Creative Chaos
Making the Magic
Drew Davidson
A Little About Me

Carnegie Mellon University
ENTERTAINMENT TECHNOLOGY CENTER

Carnegie Mellon University
ETC Press

waxebb.com
Creative Production

- Design & Development
- Communication & Collaboration
- Leadership & Management
- Schedule & Budget
- Trust & Respect
Creative Chaos

- Ambiguous Ideas & Uncertain Results
- Rapid Prototyping & Iterative Design
- Flexible Process & Comfort with Unknowns
Making Stuff

- Intellectual Property
- Not Ideas, What is Created
- Sharing Development
- Do the Work, not What They Want
Making the Magic

- New, Useful, Good
- Design Process
- Problem Solving
- Critical Creation
Entertainment Technologies

- Games, Animation, Theme Parks, Museums, Augmented Reality, Mobile, Robotics, Interactive Performances, Websites, Film, CrossMedia...

- Education, Training, Health, Medical, Civics, Entertainment...

- And More...
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 if Better and Harder
- Process needs Support
Pro Tips

Best Practices
Valuing Diversity

- Gender, Sexual Orientation, Ethnicity, Socio-Economic, Culture, Religion, Age, Disability, Expertise...
- 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 They Don’t Know
- For Being Their Best
Comfortability

- With Responsibility
- With the Unknown
- With New Challenges
- With Failures
- With Themselves
Reputation

☐ Good Colleague, Good Team Member, Good Attitude

☐ Not How Smart or Talented, Not Better

☐ Continual Process, Manners

☐ Actions as Well as Words
Reputation

- Fun to Play With (Not, Have Fun Playing)
- Quality, Quantity, Effort
- Be Good, Be Pleasant, Be On Time
- Awful - Average - Awesome
Collaboration
Not So Much
Collaboration

Co-Creation
Constraints

☐ Creativity Needs Context

☐ Yes and…

☐ Sometimes No
Failure

- Learn From Mistakes, Develop Grit
- Fail Faster, Experiment, Explore
- Rapid Prototyping
- Iterate toward Solutions
Experience

- Ultimate Design Goal
- For the User, Player, Guest…
Transformational Experiences

☐ Design for Impact
☐ Creativity for Good
☐ Changes in Our Daily Lives
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
Creative Chaos

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

Questions?

drew@andrew.cmu.edu


Anita Woolley: http://www.anitawoolley.com