CREATIVE CHAOS

TEACHING PROJECT TEAMS TO BE INNOVATIVE, OR MAKING THE MAGIC

DREW DAVIDSON
Creative Chaos

- Ambiguous Ideas & Uncertain Results
- Rapid Prototyping & Iterative Design
- Flexible Process & Comfort with Unknowns
Teaching Creativity

- Imagination & Innovation
- Skill & Process
- Individual & Group
Creative Production

- Design & Development
- Communication & Collaboration
- Leadership & Management
- Schedule & Budget
- Trust & Respect
Making the Magic

- Innovation
- New, Useful, Good
- Design Process
- Problem Solving
- Critical Creation
How?
CMU Tepper Study of ETC

- Laurie Weingart
  - Sr. Assc Dean of Education & Carnegie Bosch Professor of Organizational Behavior and Theory, Tepper, CMU
- Gergana Todorova
  - University of Miami
- Kenneth Goh
  - University of Western Ontario
ETC Study Methods

- How Does Expertise Diversity Translate into Innovation?
- 60 ETC Projects (2008-2011)
- Teams Surveyed 4 Times during Semester
- Observations & Interviews
- Independent Ratings of Final Product
ETC Study Measures

- Team Processes
- Conflict & Communication
- Coordination & Leadership
- Faculty Ratings
- Innovation, Quality
- Useful, Usable, Desirable
ETC Study Results

- More Diversity Leads to:
  - More Conflict during Process
  - and
  - More Useful, Usable, Desirable Products
  - Higher Quality & More Innovation
Further ETC Data*

- Gender, Ethnicity, Work Experience
- Project Type, Team Size, Instructors
- Familiarity, Leadership, Valuing Diversity

*2014, Anna Mayo  
CMU Tepper Doctoral Student
Creative Orchestration

- Creative Process is Inherently Chaotic
- Failures Happen, On-Going Challenge
- More Diversity is Better and Harder
- Process needs Support
Pro Tips
Valuing Diversity

- Gender, Sexual Orientation, Ethnicity, Socio-Economic, Culture, Religion, Age, Disability, Expertise, Work...

- Inclusive & Supportive

- Actions & Words

- Product & Process

- Discuss & Address

- Culture & Community

- Difference & Progress
Improv

- Yes and...
- Shaping Experiences
- Comfort with Chaos
- Something from Nothing
- Serve the Story
Feedback

- 10 years worth in 2
- Product, Process, Public Events
- From Faculty, Peers, Guests
- Daily, Weekly, Milestones
- When you’re screwing up, and nobody is saying anything to you anymore, that means they gave up.
  - Randy Pausch
Workshops & Lectures


- And More…
People (Can) Suck

- Supervisor
- Client
- Colleagues
- Bureaucracy
- Public
- You
Responsibility

* For the Work
* For Dealing with Colleagues
* For Mistakes, Failures, Regrets
* For What You Don’t Know
* For Being Your Best
Comfortability

- With Responsibility
- With the Unknown
- With New Challenges
- With Failures
- With Yourself
Collaboration

Co-Creation
Collective Intelligence

- Equal Contributions, Listening
- Empathy, Emotional Intelligence
- More Women

- Anita Woolley
  Asst Professor, Tepper, CMU
Orchestrating Creativity

- Collaborative, Innovative
- Value & Embrace Diversity
- Creative Problem Solvers
- Comfortable Doing Things They’ve Never Done Before
More Diversity Please

- Education Leads to Diversity
- Diversity of People, Processes & Products
- Do It Together, Make More Magic, Change the World
Creative Chaos

- Diversity is Valuable & Challenging
- Supportive Orchestration
- Making The Magic
Thanks!

- Questions?
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- Anita Woolley: http://www.anitawoolley.com