

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Honors in Practice -- Online Archive

National Collegiate Honors Council

2020

Best Practices in Honors Pedagogy: Teaching Innovation and Community Engagement through Design Thinking

Beth H. Chaney

Tim W. Christensen

Alleah Crawford

Katherine Ford

W. Wayne Godwin

See next page for additional authors

Follow this and additional works at: <https://digitalcommons.unl.edu/nchchip>



Part of the [Curriculum and Instruction Commons](#), [Educational Administration and Supervision Commons](#), [Gifted Education Commons](#), [Higher Education Commons](#), and the [Liberal Studies Commons](#)

This Article is brought to you for free and open access by the National Collegiate Honors Council at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Honors in Practice -- Online Archive by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Authors

Beth H. Chaney, Tim W. Christensen, Alleah Crawford, Katherine Ford, W. Wayne Godwin, Gerald Weckesser, Todd Fraley, and Phoenix Little

Best Practices in Honors Pedagogy: Teaching Innovation and Community Engagement through Design Thinking

BETH H. CHANEY, TIM W. CHRISTENSEN, ALLEAH CRAWFORD,
KATHERINE FORD, W. WAYNE GODWIN, GERALD WECKESSER,
TODD FRALEY, AND PHOENIX LITTLE

East Carolina University

Abstract: Honors colleges aim to provide unique first-year experiences that promote life skills and emphasize process over product in an interdisciplinary setting that builds community. A two-semester, five-semester-hour course sequence with colloquia tackles these challenges by introducing an entrepreneurial mindset that pushes students toward innovative understanding and building of community. The first iteration includes an introduction to design thinking; identification of wicked problems; collection of data using immersion experiences, interviews, and literature review; and experiments ($n = 35$) in project-based entrepreneurial methodologies using *Lean LaunchPad*. The second iteration involves assessment, applied qualitative analysis, out-of-class learning, and peer mentoring. Results provide a framework for developing innovative thinking, an entrepreneurial mindset, and community engagement among first-year students—a design that, the authors conclude, has not only developed in students specific, non-academic skills (such as resiliency and creative self-confidence) but effectively doubled the size (as mandated by the university) of the first-year class. Implications for future iterations are considered, calling for strengthening administrative support, increasing academic/community partnership, and sustaining funding beyond the first year.

Keywords: first-year experience programs; entrepreneurial mindset; wicked problems; human-centered design; East Carolina University Honors College

INTRODUCTION

The first-year experience in honors colleges has a unique opportunity to provide students with challenges that build life skills and serve students for years rather than the traditional, discipline-based content in students' majors. Whereas courses in the students' majors aim to teach students specific knowledge, first-year experiences in honors colleges instead provide interdisciplinary experiences. In addition, honors colleges welcome the challenge to build a cohort, developing closeness among the class members. The increase in first-year experiences for college students has been supported by a well-established body of research conducted by the National Resource Center for the First-Year Experience and Students in Transition (2019), which provides theoretical foundations and practical guidelines for creating and implementing best practices related to first-year experiences. However, that research has provided limited understanding of first-year experiences for honors students, particularly within a national context (Vander Zee et al., 2016). Furthermore, according to Vander Zee et al. (2016), the critical piece for working within current curricular contexts to design first-year experiences for honors students is coursework "that does not simply enhance but fundamentally directs and grounds the academic and social transition processes faced by first-year honors students" (p. 136). Accordingly, many honors colleges aim to deliver a curriculum based on process rather than product. The East Carolina University (ECU) Honors College has tackled these challenges and instilled an entrepreneurial mindset that will push students toward an innovative approach to their communities while simultaneously doubling the size of the first-year class as was mandated by the university.

In a two-semester, five-semester-hour course sequence, the faculty of the ECU Honors College used human-centered design (IDEO.org, 2015) to push students toward innovative thinking as they consider and achieve their life goals. Students then use these skills to identify "wicked problems" (Rittel & Webber, 1973) and prototype solutions. A wicked problem is a social or cultural problem that is difficult to solve, such as poverty, lack of healthcare access, or the current opioid epidemic (Rittel & Webber, 1973). These problems can be approached through the process of design, which emphasizes empathy and prototyping of ideas to solve the problems. This novel approach to the freshman experience is in its third iteration. Having learned many lessons, we hope to achieve a threefold goal: to provide other honors colleges with a framework for developing a student experience that encourages innovative thinking, an entrepreneurial mindset, and community engagement;

to provide lessons learned from administrative, faculty, and student perspectives; and to share the key resources needed.

Background

East Carolina University

East Carolina University is located in rural eastern North Carolina and offers 104 bachelor's degree programs, 73 master's programs, and 18 doctoral degree programs, along with a variety of other certificate and advanced programs. In the fall of 2017, our enrollment was 29,131, including 21,225 full-time students (19,104 undergraduate and 1,586 graduate, 322 students in the School of Medicine, and 213 in the School of Dental Medicine). Twenty-four percent of these students were enrolled via distance education only. Ethnic minorities make up 26% of the undergraduate students, 21% of the graduate students, 29% of the medical students, and 35% of the dental students. Fifteen percent of undergraduates are 25 or older. Eighty-eight percent of on-campus students are residents of North Carolina. The ECU student-faculty ratio is 18:1, with approximately 1800 faculty, 90% of whom are full-time.

The Honors College at East Carolina University

The mission of the East Carolina University Honors College is to prepare tomorrow's leaders through the recruitment, engagement, and retention of exceptionally talented students of character in a diverse intellectual living-learning community and to challenge them to attain high levels of academic achievement. The ECU Honors College aligns with the National Collegiate Honors Council (NCHC) definition of the honors curriculum: "Honors experiences include a distinctive learner-directed environment and philosophy, provide opportunities that are appropriately tailored to fit the institution's culture and mission, and frequently occur within a close community of students and faculty" (NCHC). ECU transitioned from a decentralized honors program to a college led by an academic dean in 2010, a move that benefited from the guidance provided by the NCHC. The ECU Honors College has a rich history of providing innovative programs for honors students. Since its inception in the mid-1960s, the honors program has attracted highly motivated and curious students and provided them, under the guidance of engaged faculty, with unique learning opportunities and experiences fostering intellectual growth, personal development, and a strong and abiding commitment to the ECU community.

For its first seven years, the ECU Honors College admitted 100 freshmen each fall. Starting with the class entering in fall 2017, the honors college now enrolls approximately 200 first-year students annually; current enrollment is approximately 600 students. The college admits only first-year students who are invited to apply after they are admitted to ECU. All students receive scholarship support, which determines their honors college academic requirements. One of these requirements is that they live and participate in an Honors Living and Learning Community (LLC) their first year. The honors college curriculum includes honors seminars, departmental honors sections, colloquia, and a 6-hour signature honors project that must be completed with the oversight of a faculty mentor. The colloquia include the 5-credit-hour, 2-course, interdisciplinary first-year seminar (FYS) series required for all entering freshman regardless of their majors. The honors college works with faculty members across campus to deliver this curriculum.

The Genesis of the Honors 2000–3000 Freshman Experience

The initial curriculum involved a series of colloquia (HNRS 2000, 3000, 4000) that were taken in sequential academic years. In the fall of their first-year, students took a 2-credit-hour course that focused on leadership and service and was largely lecture-based with some outside service project requirements. In their second-year, students were divided, as much as possible, into major-specific cohorts. The ECU Honors College recruited instructors with expertise that aligned with these majors, and they designed research experiences to teach students the basics of research methodologies within their areas. Over the course of this 3-credit class, depending on the instructor, students would work individually or in teams on sample research projects. The course culminated in a large symposium where students from all sections presented their work. In their third year, a 1-credit-hour course introduced students to the importance of philanthropy and initiated the Senior Honors project process. Students were required to identify a mentor and develop a proposal for their senior capstone project, which was a creative or thesis-based activity that required completion of 6 credit hours of independent research in their major.

As an initial curriculum, this series was an important and effective starting point for designing the honors experience and was based on best practices as outlined by NCHC. Members of the ECU Honors College leadership and interested faculty performed informal interviews and periodic surveys to understand the students' perspectives on their curricular experience. This feedback identified several areas of weakness that we sought to address.

Students consistently commented that leadership and service pedagogy in the first-year colloquium was ineffective because it did not involve real situations and challenges. The second-year colloquia seemed to many students to be a “canned” research project that was not relevant to what they wanted to do. Lastly, the third-year class came too late to be effective since students had already planned for their senior honors projects. In addition to all the course-specific feedback, many students regretted not forming longer-lasting relationships with their honors peers from other majors, whom they met for one semester in a small section and then lost touch.

The discipline-specific nature of the second-year colloquium was identified early as an area for possible improvement. Attempts were made to create interdisciplinary faculty teams in which individual faculty members still developed and delivered their own content but were charged with integrating interdisciplinary concepts they gleaned from faculty members teaching the other sections. While this attempt was a shift in the right direction, differences between sections fostered discontent among the students.

Several additional themes emerged from the perceived deficiencies in the inaugural curriculum; these centered on the “relevance” and “effectiveness” of the curricula for students. Engaged faculty saw a need for improvement: the existing curriculum reinforced boundaries between disciplines rather than fostering an understanding of interdisciplinary approaches to research and creative activities. Faculty also noted that there had been a consistent decrease in the non-academic skills of students when it came to grit, resiliency, and creative self-confidence—a trend that has been noted elsewhere (Wilson, 2015).

Leadership and service were core topics we wanted to move forward. In addition, we wanted to maintain group work as a means to create cohesive student cohorts. We moved from a mostly theoretical understanding of leadership to a more functional definition, where the students had the opportunity to develop leadership skills. Service needed to move from a dictated activity to one driven by student interests. Learning research methods should not duplicate what students did in their majors but expose them to the varied ways research is done across fields. When discussing how to restructure the student experience, we identified design thinking as a framework that could be used to affect not only leadership and service but also non-academic skills such as grit, resiliency, and creative self-confidence.

One of the major goals of the curricular change was to foster student use of interdisciplinary methodologies. To this end, the faculty team should

represent diverse backgrounds, expertise, and working styles and should serve as an ideal for the student teams they mirrored. Faculty who had already demonstrated a keen interest in honors pedagogy were recruited from different disciplines. The personnel costs associated with this change were supported in the operating budget provided through the ECU Office of Academic Affairs. The honors college provided support directly to the departments of each member of the faculty team, ensuring that they could offset the costs associated with sharing a faculty member for a minimum of one year. Lapsed salary was used in other instances to cover additional costs such as for graduate assistants.

The instructors selected were widely respected among honors students as passionate and engaged. Faculty needed to be willing to take risks, demonstrate flexibility, embrace interdisciplinary approaches, and work well in teams. The inaugural faculty team was charged with designing the new curriculum a year in advance and received supplemental summer pay to concentrate on the effort. Like the students, they used human-centered design principles (IDEO.org, 2015) in understanding the scope of the problems with the previous curriculum and in identifying possible solutions, which included incorporating a solutions-based process involving ongoing feedback, reflection, and idea iteration. Faculty collected student feedback, reflected on how to address the issues, and implemented ideas for the iteration process. As faculty leave for other opportunities, new faculty are carefully vetted to ensure that they will integrate well into the mission of the team: creating an evolving learning environment for students to meet their needs while also developing leadership skills, community engagement, service involvement, and non-academic skills for their ultimate success. Faculty receive supplemental pay yearly to revise and update the course and bring new members up to speed.

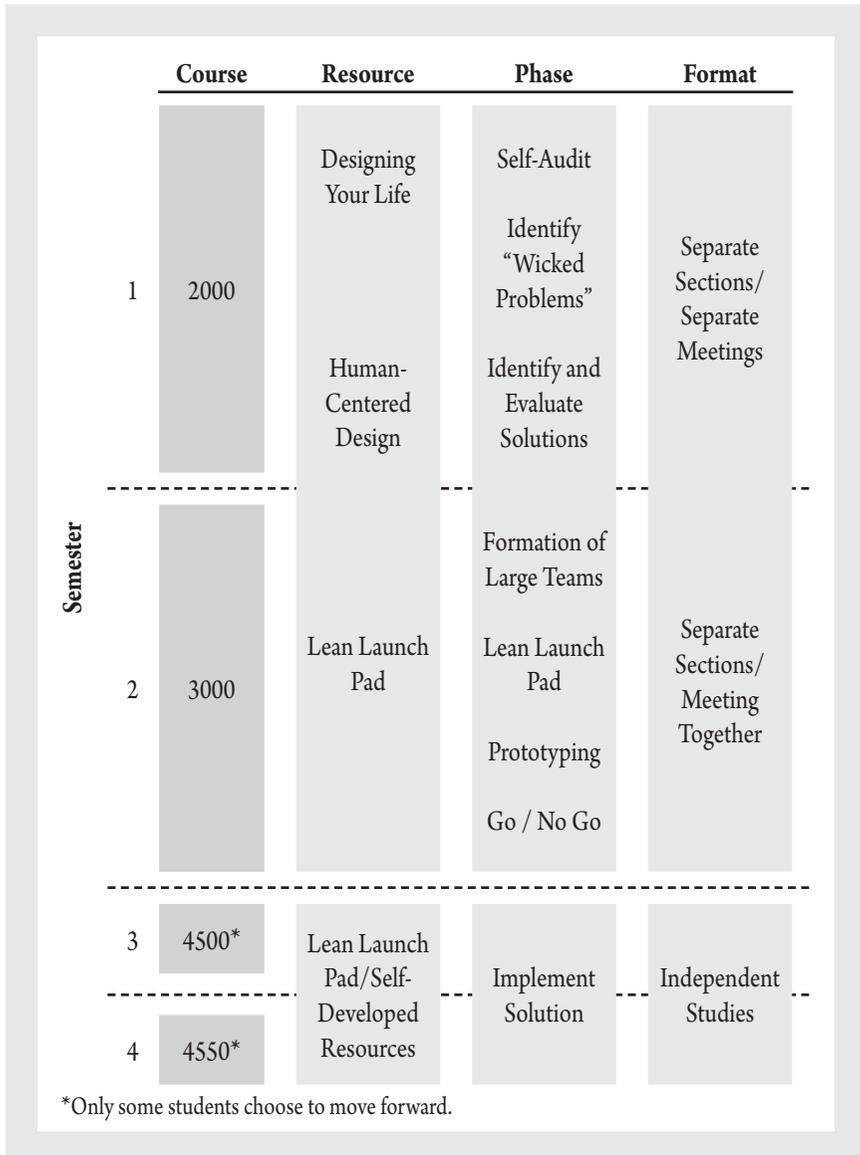
As seen in Figure 1, students take HNRS 2000–3000 in their first year. Some students choose to continue their project into their second year and enroll in HNRS 4500/4550. They use these credit hours and their project as their “Signature Honors Project.” Colors (not shown here) connect resources with phases of the course.

First Iteration

The first iteration of the revised colloquia series was implemented during the 2017–18 academic year. Honors college freshmen were required to enroll, and with approximately 200 students in the inaugural cohort, faculty developed five separate sections for the course series (HNRS 2000/3000), in

which students were introduced to design thinking using *Designing Your Life* (Burnett & Evans, 2016) as a guide. Interdisciplinary groups of students then spent approximately one-third of the semester reading this book, using the exercises to understand design thinking, and applying it to their own lives as an introduction to a new way of thinking, a challenge to their preconceived

FIGURE 1. DIAGRAM OF THE HONORS CURRICULAR SEQUENCE, RESOURCES USED, AND PHASES



notion of what they should do and study, and a way for the teams to get to know one another. Students leveraged proven design thinking principles, used by companies such as Apple and IBM, to reframe questions about their own life for the purpose of finding more meaning, creating a productive experience, and developing a different mindset for approaching life decisions (Burnett & Evans, 2016).

The interdisciplinary teams then used human-centered design (IDEO.org, 2015) to tackle wicked problems that they identified in the world around them. Thirty-five projects were produced in the five sections of the Honors 2000 class. The projects required students to engage in a series of data collection techniques to better understand the identified problem and needs of the affected communities, including immersion experiences, key informant interviews, and research on secondary data in the peer-reviewed literature.

Immersion Experience

Students were required to identify an immersion experience to gain a deeper understanding of the circumstances and foundational needs of the people who would be engaged in the strategies or using the products they were to design. To build empathy for the wicked problems and for the people affected by these problems, students were required to immerse themselves in a situation in order to fully understand what they were trying to create. For example, students who were tackling sleep deprivation among college students focused on the sleep patterns of a specific sample of students in order to understand how lack of sleep could affect their daily functioning during an entire week, and students addressing alcohol use and misuse among young adults attended an Alcoholics Anonymous meeting. These experiences were key to grasping the full scope of the issues that students wanted to tackle.

Interviews

Students were required to conduct at least ten key informant interviews with stakeholders about their identified projects. The interviews provided valuable information on the issue being addressed as well as the viability of the ideas and solutions posed by the student teams. The interviews allowed students to better understand the local conditions related to their project topic and ensured that students were engaged with key people in the community who had insights to propel or pivot their ideas.

Secondary Data Research

Student teams conducted secondary research to examine what strategies have been implemented to address their identified issues, what has worked and what has not worked, and what evidence-based practices of community engagement existed in their topic area. Students used this research to help inform their ideas for prototyping and to assess how best to measure the impact of the solutions posed by student teams.

The projects conducted in HNRS 2000 were included in a competition of poster presentations to determine which ideas should move forward into the Honors 3000 class. New interdisciplinary teams then coalesced around the fifteen top projects. These teams used Lean LaunchPad® (Blank, 2010) methodologies to investigate the issues addressed by the project and develop minimal viable products for testing. Through this process, students were exposed to the relentlessly direct feedback method (Byers et al., 2016) from instructors about their projects and paths forward. Every team experienced failure and had to pivot toward new strategies. Students experienced the pain of real learning as they struggled to work effectively in diverse teams, dealt with conflicting information from stakeholders, abandoned favorite solutions, and laid bare their learning process in front of the entire group of students and faculty.

While most students ended their work on the project at the end of this series of courses, nearly 20% of the initial students chose to continue to the implementation phase of their idea, which became their required Signature Honors Projects (SHP) in HNRS 4500 and 4550. All students complete six credit hours in support of these projects, which usually take the form of research/creative activities. The student teams worked under the supervision of an Honors Faculty Fellow to pursue their independent projects formulated during their Honors 2000/3000 experience.

Second Iteration

For the second iteration of the five-credit-hour series, the interdisciplinary faculty team assessed the student feedback data, re-analyzed applied methods for meeting the course objectives, and created strategies to streamline the learning process from the first-semester course (2 credit hours) to the second (3 credit hours). They made the following changes:

- introducing methods for conducting qualitative, face-to-face interviews earlier in the course series,

- incorporating required out-of-class learning activities, such as workshops on improving interviewing skills,
- mandating student participation in at least 3 one-on-one faculty meetings throughout the second course,
- involving honors students from the first iteration (HNRS 4500/4550 students) to help guide/mentor current students through the course process, and
- collecting pre/post survey data on identified student competencies in order to evaluate the overall effectiveness of the learning experience for the students.

Interviews

It became clear after the first iteration that students needed to be introduced to skills for conducting face-to-face interviews at an earlier stage in the series; specifically, students needed information on how to best use interview cards to document the qualitative data from the interviews. The interview cards were developed to capture the purpose of the interview (e.g., discovery/exploratory, prototyping, or iteration/hypothesis development), the interview questions used, and the overall interview results, including aggregated themes of what students learned from conducting the interview. Additionally, faculty used IDEO.org (IDEO.org, 2015) resources on conducting interviews in a human-centered design framework to teach students interviewing skills in small-group settings. Students were required to model these skills by conducting practice interviews in Honors 2000, and the Honors 4500/4550 students attended class to assist in guiding and mentoring the student groups through the modeling exercise. Students were allowed to develop interview questions and then test them with other students in class and with the student mentors. As a result of these changes, the interviewing component of the process improved among student groups.

Out-of-Class Learning Activities

In the second semester, students were required to attend one faculty-approved, out-of-class learning activity that would enhance their experience in the overall learning process. Examples included but were not limited to 1) workshops to assist in the production of their final videos, 2) interviewing sessions with trained graduate students to improve overall interviewing

skills, and 3) survey development workshops to assist in creating quantitative instruments for additional data collection. Student exposure to such out-of-class learning opportunities enhanced the final products of each student group.

Faculty Meetings

Student feedback from the first iteration revealed that students who, as representatives of their student group, interacted more frequently with faculty were more engaged and immersed in the entire experience than those who did not meet outside of class with individual faculty. Therefore, it became a requirement for students to meet at least three times with individual faculty members throughout the semester, allowing faculty to delve more deeply into the process with individual students and to address any issues or questions they had about the overall project. The meetings resulted in engaging the students more as partners in both the learning and teaching of the course content since students incorporated the faculty/student discussions into class presentations for the benefit of all students enrolled.

Honors 4500/4550 Student Involvement

After the first iteration, a number of students have decided to continue their projects as part of their program requirements for the honors college (Honors 4500/4550). These students are supported by the honors curriculum and essentially opt to move the projects toward their Signature Honors Project (SHP). The student teams work with faculty mentors to pursue their independent projects proposed during the Honors 2000/3000 experience.

In the second iteration of the course series, the Honors 4500/4550 students collaborated with the freshmen Honors 2000/3000 students by providing guidance and feedback, particularly to student groups with similar project topics. The Honors 4500/4550 students participated in small-group discussions with Honors 2000 students about identifying wicked problems to address, determining key stakeholders for interviews, and improving interviewing skills through mock interviews and modeling. The Honors 4500/4550 students also participated in Honors 3000 by providing constructive feedback, in class and via an online discussion board, to all student groups throughout the entire semester. This feedback ranged from tips on engaging key stakeholders for important interviews to providing input on lessons learned from the first iteration of the course sequence. The incorporation of

the Honors 4500/4550 students into the freshman experience proved beneficial to both sets of students.

Assessment of Student Competencies

The last addition to the second iteration was administration of a formal assessment of improvement in key student competencies among the honors students. This assessment evaluated the effectiveness of the learning experience beyond student evaluations and class assessments. The team of faculty conducted data collection at the baseline (beginning of Honors 2000), the midpoint (end of Honors 2000), and the end of the experience (end of Honors 3000) on a number of targeted student competencies. The competencies included 1) community engagement self-efficacy, 2) university-specific outcomes, 3) grit/perseverance, 4) creative self-leadership, 5) team dynamic and effectiveness, and 6) entrepreneurial self-efficacy. A survey was constructed with items measuring each student competency in order to track changes among the competencies at each data collection point throughout the two-course series. The instruction team uses these data to determine the true impact of the course experience and identify areas in need of improvement for future implementation of the courses.

FRAMEWORK

Curricular changes resulted in a two-semester framework focusing on community engagement and innovation, and it was structured with three distinct focal points: an internal self-audit on motivations and self-satisfaction; an external examination of societal problems and ideation in relation to possible solutions; and team-structured startup methodologies to frame and address these societal problems (Figure 1). Collectively, these three areas facilitated improvement in the non-academic skills of grit, resiliency, creative self-confidence.

Internal Self-Audit

Design thinking strategies were introduced first on an introspective level with the assigned summer reading of *Designing Your Life* (Burnett & Evans, 2016) and early first-semester coursework that asked students to examine their motivations and reflect on ideas of personal satisfaction outside of career goals. With this self-examination, students confronted external expectations for their lives and better understood their own relationships with personal

goal development. Through exercises and examinations, students became more familiar with their own motivations and perspective on the world. Once students completed this internal audit, they formed small teams and began to use these skills to look outward.

External Examination of Societal Problems

The external examination challenged students to look outward toward wicked problems (Rittel & Webber, 1973) surrounding them in the world. Small teams of five or six students began to use human-centered design (IDEO.org, 2015) concepts to understand these intractable problems from multiple perspectives. By gaining insight into the many facets of a wicked problem (Rittel & Webber, 1973), students could adopt an empathetic position, resulting in a better understanding of the various groups' intimate knowledge of the problem. This effort took students out of their own vision of the problem at hand and revealed a more complex and nuanced understanding of the world. Teams brainstormed different solutions and tested different approaches to engage with their chosen problems. As the first semester closed, students presented these solutions to the full class in poster form, leading to an evaluation of which projects would move forward into the second semester. Examples of projects that moved forward included work on issues surrounding student isolation, issues of campus sustainability measures, how the counseling center markets resources to students in need, methods to reduce sexual violence, and creation of mentoring systems for at-risk children in local schools.

Entrepreneurial Student Teams

In the second semester, a smaller number of groups moved forward toward constructing an implementable plan to address their problem. This effort demanded larger group membership and posed challenges in team dynamics, workflow, and group member responsibilities. The classroom was flipped in this semester as student teams presented their work each week to the whole class. Faculty posed questions to help move the team projects forward using the relentlessly direct (Byers et al., 2016) feedback method in order to assist teams in making changes and discoveries in a timely, focused manner. Each group employed a business model canvas (Osterwalder & Pigneur, 2010) to frame the propositions the teams were putting forward to implement change. This canvas offered a structure to understand the various necessities of business implementation such as revenue streams, channels of

distribution, key partners, customer segment, and key activities. Students were charged with interviewing stakeholders for their projects and reporting to the class any progress, failings, or pivots related to their project. At the end of the semester, student teams were asked to reflect on their progress and decision-making thus far and to determine if their project was viable to move forward.

Team collaboration skills improved throughout the course experience. Overall, they grew to know each other's strengths; practiced public presentation; worked communally to address large problems identified within their community; participated in conversations with a diverse population working toward positive change in their world; and developed leadership skills within their class and community. For student teams to be successful throughout this experience, adequate resources were necessary.

At the end of the semester, teams fell into two categories: those that had a plan to move forward and those that decided to abandon further work on the topic. Either outcome was appropriate. Students presented these conclusions in the form of short videos that they produced throughout the semester documenting their process and exploration. A subset of team members from those teams that had converged on specific plans of action opted to carry their projects into the next academic year as their "Signature Honors Projects."

RESOURCES

A key resource in the delivery of the course was the use of graduate assistants not to teach themselves but to support faculty teaching. Graduate assistants worked with the faculty team to grade assignments, monitor attendance, and provide feedback to the teams as needed. Given the amount of work involved in the delivery of these two courses, the graduate assistants were essential to its success. The graduate assistants were also charged with creating and leading workshops that would aid the student teams on topics such as interviewing techniques and video production. These workshops were a resource for the students and gave them supplemental information beyond the scope and timeframe of the weekly class. The graduate assistants were also a support for the students since they could serve as mentors for undergraduates who were hoping to go into the same fields as the graduate students.

An additional resource for the students and graduate assistants was the primary physical space of the Innovation Design Lab (IDL). The IDL is a growing space on ECU's campus to support innovative team development.

The IDL began in 2009 as a pilot program in a 500-square-foot space to test the concept of using innovation and design methodologies and additive manufacturing (AM) systems (3D printing) to develop talent in Science, Technology, Engineering, Art/Design, and Mathematics (STEAM), to initiate projects with industry clusters, to address workforce training and competitiveness, and to foster the development of entrepreneurial enterprises. Within the two-semester sequence, the honors student teams were invited and encouraged to use the space and its resources: the graduate assistants held office hours and offered workshops there.

Student groups that chose to continue working on their project after the initial two-course sequence had ECU's NSF, I-Corp Site program, Idea 2 impact GO (I2I GO), US EDA eNC Innovates!, and NC IDEA, Ecosystem Partners, as additional resources. These grants are designed to be economic drivers for eastern North Carolina and so connect with the mission of some student groups. Groups that chose to continue with their projects could take advantage of these and other resources available through the university. Individual students interested in continuing within the design thinking mindset presented in the courses could complete internships through the IDL.

Lastly, the honors college provided funding for many of the resources needed for the students and faculty throughout the experience. The honors college and the IDL both supported the graduate assistants for the courses. The honors student teams were required to create and share a video of their ideation and development process, and the honors college supported this endeavor with equipment and training, e.g., cameras and video editing software. Additionally, ad hoc requests from student teams emerged at times, and the honors college often funded them, e.g., healthy snacks for a workshop with a local after-school program. Finally, the honors college has funded professional development, conference presentations, and summer intensive sessions for the faculty team's course development.

LESSONS LEARNED

Throughout the design, implementation, and iteration of this two-semester sequence, a number of important lessons emerged at different levels within the structure of the university.

Administrator Perspective

Faculty Recruitment and Retention

In order to develop an intentional environment for honors students to grow, flourish, and become positive influences on their community, honors must have strong administrative support so that deans of honors colleges can recruit and retain talented faculty teams from across disciplines. Incentivizing faculty through stipends, course/FTE buyouts, Fellow status in the college, and professional development opportunities has been critical to the development and implementation of the honors curriculum at ECU. In addition, recruiting the most talented faculty from other colleges and departments requires deans and unit administrators outside the honors college to have buy-in for its educational mission. A further incentive is that the honors college promises an increase in majors as well as shared student successes. The honors dean at ECU has advocated for the overall vision of the program, exposed fellow administrators to the objectives and campus-wide benefits of the curriculum, and cultivated numerous partnerships necessary to its overall success.

However, even with buy-in from administrators, a significant challenge is overcoming the barriers that honors college faculty face when trying to effectively capture their honors work for their tenure and promotion portfolio, especially since honors faculty have their academic home in various disciplines. The ECU faculty team has addressed this challenge in the development of a research agenda connected to the implementation and delivery of the honors curriculum, ensuring that scholarly research products and grant funding can be documented for promotion committees to review. In order for interdisciplinary education to be sustained, departments and colleges need to recognize its importance in the tenure and promotion process.

Academic-Community Partnerships

Support from community partners is a critical component of exposing students to community-based experiences. These collaborations breathe life into the curriculum and add a sense of real-life value for the students. Institutional administrators must foster these connections in order to understand the reciprocal relationship, formulating sustained collaborations that are beneficial to both parties. All partners need to understand that the students are in training but also have creative minds that can assist in developing solutions for wicked problems (Rittel & Webber, 1973) to be tested within their

communities. At ECU, the partners have helpfully provided parameters for student involvement while also buttressing the creative space needed for students to develop new ideas to identify and address pressing issues.

Among the academic-community partnerships, one student team is currently engaged with Building Hope, a non-profit that pairs college students with at-risk youths as mentors. The students have developed a recruitment and vetting strategy to ensure a consistent and reliable pipeline of motivated college students for the organization. Another team has partnered with the Boys and Girls Club and ECU athletics to provide weekly events for the children at which athletes engage them in physical activity and communicate the value of college. Other teams have partnered with local schools to run workshops on financial literacy, navigating the college admissions process, and ways to avoid student debt.

Funding to Sustain the Freshmen Experience

In order to support implementation of the curriculum and ensure that student-led team projects are sustained beyond the freshmen year, administrators need to provide the funding and other resources necessary for the student teams to be successful. Resources should include a sound infrastructure for guidance on internal and external grant applications for student team projects and comprehensive development/fundraising initiatives to support student work. Administrators must also find ways that allow students to link these new experiences to academic credit opportunities and internship experiences. In addition, supporting the faculty with internally funded graduate assistants and faculty development opportunities, e.g., conferences, helps a dedicated team deliver effective instruction and leadership in and out of the classroom.

Faculty Perspective

Fostering a Team among the Faculty

The design of the course allows a variety of faculty to participate regardless of individual disciplines. The faculty organization has no leadership per se; all members of the teaching team have an equal voice and an opportunity to lead within their areas of expertise. Though this structure creates a challenge in management, the overall benefits far outweigh the difficulties that may arise when multiple perspectives are voiced. Buy-in from the faculty members to the objectives of the course is imperative to its success. A

true teaching team emerges when the honors college administration provides support through funding faculty participation in workshops and conference attendance as well as curriculum development in weekly planning meetings.

Consistency in Course Delivery among the Faculty Team

In a course with 200 incoming freshmen and five faculty members, student preference for one or another faculty member can quickly develop. In order to protect against this student mentality, the faculty team focuses on building consistency into our processes, grading, and lesson plans. Creation of joint lesson plans ensures uniformity in content delivery and in-class assignments while allowing faculty members the opportunity to lead the class in their own individual manner. Simple grading rubrics allow for consistency in grading. The rubrics are developed by the teaching team before assignments so that the entire team can provide input on allotment of points, how points are awarded, and ways to address student complaints. When a faculty member has students who are outliers, the team discusses the situation before the individual faculty member provides a response. This unified team approach allows the teaching team to develop consistency in content delivery, grading, and problem resolution, which is essential to the success of the class. Although changes were made to the course from the first to the second iteration, consistency continues to be a priority among the faculty team.

Developing an On-Boarding/Off-Boarding Program

The interdisciplinary team offers multiple benefits to the course design and delivery; however, it comes with challenges to the maintenance of the course. The logistics of finding and keeping faculty who can participate in the course delivery over multiple years is challenging. For this reason, an onboarding and off-boarding process should be developed. The team currently uses the summer planning week to introduce new team members to the course while allowing faculty leaving the team an opportunity to share their feedback and offer suggestions for improvements.

Team Teaching with Five Faculty and Two Hundred Students

Although the faculty team initially knew that constant communication and collaboration were going to be required for these courses, they did not realize just how much time was required to create such courses in a unified, consistent, yet flexible manner. For the first iteration, the team participated in

a one-week, intensive, summer prep that included all five faculty, two administrators, and multiple supporters of the honors college. The faculty team spent the first summer session completing a human-centered design course while simultaneously developing the year-long course. In the fall semester, the team then traveled for a two-day intensive training on the method deployed during the spring semester, Lean LaunchPad® (Blank, 2010). During the academic year, the faculty team met weekly for two and a half hours to plan, discuss, and manage the course and then for two or three hours weekly for course delivery.

The time commitment was significant and necessary for course development, faculty development, and course delivery, and it has remained important for all new faculty entering into the sequence. The faculty team still meets weekly for two and a half hours and has added an additional meeting time monthly for evaluation and research efforts. Any team that wants to adopt this kind of unique offering for its students must be willing and able to dedicate significant time to the effort.

The Teaching Team as a Research Team

Pedagogical research can be an important outcome from the teaching team's endeavors. Any team attempting to replicate this system should develop separate meetings that focus only on the research questions identified at the beginning of the course design efforts. Potential research questions of this kind are numerous: e.g., assessing the effectiveness of the educational intervention; understanding the students' changes in behavior or perception based on their community interactions; measuring leadership development among students in a team setting; and understanding feelings of isolation among college freshmen. During these meetings, the focus is on research, not on the class logistics. Staying focused on the research questions, measures, and writing efforts can present the team with an opportunity to better understand what is happening in the classroom and to continue to be productive scholars while dedicating so much time to the effort.

Student Perspective

The honors college has successfully developed a system that creates growth on a student-to-student basis as well as a university-wide scale by teaching incoming students the methodology of qualitative research. Coming into the university, not many students have the chance to learn hands-on research skills. The curriculum of Honors 2000–3000 and its accompanying Signature

Honors project course sequence, HNRS 4500–4550, does a thorough job of teaching students’ invaluable skills of professionalism, opportunity seeking, problem-solving, and valuing experience.

This curriculum also provides students an in-depth guide to maximizing their college and research experience. Guided by *Designing Your Life* (Burnett & Evans, 2016), students can explore research-based projects focused on self, community, and activism, instilling a sense of independence and resilience in students in long-term projects atypical of start-up ventures. When students have the choice to find their own passions and forge their own professional relationships, the connections between the university and community are strengthened.

However, the program does have several flaws worth mentioning: the skepticism of first-year students about connecting to 4500/4550 students as mentors; unequal workloads in large groups that are unfamiliar with the delegation of responsibility; and the saturation of resources when multiple students contact the same faculty/staff. Nevertheless, the course is designed to teach both students and faculty how to embrace and learn from the experience of finding solutions that will counteract difficult situations.

Students learn many lessons from a dedicated team of faculty. Whether expected or unexpected, a change is always accompanied by growth. The value of a venture is not whether it is a success or a failure but the knowledge gained along the way. Teamwork never fails to yield a new perspective. Although working in a team may serve as an unexpected challenge, it teaches students the importance of communication and servant leadership. Finally, every situation yields opportunity. No lead is too small to go unchecked, and a good idea should never be abandoned even if it is deemed “too hard.”

CONCLUSION

As universities move toward providing students opportunities based on process rather than a product, the East Carolina University Honors College adopted a unique approach in response to this new direction. Using human centered-design (IDEO.org, 2015), an interdisciplinary team of faculty developed a year-long freshman experience focused on community engagement and social change. The framework guiding the course included three distinct focal points: an internal self-audit on motivations and satisfaction; an external examination of societal problems and ideation around possible solutions; and team-structured startup methodologies developed to frame and address these societal problems. A key outcome of this design was the development

of specific, non-academic skills, including grit, resiliency, creative self-confidence, and self-efficacy in community engagement.

The freshman experience is entering its third iteration, and we can share many lessons to provide other honors colleges with a framework for a student experience that encourages innovative thinking, an entrepreneurial mindset, and community engagement; to provide lessons learned for an effective program from administrative, faculty, and student perspectives; and to share resources needed for an effective program.

Key considerations for the development of a successful program should include, above all, a committed faculty and administrative team. The faculty must value team teaching while being invested in developing innovation, community engagement, and an entrepreneurial mindset in students. Teaching and developing these skills does not follow a traditional lecture-based design, and at times, students find this challenging. A committed faculty needs to keep students at the center of all decision-making, support the process and fellow team members, and consistently encourage students to engage in the process. Additionally, having the faculty team undertake research and evaluation of the effort early on ensures their continued scholarly productivity while committing significant time to the curriculum and the team. The administrative team must focus on supporting the faculty and providing the necessary resources. Bridging the multiple academic units of the students and faculty engaged in the freshman-year experience is another key consideration for the administrative team. This bridge-building develops buy-in across campus and supports the work of the faculty and students alike.

Future Research

Future research should focus on assessing the personal growth and professional development of the students. This assessment can also be applied to the faculty team as they are constantly learning and adapting throughout the process. As student teams work within the local community, assessing the impact of their efforts is another future focus for research. Better understanding the impact our students have and have not had is important as we continue to make changes to the curriculum.

REFERENCES

Blank, S. (2010). Lean LaunchPad®. Retrieved on May 6, 2019 from <<https://steveblank.com/2010/12/07/the-lean-launchpad-%E2%80%93-teaching-entrepreneurship-as-a-management-science>>

- Burnett, B., & Evans, D. (2016). *Designing Your Life: How to Build a Well-Lived, Joyful Life*. New York, NY: Knopf.
- Byers, T., Newell, P., Felter, J., & Blank, S. (2016). Relentlessly direct: 4HD teaching style. Retrieved on May 7, 2019 from <<https://www.slideshare.net/sblank/relentlessly-direct-h4d-stanford-2016>>
- IDEO.org, (2015). *The Field Guide to Human-Centered Design*. San Francisco, CA: IDEO. <<https://www.ideo.org>>
- National Resource Center for the First-Year Experience and Students in Transition (2019). Research Findings. Retrieved on June 18, 2019 from <https://sc.edu/about/offices_and_divisions/national_resource_center/research/research_findings/index.php>
- NCHC. Definition of Honors Education. Retrieved on May 6, 2019 from <<https://www.nchchonors.org/directors-faculty/definition-of-honors-education>>
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Hoboken, NJ: Wiley.
- Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4(2), 155–69. <<https://www.cc.gatech.edu/fac/ellendo/rittel/rittel-dilemma.pdf>>
- Vander Zee, A., Folds-Bennett, T., Meyer-Berstein, E., & Reardon, B. (2016). From orientation needs to developmental realities: The honors first-year seminar in a National context. *Journal of the National Collegiate Honors Council - Online Archive*, 511.
- Wilson, R. (2015). An epidemic of anguish. *Chronicle of Higher Education*. Retrieved on May 6, 2019 from <<https://www.chronicle.com/article/An-Epidemic-of-Anguish/232721>>

The authors may be contacted at

FordK@ecu.edu.