Collaborative Innovation

By the Collaborative Innovation Team!

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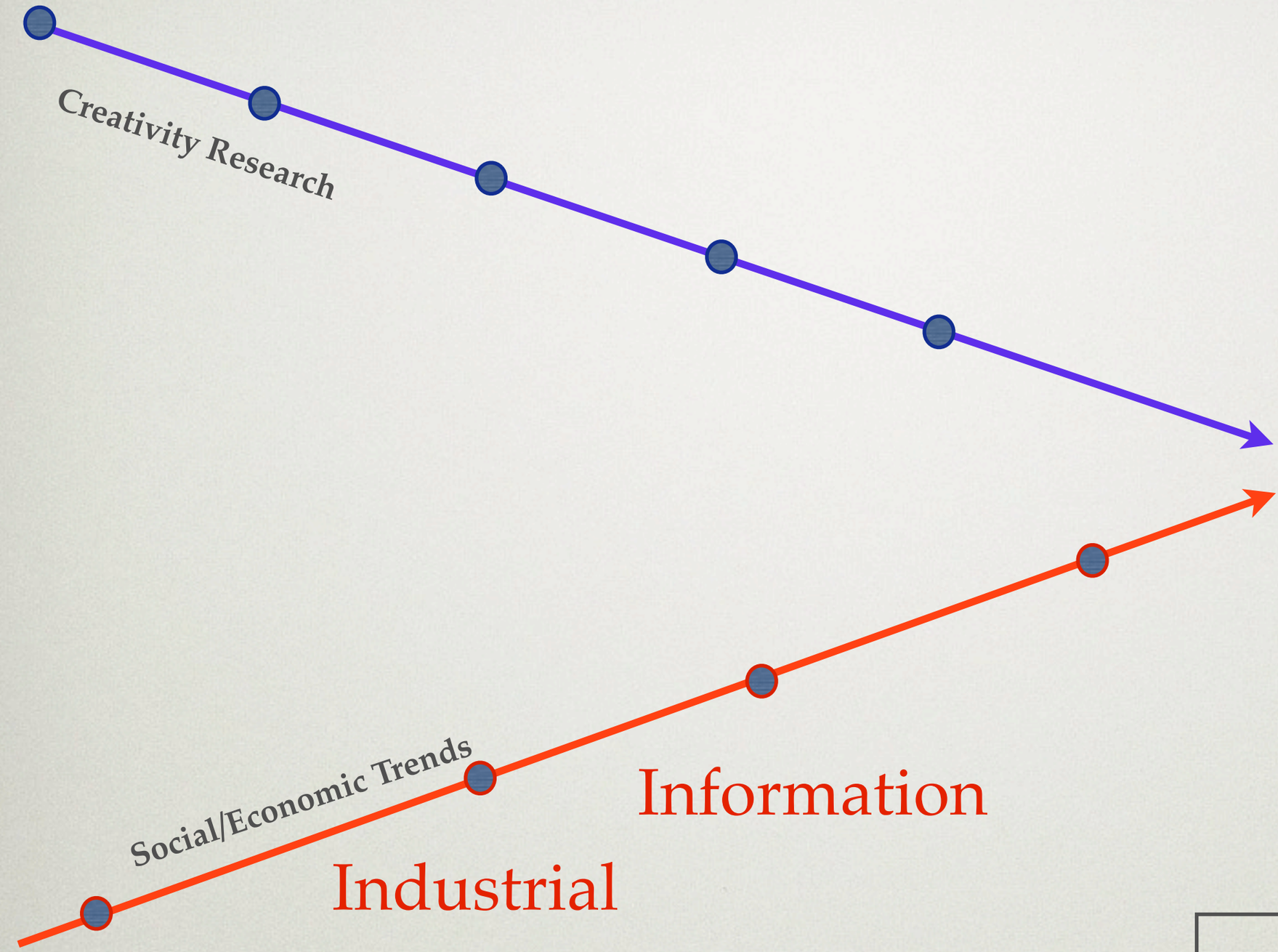
Modern Emphasis on Creativity

- 68.3% increase in patent applications from 1996-2001 (Banahan & Playfoot, 2004)

- Creative skills are critical to job/business success (Ogunleye, 2006)

- Creativity and collaboration are the "**essential competence**" (Hakkarainen et al, 2004) , the "**critical prerequisite**" (Coakes & Smith, 2007), and the "**ultimate economic resource**" (Florida, 2002).



Key

Creativity Research

Society / economic trend

Unknown / mystical (Plato, Kant)

Hereditary (Galton)

Cognitive (Weisberg, Smith, Ward, Finke)

Systemic (Csikszentmihalyi)

Creativity Research

Agricultural

Industrial

Information

Social/Economic Trends

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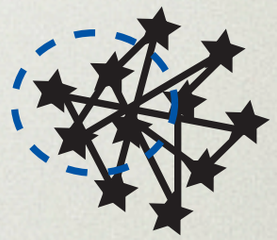
Systemic (Csikszentmihalyi)

Social / Group (Paulus, Nijstad, Sawyer)

Creativity Research

Community of Innovation



Innovation

Information

Industrial

Agricultural

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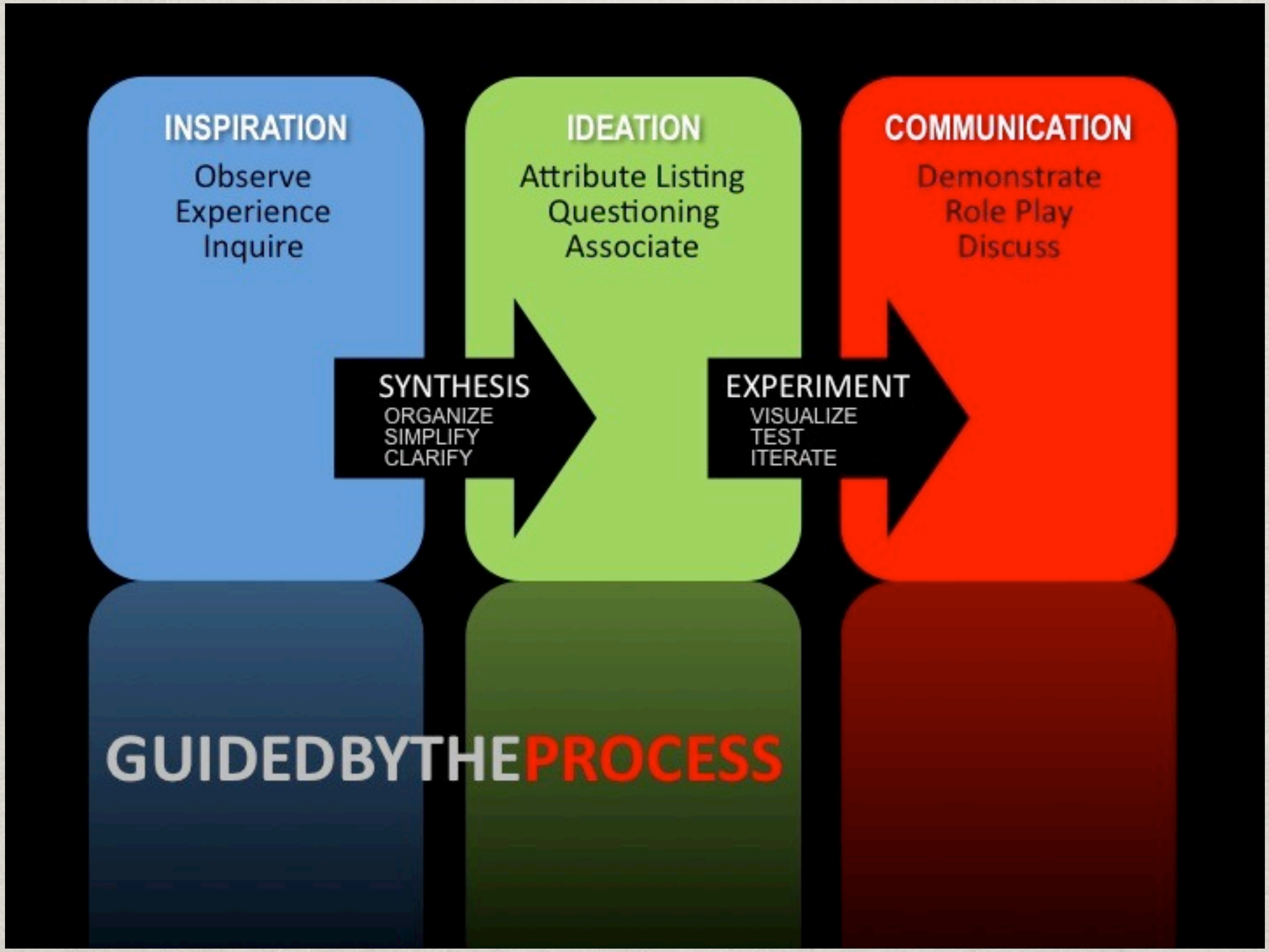
Can we Teach This?

Setting:
The Innovation Boot Camp



Compensatory Behavior

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Overall Effect

TTCT Test

- Normed over hundreds of thousands of scores over 40+ years

- Most reliable and used Creativity Test

- Tests: Fluency, originality, premature closure, abstractness, elaboration, and creative strengths

Does Creativity Go Up?

Table 2

	Mean		SD		p	F	Effect Size
	Pre	Post	Pre	Post			
Overall	86.09	90.65	17.48	17.28	.04	4.35	.049
Fluency	20.16	19.99	5.6	7.97	.84	1.30	.0004
Originality	17.06	18.26	5.19	5.22	.099	2.78	.032
Elaboration	10.72	10.80	2.89	2.88	.796	.067	.001
Resistance to Premature Closure	15.5	16.72	4.11	3.63	.022	5.425	.06
Abstractness of Title	9.76	10.71	5.28	5.33	.112	2.572	.029
Creative Strength	12.95	14.30	4.44	3.88	.008	7.358	.08

- Yes, on a statistically level, but perhaps not on a practical level

Survey says ...

Table 3.

Survey Item	Pre	Post
Pre: Based on past experiences, I feel I am able to . . . *Post: Innovation Boot Camp helped me / learn to . . .*		
Be flexible and adaptable---willing to change thoughts and activities as needed	5.7	5.5
Draw associations from distinctly different things to inspire creativity	5.3	5.7
Refrain from prematurely making a judgment so I can consider new ideas	5.2	5.7
Accept criticism as part of the process of improving my ideas without rejecting my ideas prematurely	5.4	5.5
Break out of my own limiting patterns, norms, and prejudices	4.7	5.4
Discover new skills, unrelated to things I had done in the past, to complete this project	5.3	5.3
Tolerate uncertainty and risk.	4.8	5.2
Reframe failures positively, and learn from them	5.2	5.1
Evaluate choices and ideas in a neutral and open way	5.6	5.5
Become more innovative		5.7
Apply the process and steps of innovation		5.7
Break out of my own limiting patterns, norms, and prejudices		5.4
Discover new skills, unrelated to things I had done in the past, to complete this project		5.3
Additional questions		
How innovative do you think you are (understanding, skill set, etc.)?	4.9	5.2

<2>

Group Effect

Group Average

GROUP NAME	GROUP AVERAGE
Megaguru	10.3
4ners	-29.67
AEIO	-13
Spring	-6.5
WWHs	-32.5
MARDQ	4.6
ACIDS	-8.33
OnTrack	10
Jacls	16.6
HotAir	17.5
Renegades	23.3
Classier Czars	-3
Rad Cad	-0.33
SOAR	22
SNARL	16
GrabBrass	32.3
Jury	24
Turdo	-3
Reason	15

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Comparison

	Pre-TTCT Average	Post-TTCT Average
Increased Teams (n=22)	80	100
Decreased Teams (n=26)	90	86

- Overall N = 86
- Overall Mean = 86
- Overall SD = 17

WHAT HAPPENED?

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1. Pure Coincidence

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3. Team members positively influenced creativity of others

4. The combination of 2 and 3

<3>

Cross-Case Comparison

Research Design

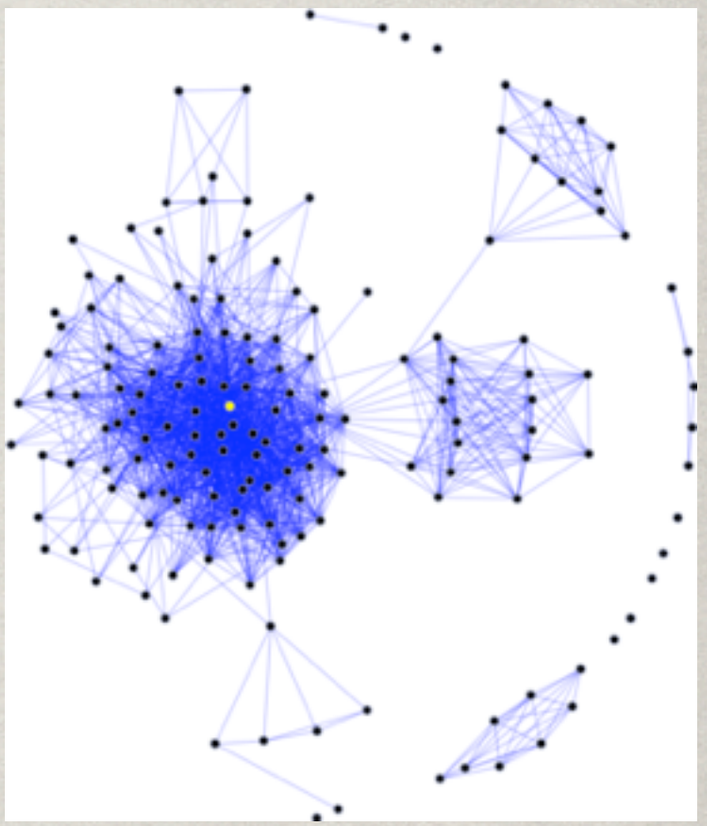
- Case studies of 4 cases in each of two settings (n=8)
  - Instructional Technology Studio
  - Innovation Boot Camp
- Data: observations, video analysis, interviews, voice memos
- Reported as comparative case studies

Common Patterns

- Democratic leadership vs. Domination, affecting group's ability to attend to diverse perspectives
- Balancing feasibility with innovation
- Value of open and supportive collaboration and critique
- Problem/solution ownership and common vision, leading to group flow and the best ideas

Future Directions

- Boot Camp
  - Block class effects/experiences, development of a group innovation assessment, SNA
- Animation Studio
  - Leadership, idea generation/development, culture
- K-12
- Other Settings?
  - IIC, Mormon Messages, Ad Lab, classroom settings



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