

SCHOOL OF ART // SPRING 2017 // VOL. 2

CROSS-DISCIPLINARY COLLABORATIONS  
IN WHOLE BRAIN PROBLEM SOLVING

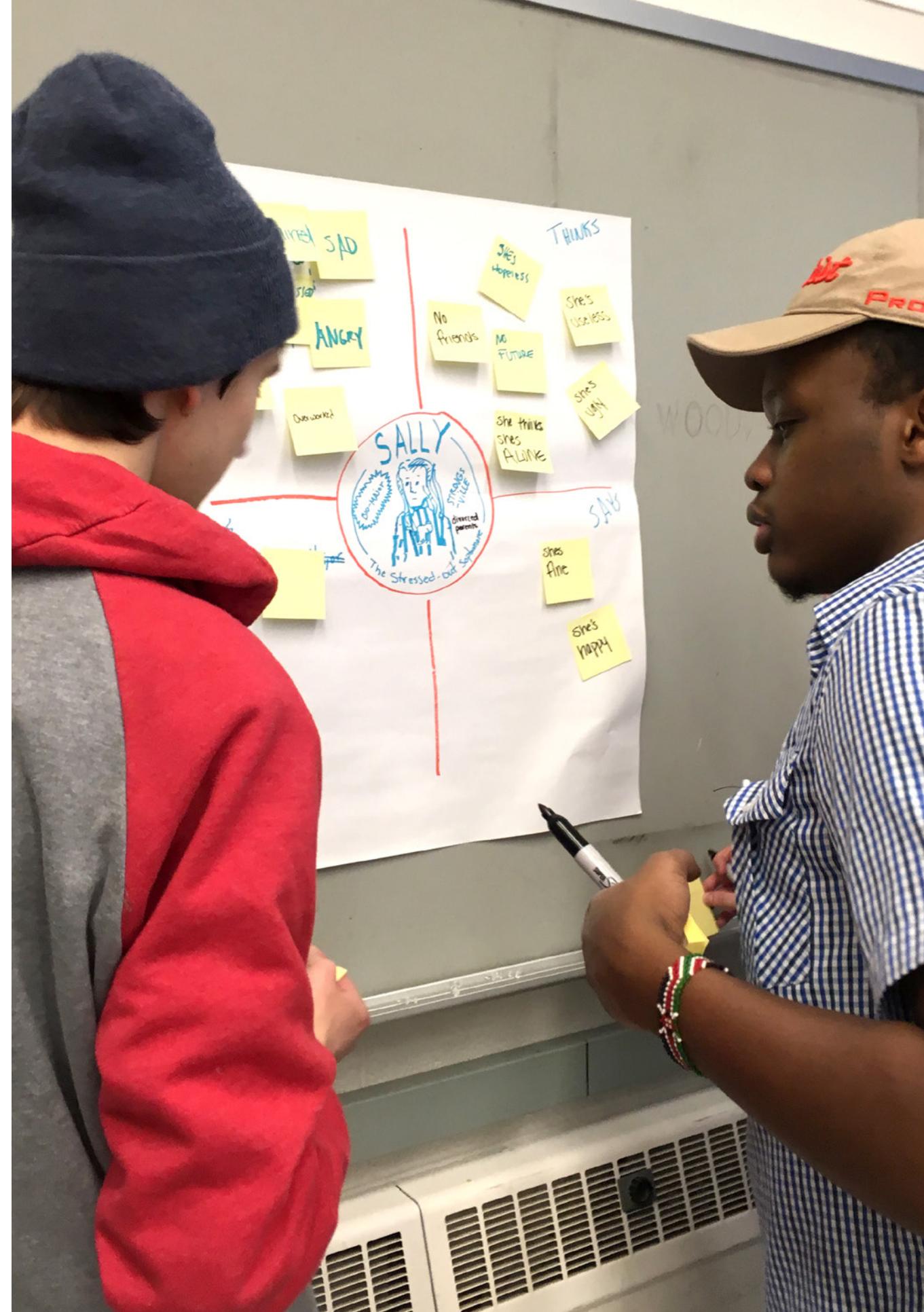


# THE INITIATIVE

Rick Valicenti '73 is a celebrated graphic designer who leads an award-winning design firm and is recognized by the White House for his lifetime contributions to his industry. But none of that matters much during the alumnus's visits to BGSU, because his focus is building the confidence of students.

For over 75 years, the School of Art at Bowling Green State University (BGSU) has provided a nurturing environment, encouraging students to express their creative voice in a school where art is innovative, vibrant, and full of possibilities. Through the generosity and vision of Rick Valicenti comes the *Rick Valicenti Collaborative Teaching Initiative (RVCTI)*. This initiative supports a one-of-a-kind art-focused teaching structure to provide collaborative learning experiences for students and faculty from across the BGSU campus. The RVCTI gives the BGSU art faculty (instructor, lecturer, tenure-track and tenured) opportunity to propose and implement a Spring term collaborative course that embraces team-teaching experiences for unique learning content and hybrids with intimate course enrollment sizes.

The 2017 RVCTI recipients were Jenn Stucker, associate professor and division chair of Graphic Design, and Kirk Kern, lecturer and director of the Hamilton Center for Entrepreneurial Leadership, for their course *Cross-Disciplinary Collaborations in Whole Brain Problem Solving*. This unique team-taught class sought to combine differing thinking approaches together for the purpose of understanding collaboration and finding ways for innovation. The class size of 24 was represented by 12 from the School of Art and ten from the College of Business, as well a student from the College of Technology and another from the College of Education and Human Development. Four of these students were also current or former Hatchlings who competed in *The Hatch* in 2016 and 2017.





# THE COURSE

## CROSS-DISCIPLINARY COLLABORATIONS IN WHOLE BRAIN PROBLEM SOLVING

In this course, the students were challenged by developing and expanding their understanding of creativity and strategy for the purpose of maximizing their potential for solving problems to improve the human experience through collaborations of “right brain/left brain” thinking. We approached our exploration through analyzing and revealing different cognitive mindsets, through channeling and unifying these perspectives to problem solve in innovative ways, through the evaluation of current design and business discourse, through participating in lively conversations, and project based activities about contemporary social issues. The coursework included a heavy emphasis on collaboration through the mixing of business and design students aimed at innovating for today’s complex problems.

The course operated in three types of activities: (1) three in-class exercises for fostering dialogue and collaborative exchange; (2) comprehensive, mixed discipline, four-member team projects aimed at social issues and; (3) a fast-paced, mixed discipline and gender, two-member collaboration focused on an innovation and implementation strategy.

The semester started with a series of exercises based on the *Work On Purpose* (WOP) curriculum for breaking the ice, revealing our own vulnerabilities and defining our motivations for action. Working from a framework of WOP’s *Moments of Obligation* the students engaged in dialogue for defining today’s most pressing social issues. Six social topics were identified as meaningful and necessary for the four member teams of six groups to respond to; mental health, the environment, fake news, the heroin epidemic, campus navigation and microaggressions. Through these topics the students explored the challenges and opportunities for action by engaging in design thinking activities and proposed ideas for change. The semester concluded with a fast-thinking innovation deliverable that could be realized in the marketplace.

### XDCWBPS // COURSE DETAILS

Associate Professor Jenn Stucker  
and Lecturer Kirk Kern

ARTD 4950/BA 4910  
*Cross-Disciplinary Collaborations  
in Whole Brain Problem Solving  
(XDCWBPS)*

Mondays/Wednesdays // 2:30-4:50 pm  
FAC 1030 // BA 109  
BGSU School of Art and  
Business Administration

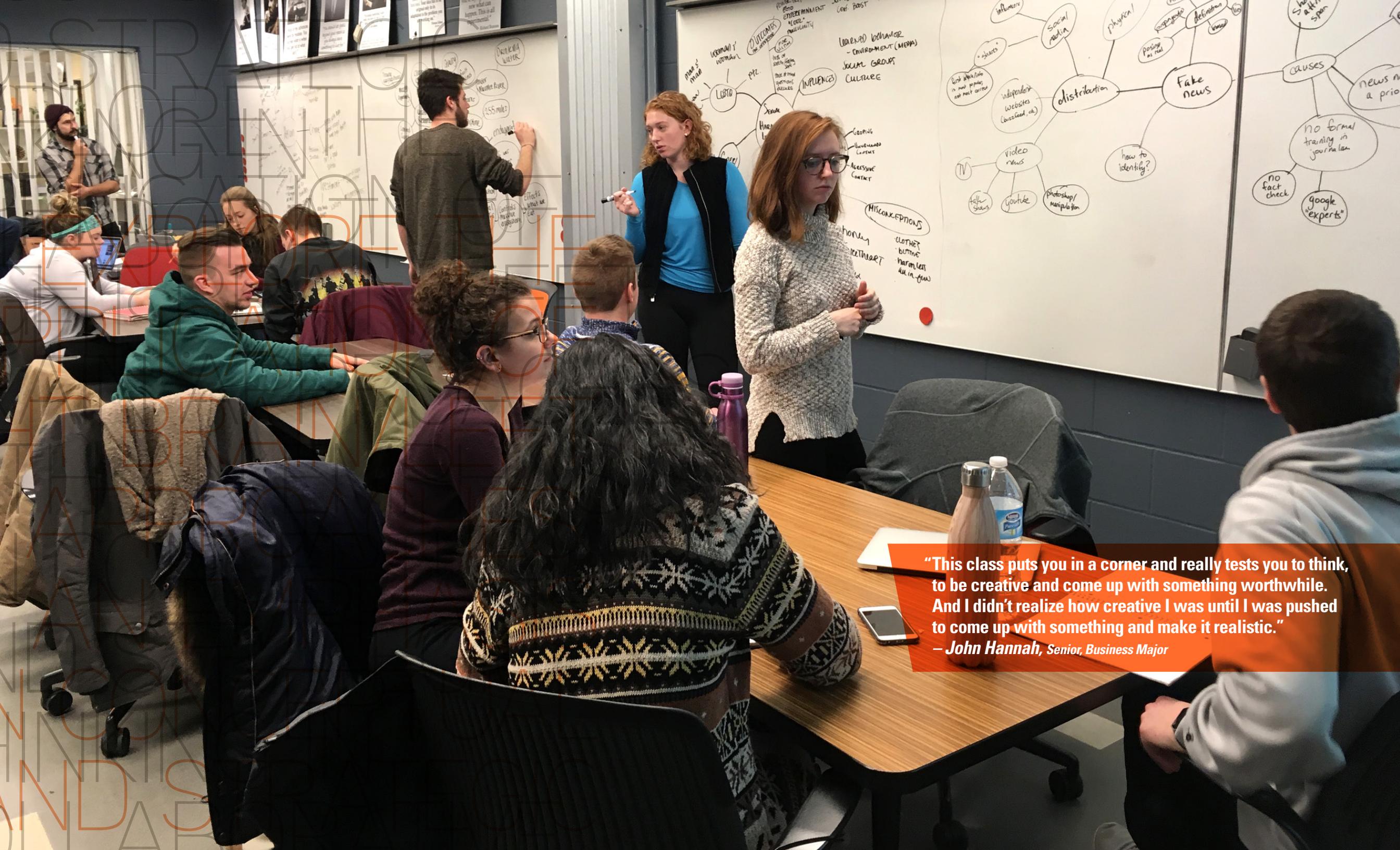
### COLLABORATIVE EXERCISES, WORK + PROCESS

- 1 // Exercises from *Work on Purpose* ::  
*Fail-off, Transforming Challenges,  
Moments of Obligation*
- 2 // DEFINITION ::  
Contemporary Issues/Mapping
- 3 // DIVERGENCE ::  
Exploratory Research Presentations
- 4 // TRANSFORMATION ::  
Strategy + Prototyping Presentations
- 5 // CONVERGENCE ::  
Implementation + Artifacts

*Empathy Mapping*  
February 2017

# CONCEPTUAL

CROSS-DISCIPLINARY COLLABORATIONS IN WHOLE BRAIN PROBLEM SOLVING



**"This class puts you in a corner and really tests you to think, to be creative and come up with something worthwhile. And I didn't realize how creative I was until I was pushed to come up with something and make it realistic."**  
— *John Hannah, Senior, Business Major*

# THE ESSENCE

Associate Professor  
Graphic Design Division Chair  
MFA, Eastern Michigan University  
Graphic Design, 2008  
BFA, Bowling Green State University  
Graphic Design, 1997

*What was the essence of the Cross-Disciplinary Collaborations in Whole Brain Problem Solving course?*

**Jenn Stucker (JS)** // The 'essence' comes down to four basic ideas we had when developing this class. First, we wanted to bridge the gap between design + business studies at BGSU. Our disciplines are kindred spirits that work together all the time, so I really see this as an opportunity that should continue to be supported. Of course our main goal was to build a better understanding of collaboration. There is a difference between contribution, like a skill share, versus collaboration, which is really about a mind share for problem solving. Third, we hoped to inspire innovation and engage in new ways of thinking. From my perspective, as a designer, we are in constant need and demand because our usages, technology, and society are constantly changing, therefore we must be fluid in our responses and design for the now and the future. Finally, we wanted to challenge students to solve real world problems of value. This generated rich discussions and revealed their uncertainty for solving big issues like the heroin crisis or waste, but we wanted to empower students to realize that someone has to pick up the baton to make change, so why not you?

Lecturer, Marketing  
Director of Hamilton Center for  
Entrepreneurial Leadership  
MBA, University of Findlay  
Public Administration, 2004  
BS, University of Findlay  
Business Management, 2002

**Kirk D Kern (KDK)** // The essence of the course revolved around the learning idiosyncrasies of two differing groups of students; graphic design and business. What we discovered is that graphic design and business students had divergent perspectives on how to solve problems and create solutions. However, when mixed into groups the whole brain dynamic became apparent. The problem solving and solution-creating activities became much more robust and unique, leading to fascinating outcomes.



*The Prik-Ly Project Campaign*  
**Social Issue // Microaggression**  
Tori Nuss, Jake Kielmeyer, Logan Holtman  
and Desmond Jackson-Vasquez



### Project Brief

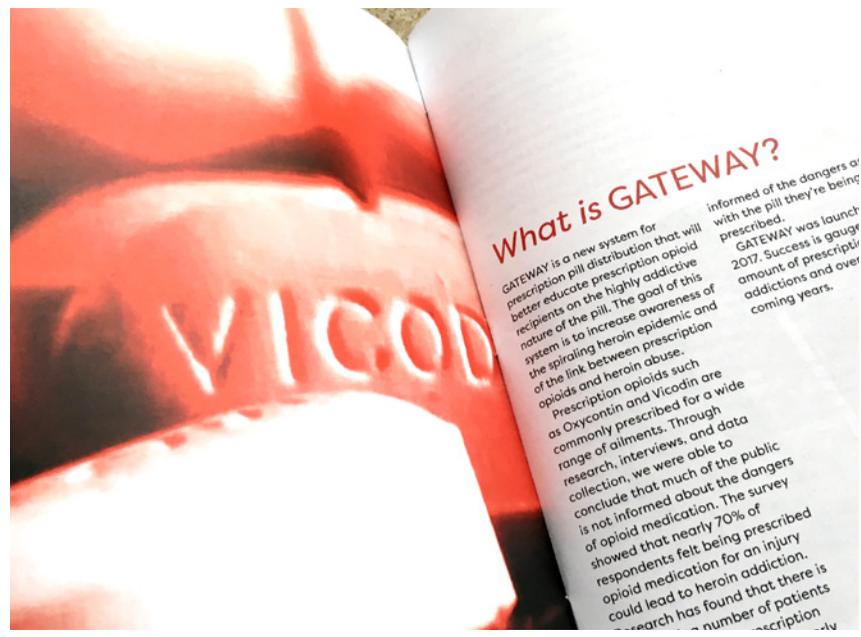
The methamphetamine epidemic in Wood County has gotten out of control in the last couple years. There has been an alarming increase of deaths by overdoses from prescription opioids. Since last year the number has risen from 14,000 to 17,000 national overdose deaths. Furthermore, deaths from heroin abuse have skyrocketed as well. With an increase from 11,000 to 14,000 national heroin overdoses. Opioid abuse is a rising issue, and we need to do something about it. Even though this is a global crisis, it is especially rampant in the wood county area. In Wood County since the start of 2017, there has already been over 100 overdose reports. According to Wood County 911 director Rick Woodyard, they have been averaging around three overdose calls a day. The main reason we have

county area, on this problem and decided that we need to change something so this problem could come to a halt. Through intensive research, we found out that the main gateway drug to heroin is prescription pills. After looking at many cases we saw that most people that were addicted knew they were, but couldn't stop the addiction. Also, we found out that most people when prescribed pain pills, don't really know the effects of opioids or how dangerous they can be when abused. The goal of GATEWAY is to change the bags and packaging of opioid medication. This will educate people about the harmful effects opioids can have on you if abused, and not taken seriously. By changing the bag it will create a more negative stigma toward pain pills, and make customers more aware of what they're taking.

### Design Solution

There is miscommunication between doctors, pharmacists, and patients regarding the severity of addiction being prescribed and the highly addictive nature of the medication. GATEWAY is a straightforward education tool designed to better inform patients and the general public on the dangers associated with their opioid medications. By modifying a system already used, GATEWAY will require less

pharmacists, pharmacists, and doctors. GATEWAY adds new elements to the current paper bag used to distribute prescription medications. The new design will feature extreme images to highlight the severity of opioid addiction.



### What is GATEWAY?

GATEWAY is a new system for prescription pill distribution that will educate prescription opioid recipients on the highly addictive nature of the pill. The goal of this system is to increase awareness of the spiraling heroin epidemic and the link between prescription opioids and heroin abuse. Prescription opioids such as Oxycodone and Vicodin are commonly prescribed for a wide range of ailments. Through research, interviews, and data collection, we were able to conclude that much of the public is not informed about the dangers of opioid medication. The survey showed that nearly 70% of respondents felt being prescribed opioid medication for an injury could lead to heroin addiction. Research has found that there is a significant number of patients

informed of the dangers of with the pill they're being prescribed. GATEWAY was launched in 2017. Success is gauged by amount of prescription addictions and overdoses over coming years.

# THE OBJECTIVES

What were the goals and learning objectives?

**JS** // Collaborative work is hard, so our goal was to make this process a more attractive approach to problem solving. Students will certainly tell you that collaborative projects make them anxious because of the work share and commitment. To combat this fear, we laid out our expectations for them: (1) *Honor and respect each other and the process of the class.* This is why we worked hard at the beginning with the WOP exercises to help the students 'see' each other better. (2) *Be present, physically, but more importantly cognitively.* This class was going to be hard, so we didn't want just a body in the room. We wanted a mind that goes with it. (3) *Be empathetic :: to each other, to your audience and the solution.* How is anyone going to solve real world problems if they are not understanding of others? (4) *Commitment :: uphold the responsibilities you take on.* We wanted to make it clear from the start that the whole team is counting on them. (5) *Remember everyone is creative.* Knowing half the class was comprised of graphic designers, we wanted waylay the idea that designers weren't the only creatives in the room. We are all creative, we just have different skill sets in applying our creativity.

**KDK** // Jenn Stucker had designed this course and was to co-teach it with Susan Kleine. After Susan's departure from BGSU, I stepped into her role. My goals and objectives were pretty simplistic; support Professor Stucker in her mission and be the voice of business to students who had little exposure to commerce. What I became was a partner who enjoyed teaching and learning from our students. Therefore, the original goal of bringing a diverse mix of students together to learn about researching contemporary social and business issues, exposing them to design thinking and developing outcomes via oral and visual presentations were met.

### FILM + TEXT REFERENCES, INFLUENCES AND INSPIRATIONS

- Design & Thinking : A Documentary on Design Thinking* by Mu-Ming Tsai
- Designing Business and Management* by Sabine Junginger & Jürgen Faust
- 101 Design Methods* by Vijay Kumar
- Work on Purpose* by Lara Galinsky with Kelly Nuxoll
- Visual Research* by Ian Noble and Russell Bestly
- A More Beautiful Question* by Warren Berger
- A Whole New Mind: Why Right-Brainers Will Rule the Future* by Daniel H. Pink
- The Design of Business: Why Design Thinking is the Next Competitive Advantage* by Roger L. Martin
- Change by Design* by Tim Brown
- Design Integrations: Research + Collaboration* by Sharon Poggenpohl & Keiichi Sato

Gateway :: Pill Distribution  
**Social Issue // Heroin Epidemic**  
 Frank Nagyvathy, John Hannah,  
 Cory Thompson and Victoria Pryzblyski



GATEWAY will increase awareness of the spiraling heroin epidemic and of the link between prescription opioids and heroin abuse.



# [ PROJECT BRIEF ]

## How do we encourage BGSU to recycle?

At Bowling Green State University, we answered the specific question "How do we encourage students and staff at BGSU to recycle?". Our answer is, we will inform them on what's recyclable at site specific locations, and by educating them on the amount of waste we as a campus generate. We will hang posters with easy to identify graphics of items that can be recycled in the area people are in, that also show the plastic recycling numbers that are accepted in our community. More awareness on how we put in the landfill, we will tell them at an event where we will teach them about recycling vs. waste station. These t-shirts are worn at the event and the conversation will be the recycling education and the recycling education will continue on.

**"The objective is to enlighten people about the issues and to call attention to the absurd amount of waste; that is the seed of a revolution."**  
— Rick Valicenti, Founder of Thirst Design + BGSU Alum '73



# PROTECT THE NEST

## [ STRATEGY ]

Protect the Nest is a campaign that we plan to launch at BGSU to help reduce wasteful behavior, increase recycling and keep Bowling Green as eco-friendly as possible. Through our research, we found that if we wanted to increase recycling at BGSU, it would be imperative to **educate students on the importance of recycling on the Earth, as well as create easy and effective recycling stations** to **limit confusion and increase overall recycling on campus.**

**10,000 GENERATIONS OF HUMANS** = **TIME IT TAKES FOR A GLASS BOTTLE TO DECOMPOSE**

**1 WEEK OF TRASH AT BGSU**

## [ SHARE ]



We plan to have an event in the Bowen Thompson Student Union in which students will bring in a t-shirt and we will screen print over in bold type stating, **"I am not a part of the weekly 101,400 lbs\* of trash"**. Our hopes are that we can share this eye opening statistic to a large amount of BGSU students and faculty, as well as start a movement towards becoming a more green campus. During this event we will also include a game component to quiz students on their recycling knowledge while they wait for their shirts to be screen printed.

## [ SUPPLIES ]



- Frame/Screen
  - Photo Emulsion/Sensitizer
  - 250 Watt Light Bulb
  - Participants t-shirt
  - Silk Screen Ink
  - Squeegee
  - Pitch Black Paper
- Cost Per Shirt: \$3**  
**Total Cost: \$55**

By having the participant bring in their own shirt we are conserving materials which reinforcing our message of recycling materials as well as helping to keep production costs as low as possible. A similar project can be done at other locations after researching the weekly or monthly trash weights.

\*Trash produced by BGSU the week of the event

# THE OUTCOMES

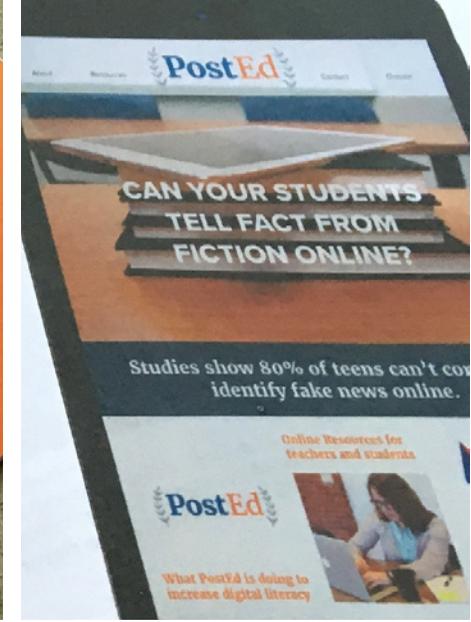
*What were the successes and learning outcomes?*

**JS //** Successes came in many different forms. Sometimes success was robust discussions like the ones we had about what is truth in regard to *fake news* or discussing the nuances of *microaggressions*. Other successes were when two disparate people came together on a project that, for a minute, you thought would never happen. The biggest success I experienced was when students began to realize that they don't have to be on the sidelines of the world they live in. For an educator, it can't get much better than that.

For the learning outcomes, it was important to remind ourselves about bridging the gap between the disciplines. We had seven outcomes we set forth to accomplish. (1) Analyze the hallmarks of "whole mind" design thinking and innovative problem solving; (2) research and identify contemporary business, social, & community opportunities for innovative problem solving; (3) identify and describe, in depth, target audiences; (4) understand and demonstrate the ability to apply visual studies; (5) develop a toolkit for design thinking like empathy mapping, persona profiles, journey mapping, and ideation (6) be able to participate and contribute to class discussions and critiques and; (7) express both verbal and visual presentation skills. Through these outcomes we worked toward creating a common ground for our unique languages.

**KDK //** This class experiment was a success! The dichotomy of the students was a challenge, but it became clear that these students were open and interested to learn about each other's areas of study. They learned to assess and utilize each other's talents (in the applied learning assignments) to leverage the best possible outcomes. They gained understanding and began to value their collaborators. This class gave the students an insight into how teams operate in today's work environment.

*(previous pages)*  
**Protect The Nest Campaign**  
Zach Nelson, Tricia Reinhart,  
Paige Collins and Danny Sobek  
**PostEd :: Digital Media Literacy**  
**Social Issue // Fake News**  
Meredith Moore, Emily Frazier,  
Austin Ahbe and Meghan O'Brien





# THE PROCESS

*How was collaboration initiated, employed and supported by student to student, student to teacher, and teacher to teacher?*

**JS //** It was important for Kirk and I to cultivate positive conditions for inspiring and sustaining collaborative experiences, so we presented the class with five guidelines for collaborating: (1) embrace and enjoy entering into something new; (2) learn the languages :: differing fields have differing terminology; (3) differing fields move at differing paces; (4) develop relationships :: trust + respect + reciprocity + no ego and; (5) recognize when things are going awry :: reassess + iterate. For this class we knew we needed to model the way, so we also held ourselves accountable to these same guidelines no matter who we were interacting with.

**KDK //** Collaboration between students was interesting. Both groups, graphic design and business, tolerated each other at the beginning of the semester. However, as the course advanced, the students began to appreciate opposing viewpoints from their colleagues. In my opinion, you cannot collaborate until you appreciate. Our students worked on a social issue project that forced them to listen to each other and join forces to reach the desired outcomes. As for student to teacher collaboration, Jenn and I were always engaged, challenged and assisted by our students. Working with and collaborating with our students was special. We would often offer differing viewpoints on topics based on our expertise. It was fun and a great learning experience for our class! Jenn Stucker is a rock star! Her energy and attentiveness to student success is admirable. We worked well together! We faced adversity from time to time, but worked together for the betterment of the class.

## COLLABORATIVE ASSESSMENT SURVEYS

*During the semester we asked students to reflect on the collaborative process through surveys. Some of their answers are quoted throughout this document. Here are some of our questions :*

What would a successful group project look like or would be to me? How would I participate in its success?

How has working with students in a different discipline been challenging as well as enlightening?

How has this course made me think differently about my role in social issues?

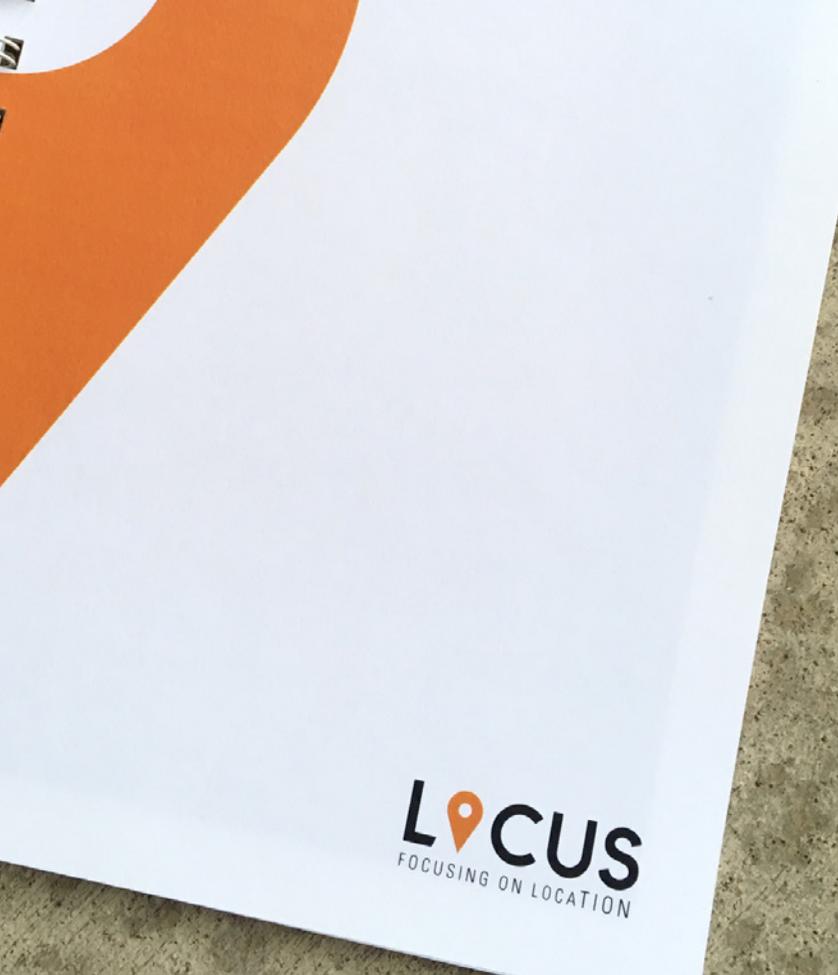
How has this course made me think differently about my ability to innovate?

How has this course empowered me as a problem-solver, creative thinker and collaborator?

Describe the experience of having team-teachers from different disciplines?



Feel Free Campaign  
Social Issue // Mental Health  
Katelin Warner, Jeremy Mwendwa,  
Paige Thomas and Tyler Ramsdell



003  
**RESEARCH**

**CURRENT PROBLEMS**  
At Bowling Green State University there are solutions for their information and advertisement that the solutions lack cohesion of both location creates a learning curve for visitors and staff before they are able to know where certain information is obtained.

**CURRENT INFORMATION**  
Information needed by students and/or visitors to be obtained through...

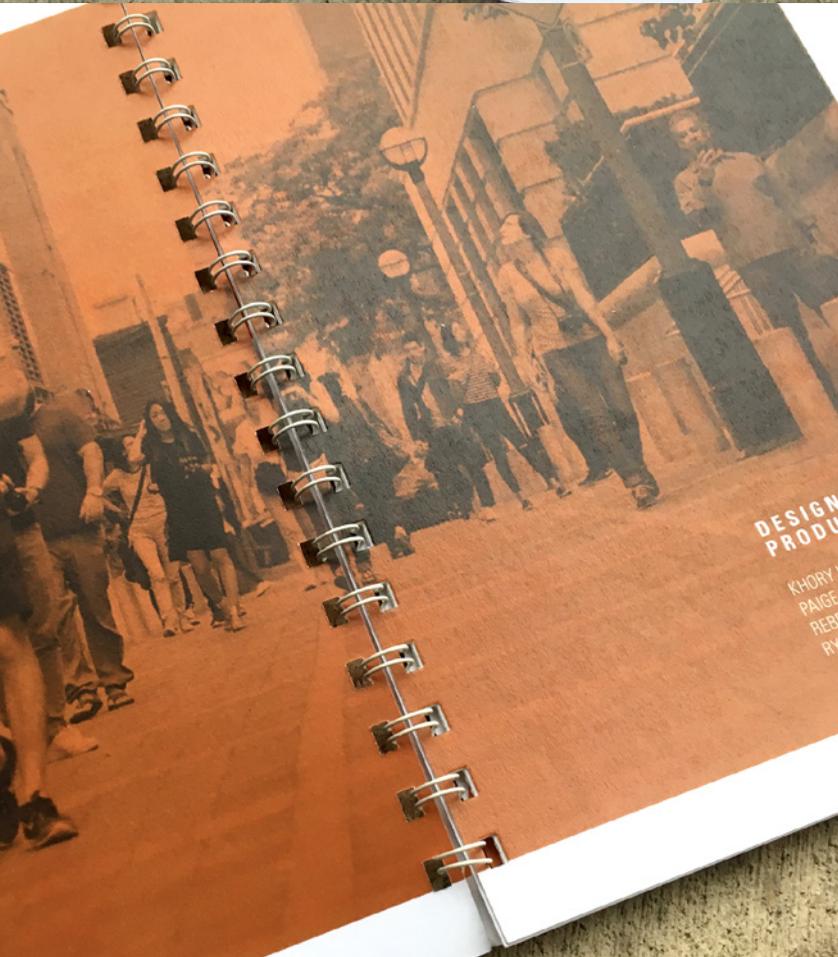
- BGSU Visitor Center
- Campus Message Boards
- In-Building Monitors
- Impromptu Signage

In addition to this information, another piece of information should be there for those who don't.

**SOLAR POWER**  
While researching possible solutions for the project we stumbled on some numbers on solar power that were intriguing.

**SOLAR PANELS**  
Over the span of 10 years, cost comparison shows a difference between solar and grid-tied signage. While the electricity cost shows a steady annual battery only needs replaced every three years, the grid-tied signage will have cost \$2,341 in costs only \$600. In summary, solar signage costs two signage types.

**"I now know that I harness the ability to create with very little to go off of. Innovation is no longer something I am unable to do."**  
— Ryan Pietrowski Junior, Graphic Design Major



004  
**DESIGN SOLUTION**

Locus, a three sided, touch screen information center which integrates navigation via a campus map, campus communication and community advertisements. By harnessing the power of the sun and only activating when people are present, this system will run in an energy efficient manner by reducing operating costs by up to 75% compared to traditionally powered signs. Locus will be made of a matte black outer structure, and non-reflective screens to minimize impact to the surroundings.

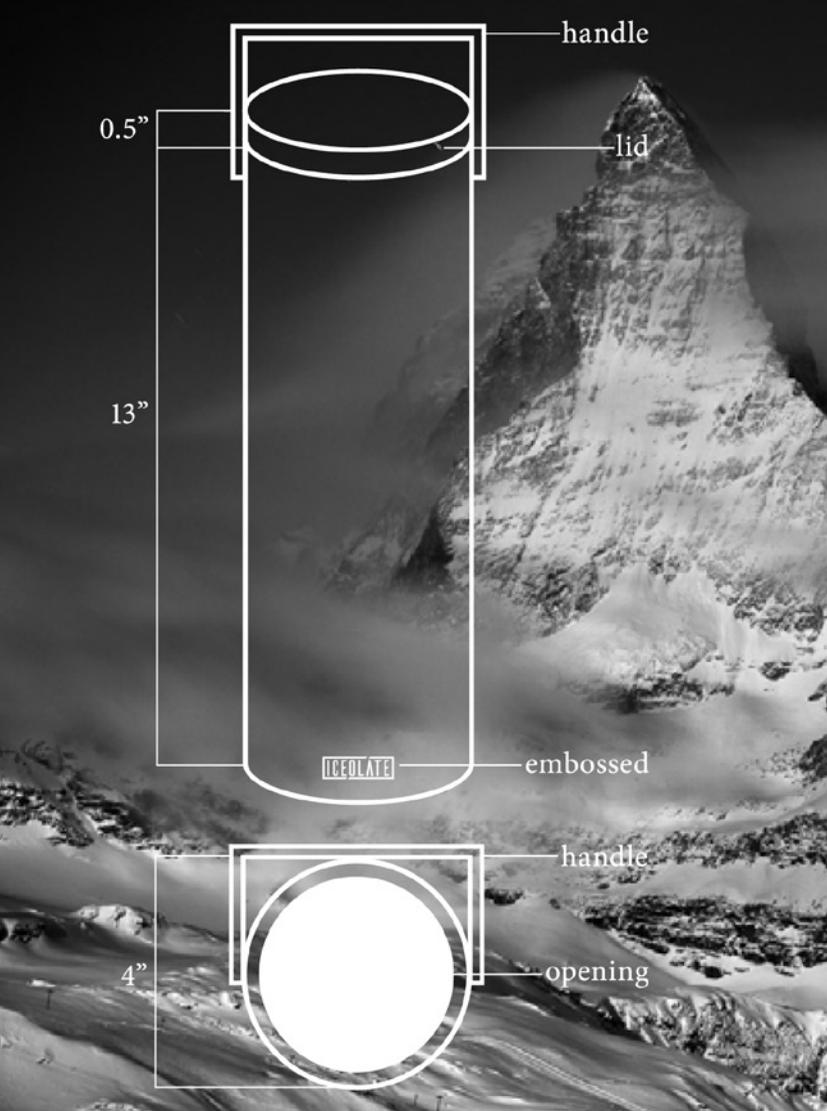
Locus is an triangular shaped pillar that is 7.5ft tall. This solution is a standard message board that has been transformed into a triangular shaped pillar with three digital screens that are not only simple to use, but eco-friendly as well.



Locus :: Solar/Responsive Signage  
Social Issue // Campus Navigation  
Ryan Pietrowski, Rebecca Schmucker  
Khory Katz and Paige Draheim



# ICEOLATE



## Product

Iceolate is a universal (individual) wine bottle carrier that is crafted from a material called *MycoFoam*.

## Reason

This material not only acts as packaging, but allows insulation and protection from external forces.

## Measurements

cylindrical shape  
 - 13 inches tall  
 - 4 inches wide

inside width  
 - 3.5 inch diameter

lid specs  
 - 0.5 inches tall  
 - 0.25 inch extrusion with a .25 inch lip

## Importance

The most important part of this innovative design which sets us apart from competitors in the market is the fact that the carrier is 100% biodegradable.

## Expenses:

Manufacturing Costs- \$1,200 per 1000 units  
 Marketing Costs- 10,000/yearly  
 Fixed Costs- \$2,064  
 MSRP- \$11.99  
 Cost of Good- \$1.20  
 Wholesale Pricing- \$6.00  
 BE Analysis- 430 units

## Sales Forecast/3 Year Expense Projection:

**1st year** - 2,000 units sold  
 \$10,000 Marketing  
 \$2,400 Manufacturing  
**Total= \$12,400 Revenue= \$ 9,600**

**2nd year** - 10,000 units sold  
 \$10,000 Marketing  
 \$10,000 Manufacturing  
**Total= \$20,000 Revenue= \$48,000**

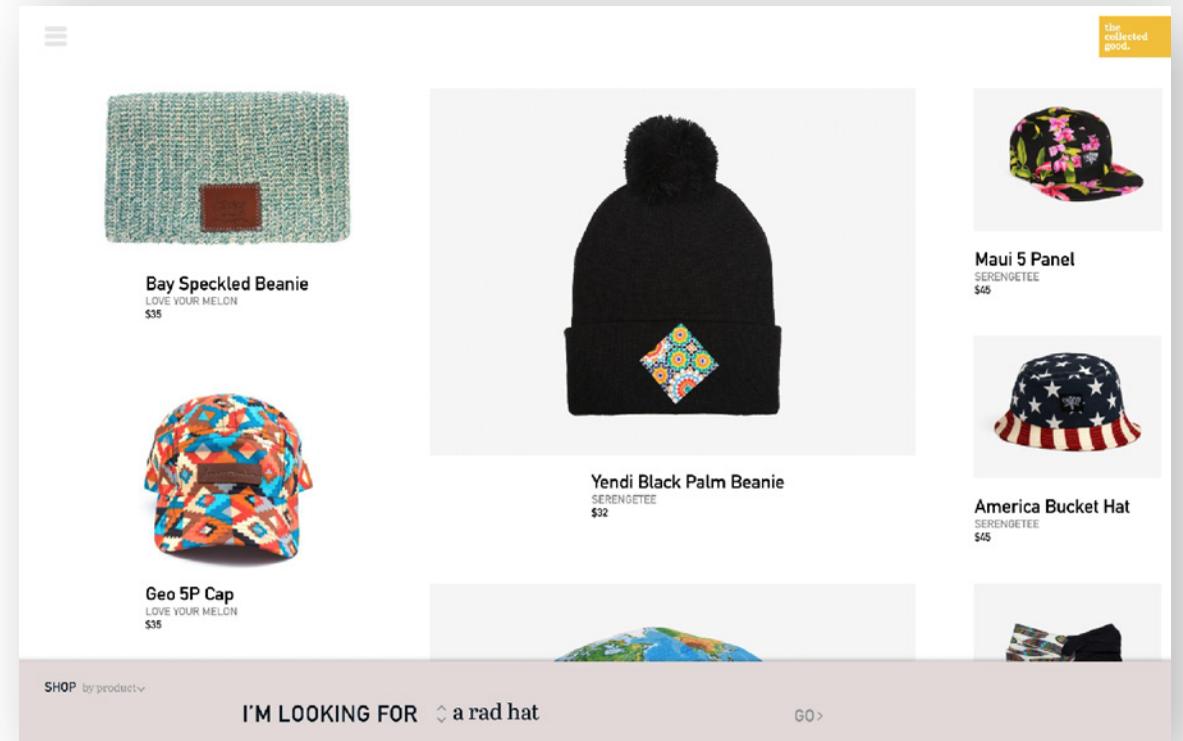
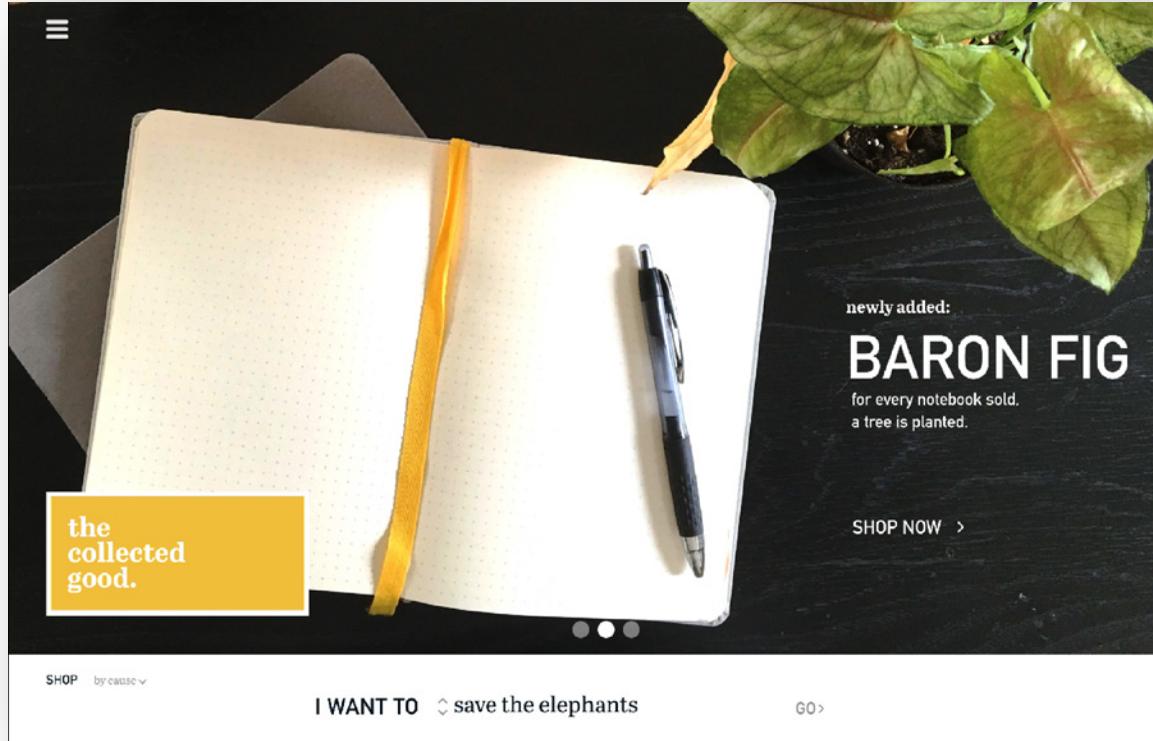
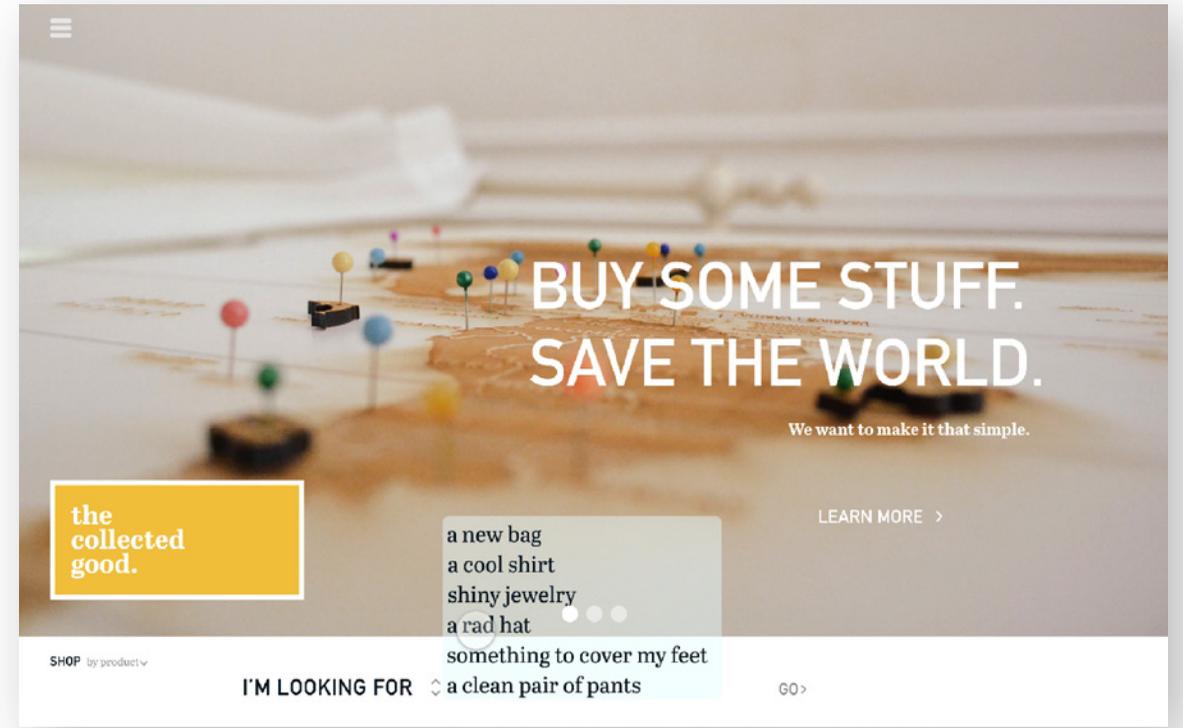
**3rd year** - 22,000 units sold  
 \$10,000 Marketing  
 \$17,600 Manufacturing  
**Total= \$27,600 Revenue= \$65,600**

**Innovate with Purpose: Iceolate Wine Carrier**  
 Egg carton inspired, customizable and biodegradable packaging  
 Ryan Pietrowski + Paige Thomas

“Seeing everyone in class, myself included, tackle big issues and problem solve in a way that seems feasible in real life, makes me realize that it’s actually possible for me to make a difference.”

– *Meghan O’Brien Junior, Graphic Design Major*





# THE TEAM TEACHING



*What was the benefit of team-teaching for yourselves and your students?*

**JS** // I can't say enough about what a great experience this was for me. After Susan Kleine left BGSU, I am grateful Kirk stepped up to teach with someone he barely knew. He made this experience so pleasant and I know I now have a new friend and collaborator. Our conversations in planning, problem solving and pivoting were with ease as we fully embraced being responsive to the climate of the students' uncertainties, frustrations and fears. For the students, getting input from two points of view forced them to define their own position. Kirk and I also didn't hide from the students in letting them know that this was all an experiment and that we were modifying as we went. It was true collaboration in action and we never took for granted their trust in us.

**KDK** // I had the great pleasure of being 'forced' to work with someone who I knew little about. I knew Jenn Stucker was respected by students and her colleagues, but I did not know the width and breadth of her knowledge. Jenn was amenable, flexible and wonderful to teach with during this course. The benefit for our students was differing perspectives. Jenn's background is in design and mine is in entrepreneurship and business... it was the best of both worlds for our students. They got double the input & twice the intellectual horsepower in the same class. What a value!



On March 27, our generous supporter and BGSU alum, Rick Valicenti attended the *Cross-Disciplinary Collaborations in Whole Brain Problem Solving* course to offer feedback and insight on the in-progress work and the social issues at hand. His comments and critiques were invaluable to the students as they continue their journey to approach tough topics. We deeply thank Rick for his time, kindness and support of the BGSU School of Art curriculum and the spirit of team-teaching.

*If you would like to join Rick Valicenti's efforts in supporting exceptional learning opportunities for students and faculty, please contact the School of Art at BGSU by emailing the Director, Dr. Katerina Ruedi-Ray at [krray@bgsu.edu](mailto:krray@bgsu.edu) for more information.*

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