

# CREATIVE CHAOS

TEACHING PROJECT TEAMS TO BE INNOVATIVE,  
OR MAKING THE MAGIC

DREW DAVIDSON





# Creative Chaos

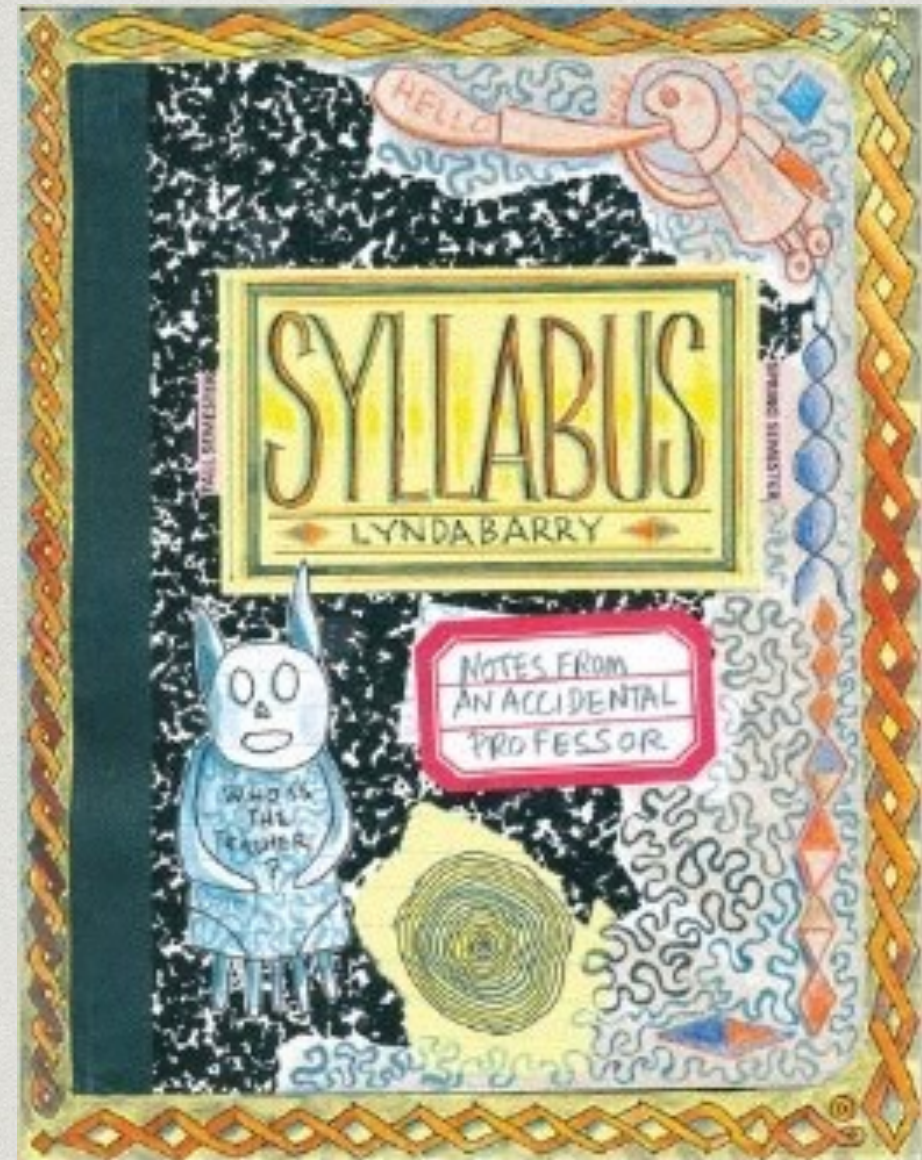
- \* Ambiguous Ideas & Uncertain Results
- \* Rapid Prototyping & Iterative Design
- \* Flexible Process & Comfort with Unknowns





# 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

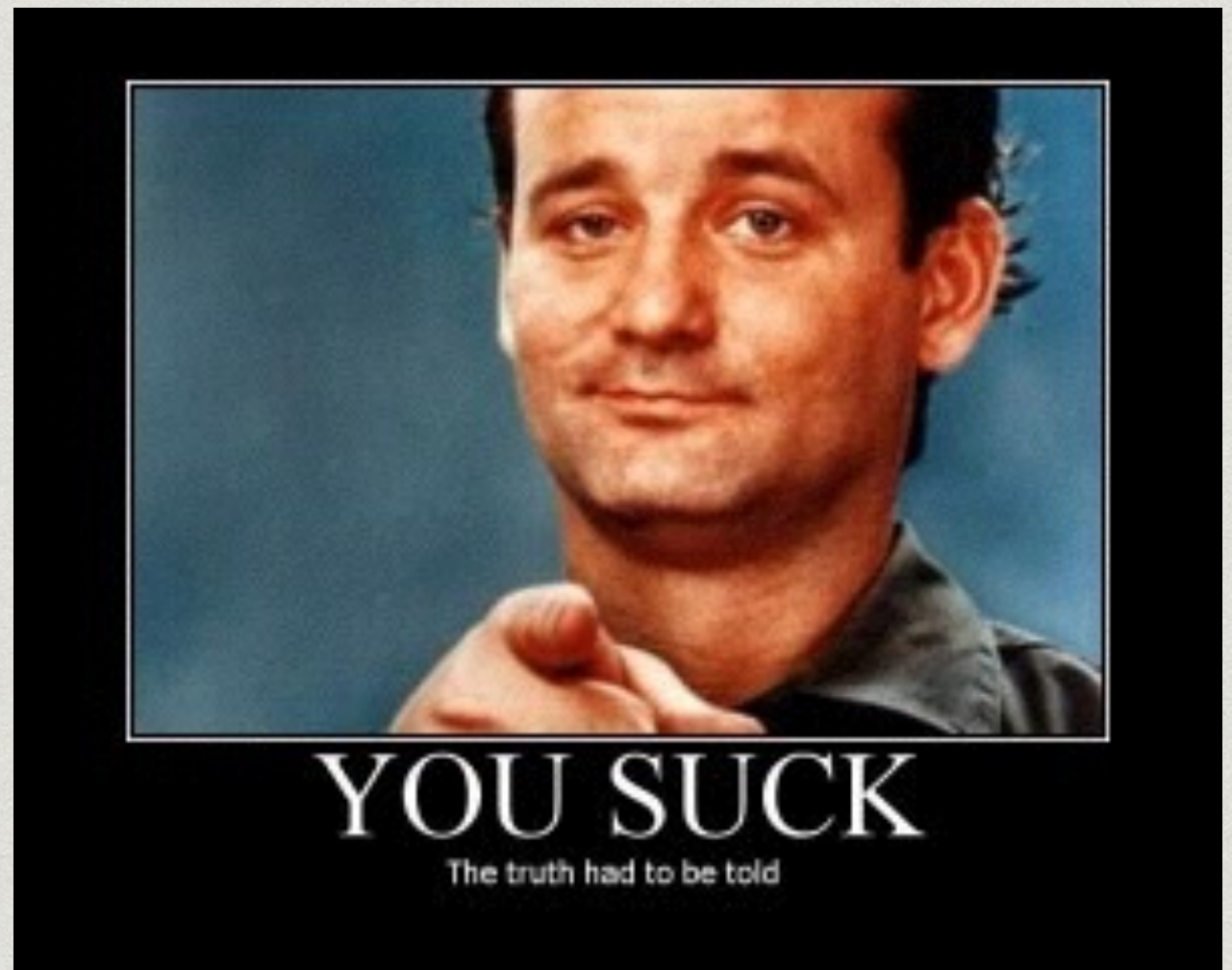
- ✱ Skills, Process, Strengths, Conflict Management, Playtesting, Aesthetics, Design, Intellectual Property, Branding, Entrepreneurialism, Public Speaking, Pitching, Interviews, Professional Communication, Portfolios, Resumes, Critique, Analysis, Personal Health, Project Management, Agile Development, Producing, Storytelling, Field Overview, Professional Development, Life-Long Learning...
- ✱ And More...





# People (Can) Suck

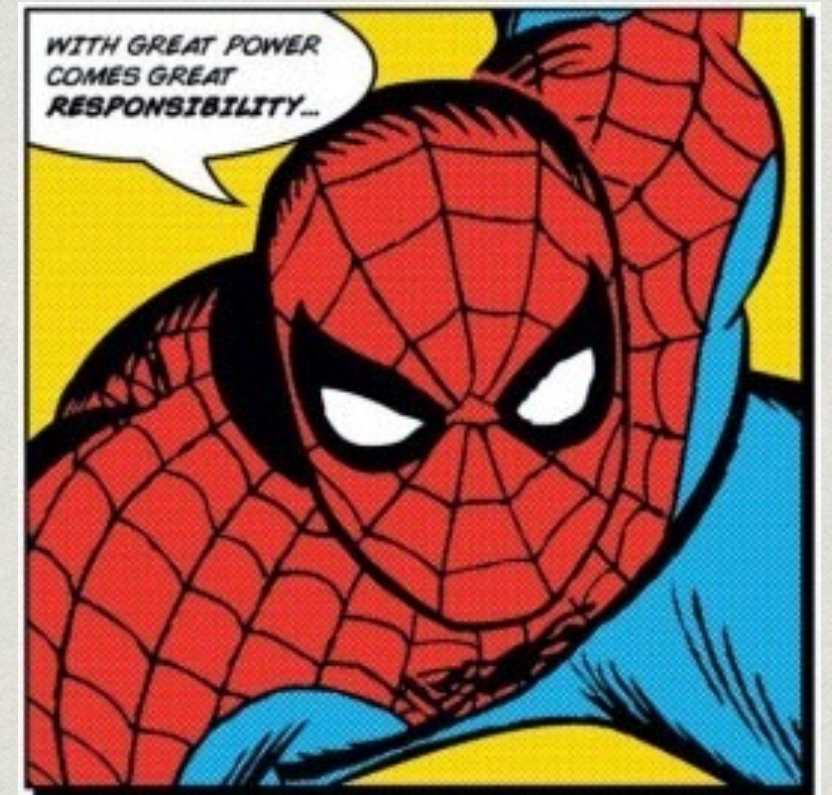
- \* Supervisor
- \* Client
- \* Colleagues
- \* Bureaucracy
- \* Public
- \* You





# Responsibility

- \* For the Work
- \* For Dealing with Colleagues
- \* For Mistakes, Failures, Regrets
- \* For What You Don't Know
- \* For Being Your Best





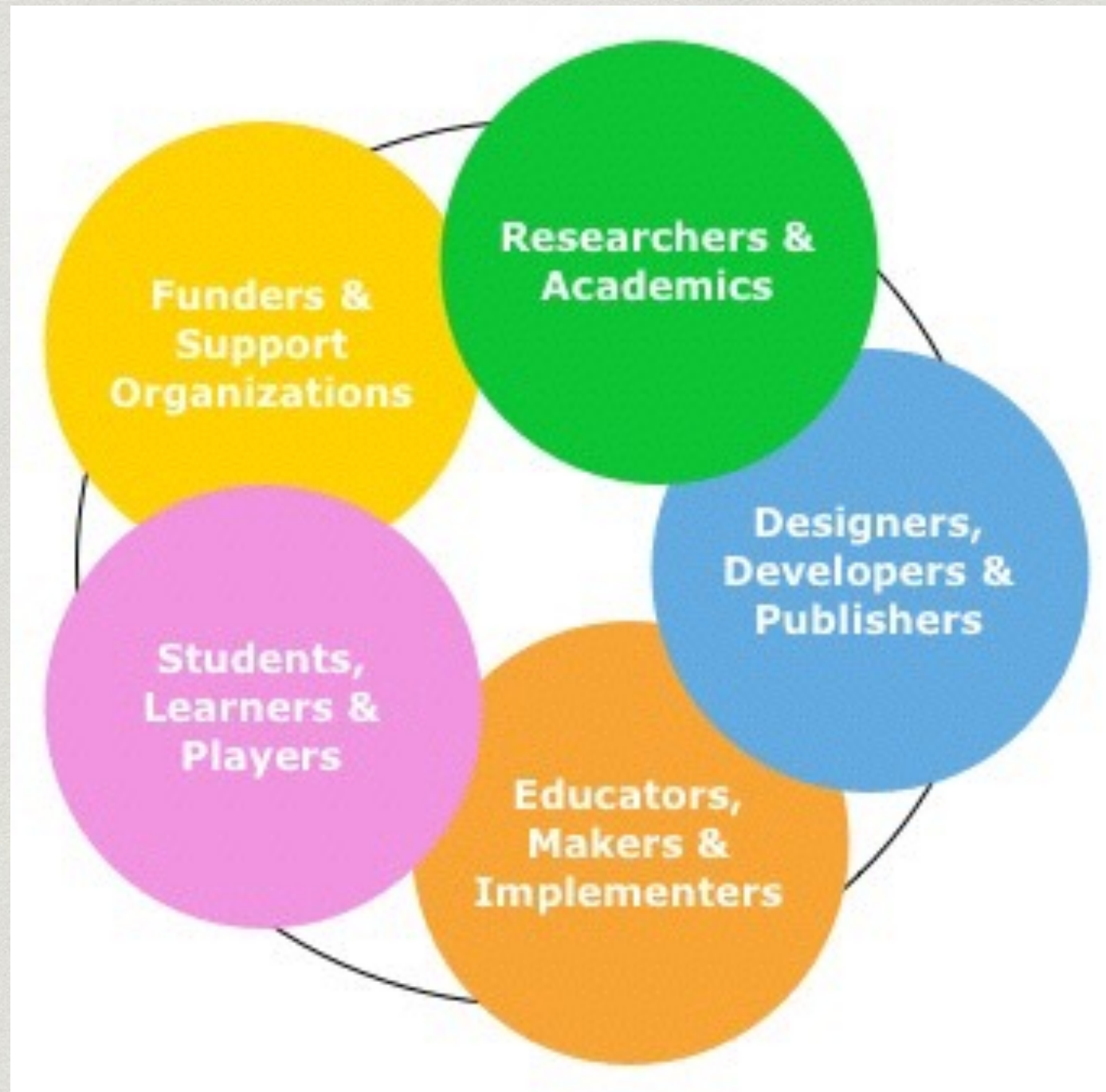
# Comfortability

- \* 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?
- \* [drew@andrew.cmu.edu](mailto:drew@andrew.cmu.edu)



- \* Goh, K., Goodman, P., & Weingart, L. (2013) Team innovation processes: An examination of activity cycles in creative project teams. *Small Group Research*, 44, 159-194.
- \* Weingart, L., Todorova, G., & Goh, K. Conflict Resolution as a Moderator versus Mediator of the Effects of Task, Process, and Relationship Conflict on Team Outcomes. *Eighth Annual Interdisciplinary Network for Group Research (INGRoup) Conference* (Atlanta, GA), July 2013.
- \* Anita Woolley: <http://www.anitawoolley.com>