



Green League

An Innovative Tool for Employee
Learning & Engagement

Jennifer Battle & Lauren Olson

Office of Campus Sustainability

Carrie Heeter

Games for Entertainment & Learning Lab

Michigan State University

Fund for the Improvement of
Post-Secondary Education
Department of Education
#P116B100403

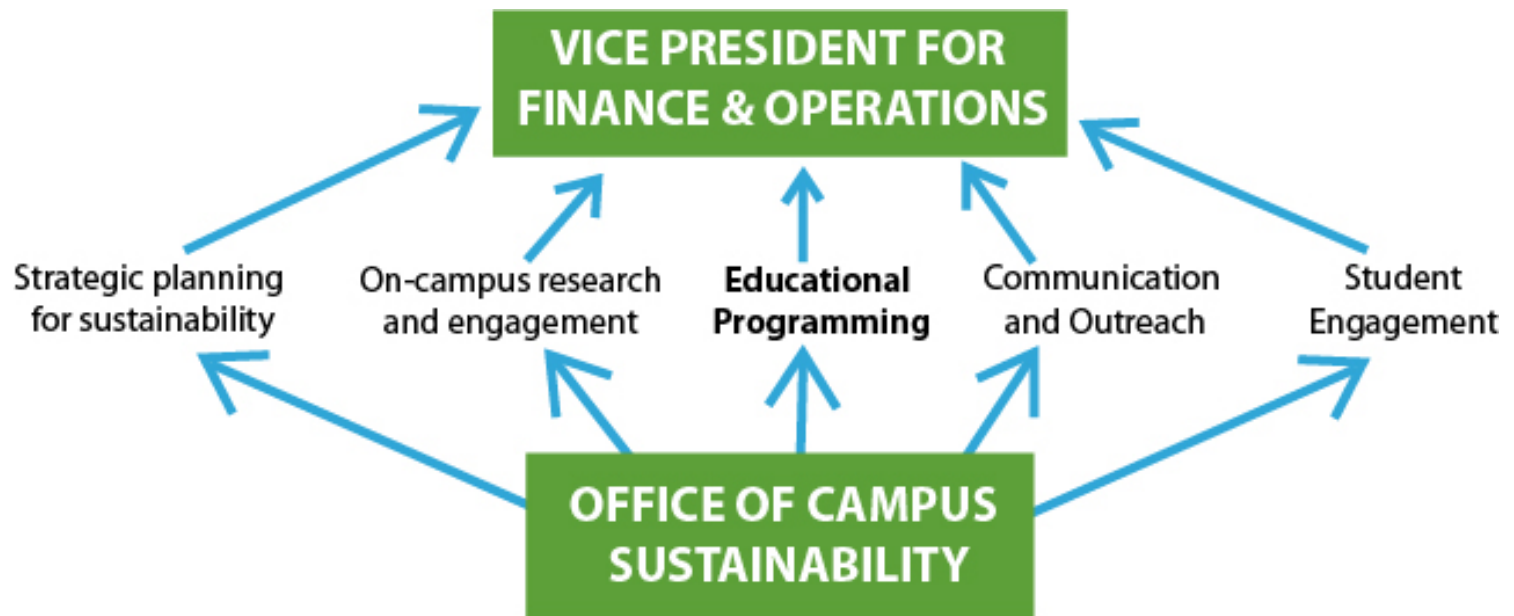


About Michigan State University

- General MSU facts
 - Main campus: 5,200 acres, 579 buildings, 58,000 students, faculty and staff
 - Tier I Research Institution: Cyclotron, F-RIB
 - 30,000 on-campus meals served per day



About the Office of Campus Sustainability



Taking a Closer Look

Environmental
Stewards

737

34%

Green
Certification

475

44%

Sustainability
Competencies

Understanding
& Application

Most would consider this a success, but when measured against sustainability competencies, stewards could improve the depth of their **understanding** and **application**

Designing an Intervention

Large, diverse audience

Busy professionals

INTERVENTION

Limited time for
professional development

Working multiple shifts

Gaming Can Make a Better World



Talks	TED Conferences	TED Conversations	About TED
Speakers	TEDx Events	TED Community	TED Blog
Themes	TED Prize ↗	TED-Ed ↗ NEW	TED Initiatives
Translations	TED Fellows	<input type="text" value="Search"/>	

TALKS

Jane McGonigal: Gaming can make a better world

FILMED FEB 2010 • POSTED MAR 2010 • TED2010

01:11 / 20:04

32 languages [Off]

Embed Download Favorite Rate

Show transcript

Get this talk on DVD

2,545,218 Views [?](#)

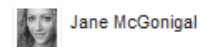


Games like World of Warcraft give players the means to save worlds, and incentive to learn the habits of heroes. What if we could harness this gamer power to solve real-world problems? Jane McGonigal says we can, and explains how.

Reality is broken, says Jane McGonigal, and we need to make it work more like a game. Her work shows us how. [Full bio »](#)

“My goal for the next decade is to try to make it as easy to save the world in real life as it is to save the world in online games.” (Jane McGonigal)

[▶ Play \(from 00:20\)](#) [Share quote](#) [More quotes »](#)

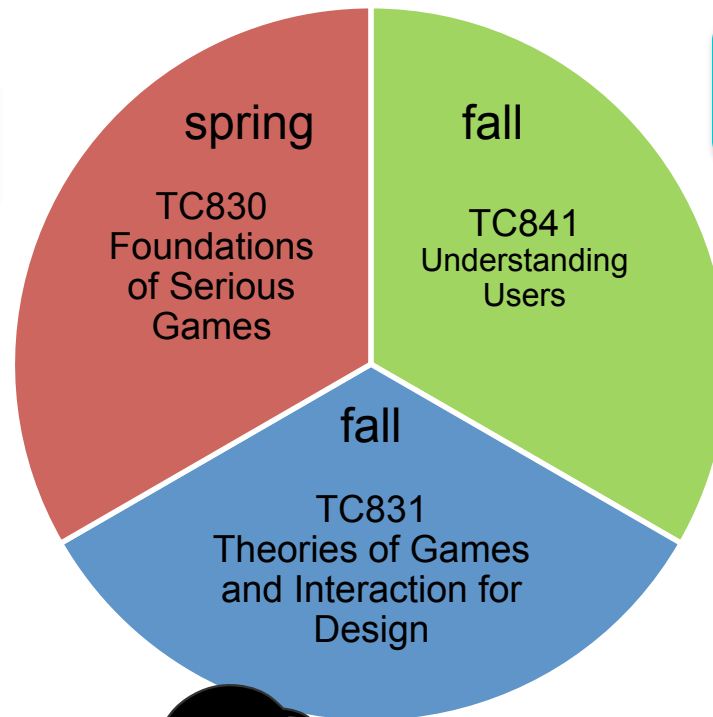


Jane McGonigal

http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.html

MICHIGAN STATE UNIVERSITY SERIOUS GAMES GRADUATE CERTIFICATE

Be a Serious
Game Monster!

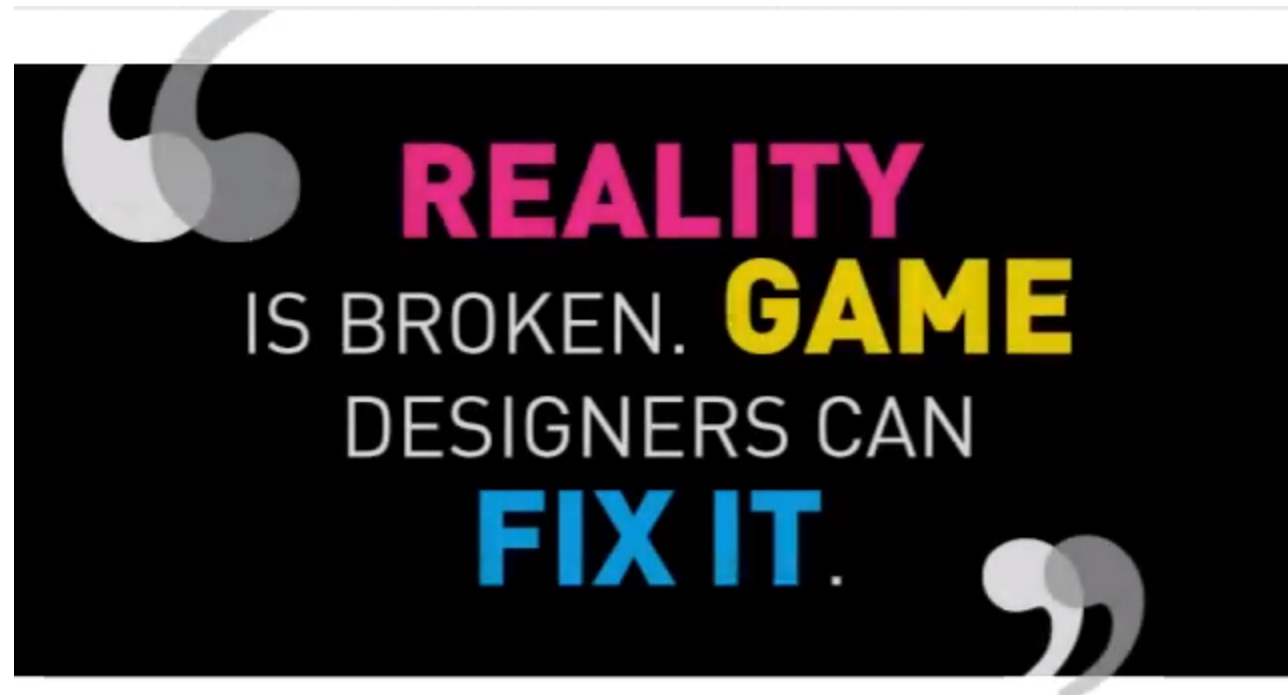


Be a Serious Game
Wizard



Be a Serious Game Ninja
seriousgames.msu.edu

Reality is broken



Jane McGonigal and MSU Serious Game Design MA students are true believers...

In fact...

MY GOAL FOR THE NEXT DECADE IS
TO TRY TO MAKE IT AS EASY TO
SAVE THE WORLD IN REAL LIFE
AS IT IS TO SAVE THE WORLD
IN ONLINE GAMES.

Games can save the world

Furthermore...



I SEE A FUTURE IN WHICH **GAMES**
ARE EXPLICITLY DESIGNED TO
IMPROVE QUALITY
OF LIFE, TO **PREVENT**
SUFFERING, AND TO **CREATE**
REAL, WIDESPREAD **HAPPINESS**.

Games can do anything

Developing *The Green League*

- In partnership with MSU Games for Entertainment and Learning (GEL) Lab
- Led by Dr. Carrie Heeter and team of undergraduate and graduate students
- Reviewed our objectives and challenges and came up with multiple game options



Alas, Stewards are not Jane McGonigal or SGD enthusiasts

- Many stewards in their **40s and 50s**.
- Use **computer** more than mobile device.
- **Engage** in some form of **digital gaming**.
- Perceive **stewardship** as "spreading the **word**."
- Say **lack of knowledge** impedes sustainable habits.
- Prefer **team based competition**.
- Motivated by **tangible rewards** (i.e., food)



REDIRECT: Combining Intrinsic Motivation & Extrinsic Rewards

The screenshot shows a web browser window with the SuperBetter website. The browser tabs include "Jane McGonigal: Gaming can make a ..." and "My Activity - SuperBetter". The address bar shows "superbetter.com https://www.superbetter.com/heroes/130035/activities".

Profile Header:

- Logo: SUPERBETTER
- Avatar: A stylized figure with arms raised.
- Name: LAUREN OLSON
- Quote: "I'M GETTING SUPERBETTER AT I'm just getting SuperBetter SO I CAN do anything"
- Progress: 38 CURRENT / 38 PEAK
- Category: RESILIENCE
- Level: LEVEL 3

Activity Feed:

- Activity: "What's up?" (with a "POST" button)
- Activity 1: Lauren Olson set their Epic Win (1 minute ago). Includes "LIKE | COMMENT" and social media icons.
- Activity 2: Lauren Olson earned the Level 1 Champion Achievement (6 days ago). Includes "LIKE | COMMENT" and social media icons.
- Activity 3: Lauren Olson vanquished the Liquid Calories Bad Guy (6 days ago). Includes "LIKE | COMMENT" and social media icons.

Navigation Menu (Left):

- support
- ACTIVITY
- QUESTS
- ALLIES
- POWER-UPS
- BAD GUYS
- FUTURE BOOSTS
- ACHIEVEMENTS
- HELP! I'M STUCK

TO DO (Right):

- OCTOBER 15, 2012
- ACTIVATE POWER-UPS 0/3
- BATTLE BAD GUYS 0/1
- COMPLETE TODAY'S QUESTS 0/3
- Scrap the Elusive Search for Happiness
- Welcome to Being



Design Research Recommendations



- Allow the player to easily **track their progress**
- Include **social networking opportunities**
- Engage players with **extrinsic motivators**
- Include **social competitive elements**
- **Minimize identity and story.**
- Provide **ease of access** with **low learning curve**
- Offer the players a **variety of challenges or scenarios** to maintain attention.



The Green League

- Hybrid **fantasy sports** type competition coupled with a **social location-based** platform (e.g. SCVNGR, Foursquare)
- **Individuals** earn points for their **team** by completing **challenges**
- Points differ **based on difficulty** of the challenge
- The team with the most points wins
- Rewards are **physical and virtual**



HOME



CLUBHOUSE



CHALLENGES



SCOREBOARD



Have an **IMPACT.**
JOIN the
GREEN LEAGUE.

Because **every** action,
no matter **how** small, scores
BIG
for the **ENVIRONMENT.**

GET IN THE GAME WITH THE MSU GREEN LEAGUE!

Created for MSU's Environmental Stewards, MSU Green League is a web-based educational game to promote sustainability in everyday decision making.

Each player is part of a team and earns points for completing challenges in the workplace. Challenges are real sustainable behaviors that help MSU meet its broad sustainability goals. Each week teams compete to earn the most points. At the end of the "season" prizes are awarded to top teams.

The challenges will help environmental stewards:

- Use best practices for sustainable behaviors



CHALLENGES

CHALLENGE LIST

Sort by Order

Green Team



Difficulty: 1
Impact: 4
Points: 10

Reflection



Difficulty: 1
Impact: 5
Points: 10

Fume Fighter



Difficulty: 1
Impact: 6
Points: 1

Disconnected



Difficulty: 1
Impact: 6
Points: 1

Online Banker



Difficulty: 1
Impact: 3
Points: 1

Lights Out



Difficulty: 1
Impact: 6
Points: 1

Paper Power



Difficulty: 1
Impact: 12
Points: 1

Blind Insulator



Difficulty: 1
Impact: 6
Points: 1

Lights Out



Difficulty: 1
Impact: 6
Points: 1

Team Meeting



Difficulty: 1
Impact: 5
Points: 1

Powered Pop



Difficulty: 1
Impact: 6
Points: 1

Minimal Margins



Difficulty: 2
Impact: 6
Points: 1

Green Goals

Environmental Employee

Power Down

Team Building

CHALLENGES BY CATEGORY



ENERGY



RESOURCES



LABORATORY



OFFICE



POLLUTION



TECHNOLOGY



PURCHASES



APPLIANCES



RECYCLE



REDUCE



REUSE



LEARN

Challenge Example

PAPER POWER



There's two sides to every story! You can earn points for every printer's default settings you set to two-sided printing.

Fun Facts: Think about this! Did you know a MSU study showed that we could reduce inputs to campus, save money and reduce paper waste by printing two sided? That's what going green is all about!

IMPACT: 12

DIFFICULTY: 1

POINTS: 1

CATEGORY: [Action](#) , [Engage](#), [Information](#),
[Office](#), [Reduce](#), [Resources](#)

Source:

http://www.bespartangreen.msu.edu/content/documents/two_sided_printing_costs.pdf



Piloting *The Green League*

- Pilot November 5- December 14
- Post-pilot focus group and survey
- Debug and develop game for full launch
- If successful, full launch Spring 2013



Considerations for Pilot

- Work time/**release time**
- New and **novel concept is a barrier** for understanding
- **Perception of gaming** as a professional development tool
- Pushing **late adopters** to become early adopters



Expected Outcomes

For FIPSE Grant

- As we see if this is a way to improve learning, so do the other sites, evaluated by 3rd party
- Share with other higher education institutions
- Different method of behavior change

For MSU

- Better learning and engagement for environmental stewards
- Improve the ability for stewards to apply critical thinking and systems thinking to solve problems



Thank you!

Questions & Discussion

Jennifer Battle, Director
Lauren Olson, Education Coordinator
begreen@msu.edu

Carrie Heeter, GEL Lab
heeter@msu.edu