unique, surprising, startling, astonishing, astounding, germinal, trendsetting, radical, revolutionary, influential, pioneering...
UNIQUE

JUST BECAUSE YOU ARE UNIQUE DOES NOT MEAN YOU ARE USEFUL
Effective

Valuable, important, significant, essential, necessary, logical, sensible, relevant, appropriate, adequate, effective, functional, operable, useful, user-friendly
Don Norman’s tea pots!
Whole

Organic, ordered, arranged, organized, formed, complete, elegant, graceful, charming, attractive, refined, complex, intricate, ornate, interesting, understandable, meaningful, clear, self-explanatory, well crafted, skillful, well made, meticulous, careful
Thus a creative product is **NEW**

*Novel*

*Effective*

*Whole*
Creativity is a goal orientated **process** of developing solutions that are **Novel** **Effective** **Whole**
But...
Where do NEW ideas come from?
Creativity is just connecting things
— Steve Jobs
My response to Mr. Jobs...
If only it were that easy...
the creative process itself will never be easy... this crux of combinatorial creation – that magic moment when ideas click together and “make a stable combination” – cannot be forced.

We can, however, optimize our minds for combinatorial creativity – by enriching our mental pool of resources with diverse, eclectic, cross-disciplinary pieces which to fuse together into NEW combinations — Maria Popova
Combinatorial creativity + the cross-pollination of disciplines
The paradox...
Being both...
in a discipline
and yet
outside of it
The importance of disciplinary knowledge
Disciplines teach us to see

Purposes | Knowledge | Methods | Forms
Disciplines teach us to see
Purposes | Knowledge | Methods | Forms
Rosamund E. M. Harding (1899 - 1982)

**Without the rock of knowledge genius has no foundation**

Originality depends on new and striking combinations of ideas. It is obvious therefore that the more a man (sic) knows the greater scope he has for arriving at striking combinations. And not only the more he knows about his own subject but the more he knows beyond it of other subjects.

Success depends on sufficient knowledge of the special subject, and a variety of extraneous knowledge to produce new and original combinations of ideas [and]... technical skill [which] must be so far developed that it is never a hindrance to the flow of ideas.
(in)Disciplined learning
Ludwig Boltzmann 1844-1906

James Clerk Maxwell 1831-1879
The variations of the velocities are, at first, developed majestically: then from one side enter the equations of state: and from the other side, the equations of motion in a central field. Ever higher soars the chaos of formulae. Suddenly we hear, as from kettle drums, the four beats “Put N = 5.” The evil spirit V (relative velocity of molecules) vanishes: and, even as in music a hitherto dominating figure in the bass is suddenly silenced, that which had seemed insuperable has been overcome as if by a stroke of magic... One result after another follows in quick succession till at last, as the unexpected climax, we arrive at the conditions for thermal equilibrium together with the expressions for the transport coefficients. The curtain then falls! — Boltzmann on Maxwell’s work on the dynamical theory of gases
If we care about creativity,
We must provide opportunities for play across disciplines
Because...
Chance favors a prepared mind — Louis Pasteur
A mind prepared for combinatorial creativity...
Instead...
“No Child Left Behind” After Six Years: An Escalating Track Record of Failure

Submitted by fairtest on January 25, 2008 - 5:06pm

After six years, there is overwhelming evidence that the deeply flawed "No Child Left Behind" law (NCLB) is doing more harm than good in our nation's public schools. NCLB's test-and-punish approach to school reform relies on limited, one-size-fits-all tools that reduce education to little more than test prep. It produces unfair decisions and requires unproven, often irrational "solutions" to complex problems. NCLB is clearly underfunded, but fully funding a bad law is not a solution.

Public recognition of the law's ill effects has produced a growing consensus in favor of a fundamental overhaul. It's time for a new conception of the federal role in education—beyond standards, tests and punishments—in order to strengthen schools and truly leave no child behind.

* NCLB rests on false assumptions—e.g., test scores equal educational quality, and sanctions based on low test scores drive school improvement. As a result, it offers false remedies that are not working. Since NCLB was signed, reading scores on the National Assessment of Educational Progress (NAEP) have stagnated, and the rate of improvement in math has slowed. The neediest children in our nation continue to receive an unequal and inadequate education. In Texas, for example, the "achievement gap" narrowed on the state test but widened on the NAEP. The façade created to
Lansing schools may cut 87 jobs under 5-year contract
Elementary art, music, PE teachers would be eliminated

Lansing School District music teacher Dave Wullaert gives instruction to Gier Park Elementary students on Thursday. Greg DeRuirer/LSJ

Lansing teachers and the school board Thursday agreed to a five-year contract that includes a pay freeze, eliminating elementary art, music and physical education teachers and a reduction of teacher planning time.

That could mean cutting as many as 87 staff positions in the 915-student district in the fall. The school board will still have to approve the contract at its final meeting May 20.

At the meeting, the board heard about the state’s M-380 productivity report, which classified Lansing as a productivity district. Lansing’s teachers average 25.7 productive hours per staff member compared to the state average of 22.9.
The need for NEW* ideas
Science
ART SCIENCE
To end...
3 words...
3 videos...
Have a wonderful day...
Remember to...
Thanks
punyamishra.com
punya@msu.edu
punyamishra
Stink Different