9 Fusing Hand and Hi-Tech for Hi-Touch

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Abstract

Graphic design academic programs must respond to contemporary society's relentlessly growing need for digitally designed solutions. According to the Creative Group's 2017 Salary Guide, starting salaries will increase this year by more than 5% for visual designers and more than 6% for mobile and UX designers. This poses a challenge to design educators, whose students necessarily embrace an ever-changing array of technical solutions, which can lead to distraction, stress, and loss of creativity. Surrounded by multiple devices that inhibit their creative workflow, students are relentlessly tempted to multitask, which can decrease productivity and increase stress, according to recent studies.[1] "Highly physiologically arousing emotions associated with stress" rouse our instinct "to stay away from excitement and seek comfort instead,"[2] depressing, rather than fostering, creative thinking.

Two ways to provide much-needed relief are drawing and listening to music. As discussed by Robin Landa in a recent *HOW* article, "Drawing allows you to disappear into the act of creation," and "sustained focus while drawing acts to quiet any internal noise.[3]" Dedicated sketching sessions can enable a designer to focus on growing a concept without the noise of multitasking. The second, listening to music—especially beloved music—is a proven and well documented way to relax mind and body, slow heart rate, lower blood pressure, and decrease stress hormone levels.[4]

Student Marc Rosario has created a mobile app experience (currently at the designed prototyping phase) that aims to combine these two stress-releasing options to increase creativity. "Sharpen" boosts creativity through drawing, sketching, and listening to music. Brainstorming an idea within the timeframe of a song, users can take pictures of their process, upload the work to Sharpen or other social media channels, and share or solicit feedback of their work.

This paper presentation provides a two-pronged approach to this challenge of fostering creativity while responding to industry needs. It focuses on the curricular value of fusing "hand" skills outside of the computer (focused sketching, research, user testing, surveys, written reflections, and brand development) with "hi-tech" digital design (brand identity, mobile design, and prototyping). Also, it explores, through example, the "hi-touch" results of that fusion, using Marc's app prototyping project, which celebrates hand skills and entices young people to draw and sketch more frequently.

[1] http://www.nytimes.com/2008/10/25/business/yourmoney/25shortcuts.html

[2] http://sharpbrains.com/blog/2013/11/26/the-link-between-brain-stress-and-creativity/

[3] http://www.howdesign.com/design-creativity/drawing-exercises-sketch-creativity-happiness/

[4] http://psychcentral.com/lib/the-power-of-music-to-reduce-stress/

Fusing Hand and Hi-Tech for Hi-Touch

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KEYWORDS:
Graphic design, mobile app, UI/UX, VR/AR, portfolio, identity design, iteration, prototyping, motion graphics, proto-portfolio, design careers, student success

INTRODUCTION

As design educators, we must pay careful attention to what our students will do after they leave the classroom. Guiding new designers into the professional world, where they can build meaningful and sustainable careers, is a critical part of our mission, and we accomplish it by providing the tools and practices that will most effectively prepare them to enter the workforce in its current state. With the rapid advancements in the design industry, and in media and technology, this goal has become increasingly challenging to achieve. How can educators keep pace with this accelerated evolution, while providing a positive experience and a relevant program that fosters students' creativity and ensures they are highly employable?

Graphic design academic programs, and the educators who devise them, must be vigilant and proactive about responding to contemporary society's relentlessly growing need for digitally designed solutions. According to the Creative Group's *2017 Salary Guide*[1] for creative and marketing professionals, starting salaries will increase this year by more than five percent for visual designers and over six percent for mobile and User Experience designers. This has led some programs to modify their curricula and to offer a larger array of technology courses, specifically in mobile design, User Interface/User Experience (UI/UX), and Virtual Reality and Augmented Reality (VR/AR).

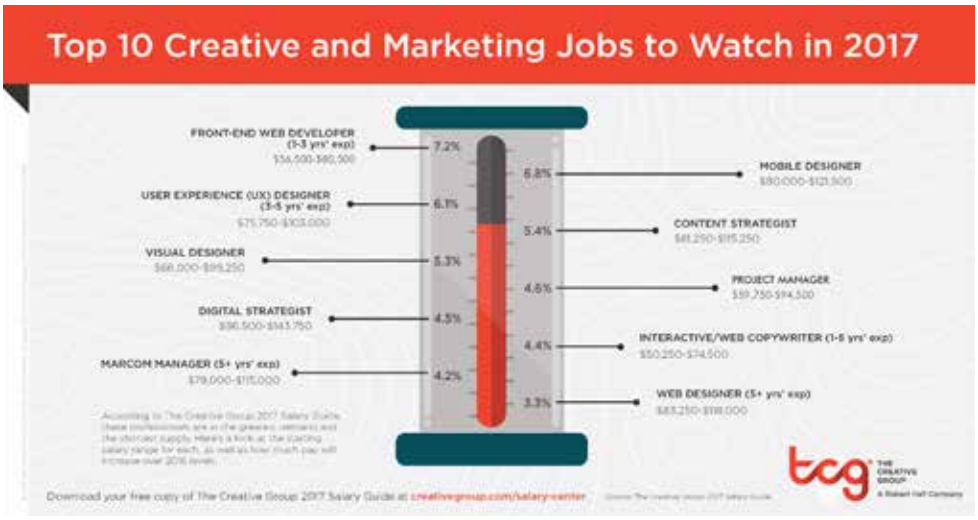


Figure 1: The Creative Group's *2017 Salary Guide*: https://creativegroup.com/salary-center

1 "2017 Salary Center for Creative and Marketing Professionals." *Robert Half*. The Creative Group, 30 Mar. 2017. Web. 09 June 2017.

Another way design educators can stay current on the changes happening in the professional world of design is to keep track of industry trends. The Creative Group's annual salary guide is an industry resource that also provides guidance on compensation and hiring, based on business and social influences.

Additionally, relationships that educators develop with creative recruiters, alumni, and practicing industry professionals serve as a valuable stream of continuous feedback. Those who actually assess, hire, and promote students in the professional world provide invaluable insights, which help design institutions improve and strengthen their programs. Professional and design educator conferences and events offer continuing opportunities and venues for learning about trending practices. At the 2017 One Club's Educator's Summit, Advertising Design Professor C.J. Yeh from FIT presented on how a growing number of companies are using artificial intelligence (the capability of a machine to imitate intelligent human behavior[2]) to design logos (https://www.logojoy.com/) and to market and advertise their goods (https://www.alibaba.com/). Both of these scenarios either eliminate or redefine design jobs[3] and further challenge design educators' ability to continuously foster their students' creativity while providing the practical tools and technical know-how to stay relevant and competitive in a fast-paced, technology-driven world.

This paper provides a two-pronged approach to the challenge of fostering creativity while responding to industry needs. It focuses on the curricular value of fusing "hand" skills outside of the computer (focused sketching, research, user testing, surveys, written reflections, and brand development) with "hi-tech" digital design (brand identity, mobile design, and prototyping). Also, it explores, through example, the "hi-touch" results of that fusion (an authentic brand experience), using student projects that combine a study of traditional design and technology. By working together, and sometimes with other faculty or professionals, Assistant Professors Denise Anderson and Ed Johnston from the Robert Busch School of Design have developed "Proto-Portfolio," a process around a single, straightforward objective for students: to create projects so believable that people think they are real (or should be).

BACKGROUND

An understanding of the demographic of Kean University students, as well as the disparate but complementary expertise of Anderson and Johnston, provides a context for the development of this process.

Kean University is a four-year state liberal arts institution located in Union, New Jersey. The Michael Graves College (MGC) consists of two schools: the Robert Busch School of Design (RBSD) and the School of Public Architecture (S of PA). Within the RBSD, there are four professional programs in the practice areas of BFA Advertising Design, BFA Graphic Design, BFA Interior Design, and Bachelor of Industrial Design. In spring 2017, approximately 163 advertising and graphic design majors were enrolled in these programs; 65 percent of those students transferred in from two-year colleges. The RBSD employs three full-time faculty for its Advertising and Graphic Design programs.

2 "Artificial Intelligence." *Merriam-Webster*. Merriam-Webster, n.d. Web. 09 June 2017.

3 Beer, Jeff. "Why Creatives Shouldn't Be Afraid Of Artificial Intelligence." *Fast Company*. Fast Company, 30 July 2016. Web. 09 June 2017.

Denise Anderson joined the Robert Busch School of Design faculty as a full-time professor in 2013, after teaching as an adjunct instructor in the department for fifteen years. She serves as the senior portfolio coordinator for the School's graphic design program and teaches courses related to graphic design, branding, and identity design. Anderson's book *Stand Out: Design a Personal Brand, Build a Killer Portfolio, and Find a Great Design Job*, which she both authored and designed, was published by Peachpit Press in 2016. As a seasoned graphic designer, brand strategist, entrepreneur, and founder of the award-winning creative firm DesignDMA, Anderson brings to the classroom more than two decades of experience creating branding strategies and corporate identities for global financial services firms and a variety of start-up companies. Prior to establishing DesignDMA, Anderson served as the Director of Marketing Services at Pershing, a BNY Mellon company.

Ed Johnston is an award-winning designer and educator who creates engaging experiences with mobile and immersive technologies. As an assistant professor in the Robert Busch School of Design, Johnston teaches courses related to user experience, interactive design, and motion graphics. He offers more than a decade of experience infusing new technologies into higher education environments and collaborating with colleagues for student success. His continuing work on Augmented Asbury Park involves digitally reconstructing key historic landmarks on the Asbury Park boardwalk in New Jersey using augmented reality technologies. Johnston is directing multiple projects using VR/AR technologies at Liberty Hall Museum to enrich visitors' experiences with museum content. He has presented, published, and exhibited his creative work and research both nationally and internationally. Some recent highlights include presentations at TEDx Navesink, Design Incubation, ISEA, and the UCDA Design Education Summit.

OBJECTIVE

The objective—"to create projects so believable that people think they are real (or should be)," which students can use in their final senior-year portfolio—serves several important functions. Projects developed over time, with intense mentorship and guidance, and reworked and refined through a series of courses, make the critical transition from concept to believable outcome. Prospective employers see student work that reflects an admirable level of commitment from an enthusiastic young designer who has learned both to communicate with passion and to give careful attention to detail. Undergoing an experience that simulates what they will encounter in the professional world makes students highly marketable, and equips them with a demonstrable ability to develop an idea over multiple interactive touchpoints in the areas of print and digital.

METHODOLOGY

To guide students tasked with creating believable projects, Anderson and Johnston have developed what they call "Proto-Portfolio," a process that is defined by combining the terms "prototype" and "portfolio." Proto-Portfolio guides students to continuously validate and iterate their projects through a multi-course collaboration, with a special focus on developing integrated brand experiences for their final Graphic Design Portfolio course. The process includes these components:

Start with a class assignment. Typically, the most compelling projects are initiated from the final project assigned in Anderson's Identity course: "Develop a new business idea." By the time students begin this

project, they have already had 10-12 weeks of learning various ways to design brand identities (logos, brochures, websites) and know how to create a design strategy and develop a creative brief. Students are often driven by one of their life experiences to pursue a project—fusing their learned knowledge of identity design with a personal passion. Making this connection inspires students to take ownership of their project and become personally invested in its success. Former student Katrina Streisguth's Elite Care mobile app design was inspired by her mother, who works as a certified nursing assistant at a resident nursing facility. Katrina says: "My mom shared with me her first-hand insights on the challenges of staff and patient care. I wanted to do something to help the residents and make her job more effective."

Develop the same project in a secondary course. Students frequently come into one of Johnston's UI/UX or motion courses already equipped with a designed brand identity from Anderson's Identity course, and they go through the process of injecting a key technology touchpoint that will contribute to an integrated brand experience. Working within UI/UX, students create a concept for a mobile app or mobile website experience. Equipped with the knowledge they have acquired in Anderson's course, the students continue to research current statistics in their area of interest, to help establish an argument for why their app concept should exist. Students work through several rounds of prototyping, from low fidelity paper sketches of screens to high fidelity interactive experiences on mobile devices. Using their prototypes, students learn how to run both in-person and remote usability sessions, and they iteratively improve upon their initial designs. They also learn how to create a short informational video about their designed experience that communicates its value and articulates key interactions. Within Johnston's motion course or independent study, students regularly drive an animated or video-based storytelling touchpoint for their brand.

Refine the project in the final Graphic Design Portfolio course. Once a project has been validated and developed over a series of courses or guided independent studies, it is ready to further develop in Graphic Design Portfolio. At the RBSD, students are required to create four to five integrated campaigns in order to graduate. The rationale is that integrated campaigns demonstrate a student's broader ability to create stories through a branded experience, and show his or her aptitude for design thinking, technology, and other skills such as illustration, motion graphics, or videography. In addition to designing other touchpoints to complete the brand experience, students are taught how to present their work, and express who they are as designers. And, they learn to tell an authentic and empathetic story about their project.

THE PROTO-PORTFOLIO™ PROCESS

Proto-Portfolio is an approach that Anderson and Johnston have developed over time and now apply across all of the courses they teach. Placing emphasis on validation and iteration, the Proto-Portfolio process guides students to fuse non-computer "hand" skills with "hi-tech" digital design for "hi-touch" results. Students who embrace the process consistently produce projects that have the capacity to connect to a real audience because they are so believable.

Hand. Students begin the process by researching supporting data on their initial area of interest, defining current pain points, and identifying inspiration in connection with that area. These forays might

include some sketching, initial testing, a written reflection, and brand development. Delving into their area of interest and conducting a critical analysis of their subject matter helps students learn how to articulate a design problem so they can explore possible solutions and strategy effectively.

Hi-Tech. Next, students begin "hi-tech" iteration, working to solve their defined problems and developing experiences for their projects. These might take the form of digital prototypes, brand identities, motion pieces, or another form of interactive product. Through further user testing, presentation, and reflection, students create experiences that are refined and functional.

Hi-Touch. The refined experiences lead into a "hi-touch" phase, where distribution, storytelling, and presentation become essential to sharing and communicating the designed solution and strategy.

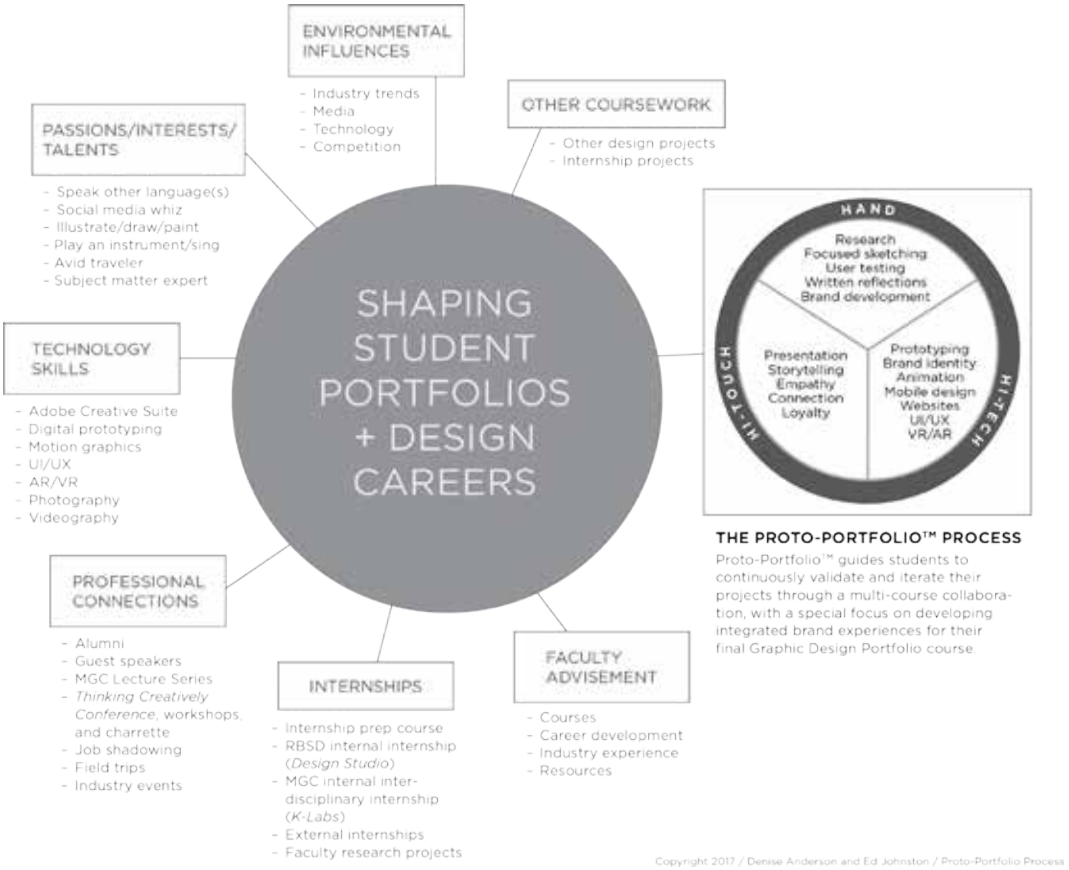


Figure 2: Proto-Portfolio™ Process diagram

STUDENT EXAMPLES

Sharpen

The Sharpen project was developed by student Marc Rosario, who first took Anderson's Identity course, followed by Johnston's Design for Mobile course, and then Portfolio with Anderson, to tie the components together for presentation.

Figure 3: *Sharpen* mobile app image. Concept by Marc Louis Rosario

Drawing from his initial interests, research, and feedback sessions, Marc defined a purpose for his idea—a mobile application that leverages the power of music to help users overcome creative blocks, boost creativity and productivity, and step outside of their comfort zones. "The more research I did with user-testing and outside resources," Marc says, "the more I was able to build touchpoints for a better brand experience."

After his initial research and sketching in the Design for Mobile course, Marc moved forward with creating a low fidelity paper prototype of his app concept. "I have students create their initial prototype iterations with paper," Johnston says. "This activity gets them to think outside of their devices and not over-commit to designed screens without initial feedback and user

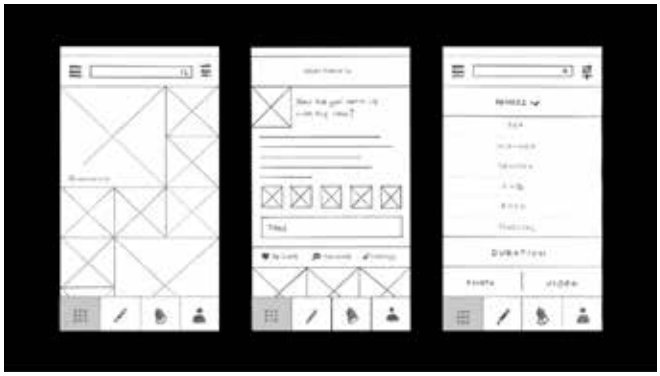


Figure 4: *Sharpen* prototype sketches. Concept by Marc Louis Rosario

testing." Following paper prototyping, the students learn how to implement methods of user testing, and they creating wire-framed prototypes in design software to start testing and blocking out the layout for their apps on actual device screens.

Figure 5: *Sharpen* logos: initial (left) and final (right). Concept by Marc Louis Rosario

Marc developed the Sharpen brand identity in Design for Mobile, but he used the process outlined in Identity to create it, and he consulted with Anderson throughout the various stages of development. "I encourage students to reach out to me on their identity projects, even if they are not currently taking my course," Anderson says. "I want to minimize their need to go back and redesign something because it is not correct. If, for instance, a student decides to rework a logo as an improvement (as Marc did with Sharpen to simplify the logo to further refine his concept and make it more readable for viewing on a small screen), Portfolio is the place to do it. But there is no time in that class to rework major aspects of a project that didn't meet objectives."

Once the students have articulated a direction for their brand identity, they design their screens and create interactive prototypes in software such as InVision or Marvel. This enables them to establish refined, high fidelity user journeys for further testing and presentation. In addition, they create short informational videos about their app concepts.

In Portfolio, Marc did more user testing and realized he did not need to use music in his concept; users found it confusing that they had to sketch during the entire length of a song. Portfolio gave Marc another opportunity to refine the project in another course, so he could deconstruct and further fine-tune his idea.

Marc's *Sharpen* case study of his mobile app can be experienced here: https://www.marclouisrosario.com/sharpen/.

***Recycle Responsibly* by Coca-Cola**

Students Brooke Roderick (Advertising major) and Billy Weaver (Branding + Advertising) created the *Recycle Responsibly* campaign. The project was initiated in Anderson's Identity course as a "new business idea" and later developed in Portfolio, in conjunction with an Independent Study with Johnston.

The goal of *Recycle Responsibly* was to raise awareness of and increase involvement in the recycling of Coca-Cola products. Brooke's personal experiences while walking around New York City initially inspired the campaign: "One day, while in the city, I saw a homeless woman digging through the trash. I thought to myself, 'Oh, that's sad. She must be looking for food.'… But she wasn't. She was trying to find bottles and cans. Many of the homeless in NYC collect recyclable goods in order to turn them in for approximately five cents each. They spend entire days rummaging through the garbage to make as little as $5 per day. It's happening right before our eyes. So let's help them!"

Figure 6: *Recycle Responsibly* field research image. Concept by Brooke Roderick and Billy Weaver. Coca-Cola is a trademark of The Coca-Cola Company.

From her field research, Brooke identified that NYC had very few recycling bins. Brooke also carried out a survey to support and validate her idea.

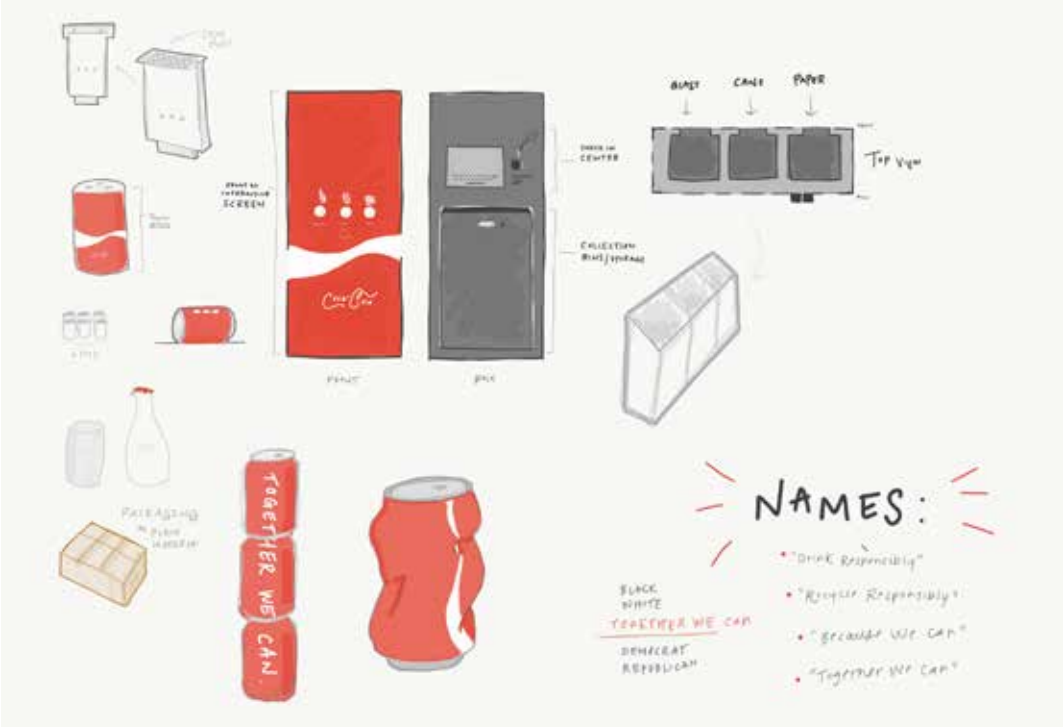
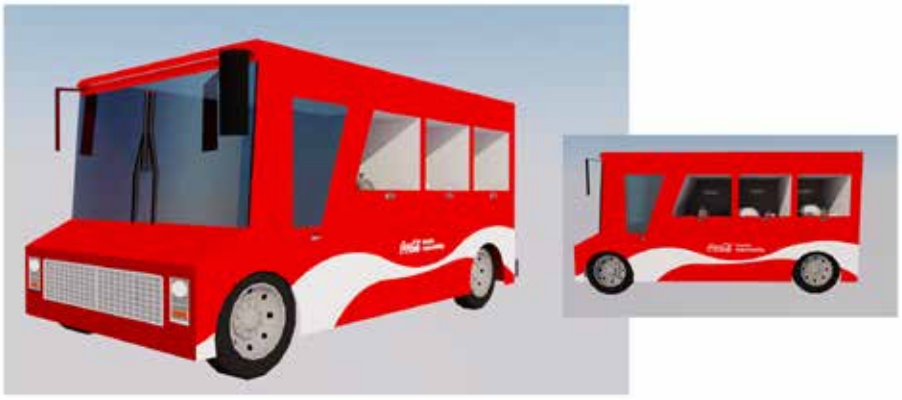


Figure 7: *Recycle Responsibly* brand identity concepts. Concept by Brooke Roderick and Billy Weaver. Coca-Cola is a trademark of The Coca-Cola Company.

Figures 8–9: *Recycle Responsibly* final brand identity touchpoints. Concept by Brooke Roderick and Billy Weaver. Coca-Cola is a trademark of The Coca-Cola Company.



The *Recycle Responsibly* campaign is a great example how students used the Proto-Portfolio process to amplify the fidelity and clarity of their research and to propose a solution through well-crafted, data-driven storytelling, animated touchpoints through motion graphics, and well-designed case study videos. Johnston worked closely with Brooke and Billy on their case study video as part of an Independent Study. The touchpoints they created were purposely selected to best connect to the audience, to enhance the visual appeal and fidelity of the project, and to create an experience. The goal is always to make it "feel as real" as possible, Anderson says. "Students love to see the results, and professionals appreciate the level of detail." The campaign and the case study video can be experienced here: http://www.brookeroderick.com/recycleresponsibly and http://itsbillyweaver.com/recycle-responsibly.

RESULTS – OBSERVATIONS

Working together and in tandem, Johnston and Anderson have noted a growing synthesis. The brand experience that students create is being enriched through further articulation of the intended user experiences and through high fidelity interactive prototypes. Additionally, the brand's story is being more clearly expressed and further refined through motion and video compositions.

The educators have also observed improvement in student presentations, in both the compelling visuals that the students create and in their verbal command that result from increased frequency of presenting. This improvement is happening across courses with shared workflows and tools for creating presentations, including Keynote.

SUMMARY

The student examples in this paper highlight just a sampling of the many great projects that RBSD students exhibit in their final portfolios. Spring 2017 graduates—some of whose work is in this article—have already found employment: Marc Rosario (https://www.marclouisrosario.com/) now works as a junior art director at Weber Shandwick (NY); Brooke Roderick (http://brookeroderick.com/) is art director at Big Spaceship (NY); and Billy Weaver (http://itsbillyweaver.com/) is art director at Entrée Health (NJ). Regardless of the type of student or project, the results are clear. Students who move through Anderson and Johnston's Proto-Portfolio process produce strikingly improved projects, which gain attention and respect from the practicing professionals who seek new talent and fresh perspectives. Feedback from those students, and from the people who hire who them, confirms that the approach effectively simulates and adapts to what students will encounter as they enter the workforce, and equips them with the practical tools they need to feed their creativity and to remain relevant and competitive in a fast-paced, technology-driven world.

In summary, here are Anderson and Johnston's overall themes that help shape student portfolios and their design careers:

Reinforce the basics. Emphasize "deep dive" development of an idea in regards to research, user testing, wire-framing, and brand building. Repeat in each course, as necessary.

Iteratively improve projects. Iteration and tag-team teaching are critical for creating work that is highly developed and highly believable. Anderson and Johnston each have a subject matter expertise and different experiences, and they pool their resources to ensure the best possible outcome for their students.

Celebrate student success. Finding opportunities for students to share their project stories by entering student work into the business school's business plan contest (Student Katrina Streisguth's Elite Care mobile app [https://www.kstreisguth.com/elite-care/] made it to the semi-final round in 2017); a local entrepreneurship contest (student Stephen Sepulveda's mobile app [http://stephensepulveda.com/item/viewsbrews/] won the Red Bank Studio Entrepreneurship contest for his project, Views and Brews in 2016); or the countless number of students who have heard from a design professional, "Is your project real? If not, it should be."

To see more student projects created by recent RBSD graduates, visit: http://www.mgcsync.com/. If you would like more information about the Proto-Portfolio process, please contact Denise Anderson (danderso@kean.edu) or Ed Johnston (jedward@kean.edu).