Experience Architecture: Developing an Interdisciplinary UX Undergraduate Degree

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Abstract. This program showcase discusses the creation of an undergraduate user experience program housed in the Arts and Humanities and shared between two programs: the Department of Art, Art History and Design and the Department of Writing, Rhetoric, and Cultures in the College of Arts and Letters at Michigan State University. The design of the program was grounded in three guiding questions: 1) How do we develop a UX degree that is rooted in Humanities at an R1 land-grant university? 2) How do we develop a curriculum that is interdisciplinary and upholds the values of the Humanities? And 3) How can we remain agile and create space for curriculum revision that invites iteration in a way that does not chase industry, but produces graduates who can lead industry towards changes fostered by the work in the Humanities? In reflecting on these questions, the Experience Architecture (XA) Program was developed and deployed in the fall of 2013 and was revised in fall of 2020 to better situate the field under the umbrella of XA to filter conversations about human design thinking in and around a Humanities centered approach to problem solving. We are humans building and designing systems for other humans, not ones and zeros building for other ones and zeros—our efforts should be grounded in the ethics, morals, and values of what it means to build, design, and care for Humanities-based systems, be they digital or physical.

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Introduction

So, how do you do it? How do you remind colleagues, researchers, peers across campus in STEM, parents, and prospective students that a Humanities-based approach to user experience (UX) is needed now more than ever? You can show them job ads online, all of them calling for the skills we teach in the Humanities like writing, empathy, rhetoric, human centered design, critical thinking, expression, leadership, and more. The list of jobs and their salaries help to convince parents of prospective students who are annoyed that their child is dropping out of computer science or engineering, and they are worried that their now very expensive degree won't land them a job to pay off the loan. So, the jobs list and salaries help those conversations, especially when we discuss more than the typical three jobs they could have after graduation, all with vertical trajectories for advancement, particularly when it comes to leadership. But to use industry data to convince other academics of the value of a program is always less acceptable. So, we frame it as a way to get on the inside—to get a seat at the table in order to eventually change the system. But this is always met with reservation. Thus, our efforts to develop, deploy, and revise an agile undergrad UX curriculum in the Humanities were grounded with interdisciplinarity in mind, because the program is shared between two departments and housed at the college level, its development required us to be flexible in our approach, thus enabling us to have diverse perspectives and questions ready for our students to deploy once they graduate.

For this article, by way of a "program showcase," we offer here a set of descriptions and reflections around our efforts to develop the major, support the major, revise the major, and ensure it is sustainable for the next round of changes by future faculty. We hope that this article will offer some insight into the achievements, the struggles, and how such a program can be deployed at campuses around the world. Our hope with this article is to showcase a template for such a program and its proliferation of Experience Architecture on a global scale. In doing so, we believe it can advance the Humanities into spaces where it is not normally prioritized.

Origin of the Experience Architecture Major

The Experience Architecture (XA) major originated in several spaces and across many conversations. At Michigan State University (MSU), the program was built with the support of the Dean of the College of Arts and Letters (CAL) through the collaboration of untenured junior faculty in the Departments of Art, Art History, and Design (AAHD) and Writing, Rhetoric, and American Cultures (WRAC, what is now known as WRAaC: Writing, Rhetoric, and Cultures).

Pitching the Idea

The origins of the XA major at MSU can be traced back to the spring of 2011. At that time, the university was hiring several faculty as part of an initiative focused on Technology, Culture, and Creativity. During her on campus interview for a position as an assistant professor, Liza Potts spoke with CAL Dean Karin Wurst. The conversation centered on building a program that would prepare humanities students for technology-focused careers. Caught a bit off guard but prepared for the conversation because of her experience pitching ideas and recent conversations in industry[1], Potts outlined a program that would later provide the starting point for the working group that she led beginning in Fall 2011.

The initial idea was based on Potts' experiences working in the tech industry across the full gamut of user experience positions, including user experience architect, content strategist, usability engineer, information architect, program manager, instructional developer, and of course, technical writer (or, documentation engineer, as one start-up called it). Across these experiences, she used her humanities and social science training to learn how to best support people's communication needs by building better technologies. It was those experiences that the dean wanted to know more about and build into a degree that could send CAL's graduates into a world that was (is) increasingly relying on technology. In addition to that clear exigency, the work that Potts was doing in technical communication—how people communicate during times of disaster and how we can ensure that technology is a support, rather than a hindrance—was a central consideration for pitching the idea.

[1] When Potts was deciding whether or not to leave industry for academia in 2008, she was the director of user experience research at a design consultancy in Philadelphia, Pennsylvania. During one of several weekly 1:1s with each team member, they discussed how to scale their work in UX to make a bigger impact on the industry. A content strategist with a PhD in English, Dr. Lasagna (not her real name) urged Potts to return to academia, likening their 1:1s to empowering teacher/student advising sessions. It was then that Potts began to think about making this shift and building a program to train the next generation of user experience professionals with a strong foundation in the humanities.

Brainstorming Internally

After arriving on campus in Fall 2011, Potts was called into Dean Wurst's office and told to develop the new degree program with, then fixed-term faculty, Rebecca Tegtmeyer, a colleague in the Department of Art, Art History, and Design (AAHD). Tegtmeyer was recently new to academia and was hired at MSU in Fall of 2009, as a fixed-term hire. She had recently completed her Masters of Graphic Design at NC State University with a thesis that broadly explored the methods and processes of interaction design. It wasn't until Fall 2012 that Tegtmeyer was hired into the tenure-system at MSU as an assistant professor. Dean Wurst perhaps saw the potential in both Potts' and Tegtmeyers' areas of expertise and initiated their collaborative team. As the tenure stream member of the team, Potts was charged with leading the XA program committee and acting as the public face for the major across campus and externally with corporate partners. Bill Hart-Davidson, colleague in WRAC, acted as a mentor to Potts and Tegtmeyer, helping the team work through ideas and considerations throughout.

Most of the initial brainstorming consisted of Potts and Tegtmeyer meeting for hours to think through curriculum possibilities, research similar programs, and write up their ideas to share with the Dean and other stakeholders in their departments. While the team wanted to respond to the immediate needs in industry, they also wanted to build the positive future that their colleagues dreamt of in academia and industry (thinking back on their experiences at larger corporations, startups, and agencies). The goal was to create an undergraduate major grounded in the Humanities that would prepare a diverse group of students to lead an industry and enact positive change. By changing who gets a seat at the table when building technology, they wanted to change the industry itself and the technologies we would use in the future. The hope was that these future professionals could help move an industry obsessed with "disruption" to one that would encourage participation and champion equality.

Building Community

In thinking about how we could make the program interdisciplinary, we knew that we had to bring in partners from across campus and industry. As untenured faculty, we were at a disadvantage before we even began because of the hierarchical structure of academia. As scholars with previous lives as user experience and graphic design professionals, we knew we had the connections and vocabulary to build a program that would be understood in industry and beyond.

The Dean was justifiably adamant that we should partner with

multiple departments and colleges across campus. We discussed how this program could transcend the silos in higher education, helping students see across disciplines and envision new career possibilities. Undaunted (and more than a little naive), Potts and Tegtmeyer began by meeting with colleagues in engineering, computer science, and business to pitch the program and offer up partnerships. While the initial reactions were positive, we quickly realized that most of the coursework would need to come from departments in CAL. The reasons were straightforward in that many of the STEM-based programs were bound to their own accreditation systems, without much leeway or bandwidth for creating new courses or altering existing curriculum.

For partnerships with user experience professionals in industry, we knew we had to gain a foothold in a space where defining the work is often more difficult than doing the work. At first, we began to reach out to our networks, talking about the initial ideas, concepts, and goals for the program. We were fortunate enough to connect with Keith Instone, one of the leading information architects in industry and a former teacher of Bill Hart-Davidson. As the first Experience Architect in Residence at MSU, Instone was pivotal in helping the program leaders understand how the initial curriculum would support our students after graduation. During the early years of the XA program, Potts was also engaged in a project with the leaders of Ladies that UX, an international organization for practitioners. Through her contacts there, she was able to talk about the degree program and co-sponsor a Michigan meet-up of two chapters of the organization with current students and professors at MSU, as well as publish the findings of several projects (Potts, et. al. 2017). This work led to the appointment of the second Experience Architect in Residence and former leader of the Detroit chapter of Ladies that UX, Emily Bowman. As the program progressed, we were able to expand these industry partnerships to include internships, hiring opportunities, and research opportunities.

The Initial Plan

The initial plan and paperwork were put together on an accelerated timeline, launching in 2013. Potts and Tegtmeyer pitched several different courses and pathways, all of which aimed at making what Potts would refer to as "knowing enough to be dangerous" as professionals who could work across research, content, design, and development as user experience architects. In 2013, the revised and updated version of Don Norman's The Design of Everyday Things, Norman noted that the group he "headed at Apple called itself the 'User Experience Architect's Office'" (xiv). We felt, given this title, it gave us an opportunity to rein-

vent the role of UX and the fields that fall under the larger XA umbrella.

For the initial iteration of the program, we drew on user experience concepts developed by thought leaders who valued building people-centered technologies. We placed XA at the center of this work with Peter Moorvile's concept of context, content, and users (Figure 1), along with the concept of wicked problems, as articulated by Richard Buchanan (1992), UX as strategy as defined by Peter Merholz (2012), and several leaders in similar areas. We leaned on the work of information architects like Peter Moorvile, Louis Ronsefeld, Jesse James Garret, and Abby Covert; technical communicators Ginny Reddish, Karen Shriver, JoAnn Hackos, and Whitney Quesenberry; content strategists Kristina Halvorson, Melissa Rach, Karen McGrane, Erika Hall, Erin Kissane, Lisa Welchman, Sara Wachter-Boettcher, and Meghan Casey; information designer Scott McCloud; and researchers eCatherine Courage, Kathey Baxter, Kim Goodwin, Indi Young, Steve Portigal, Steve Krug, and a host of others[2].

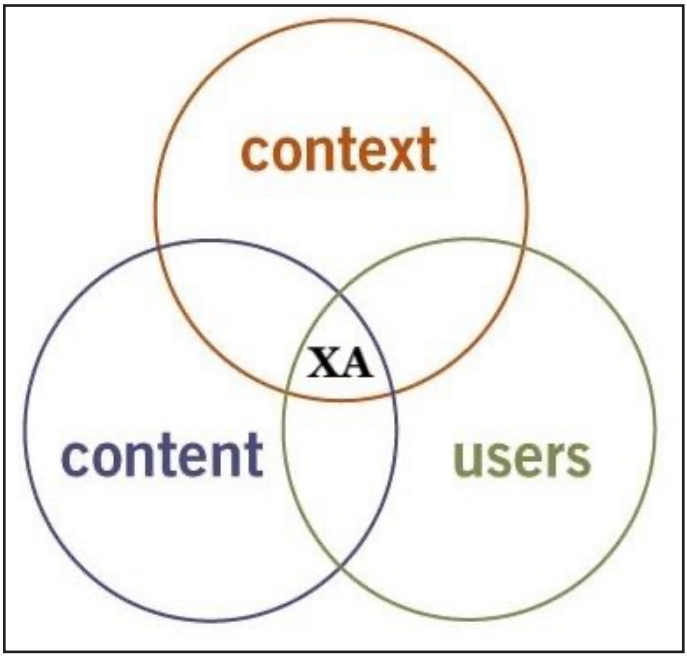


Figure 1. Mapping the three circles of information architecture (Moorville) onto our courses—edited with "XA" in the middle to show the overlap.

[2] Liza Potts takes full responsibility for this list and any inadvertent miscategorizations of this list of awesome folks who have shaped her thinking about ux. Apologies to anyone that we left out, for our brains can only hold so much awesome.

As we built out the curriculum, we aimed to create courses that would touch on the design process and include concepts from across our fields. We were (and continue to be) very cognizant that this degree was not a technical degree; the program needed to not just teach practices and tools, but it must focus on the whys of technology development and the impact of these technologies on our lives, societies, and cultures. Therefore, we needed to develop a way of balancing theory, method, and practice across the curriculum. This idea emerged from brainstorming sessions between Instone and Potts, as Potts was thinking through how to make this happen in each class. A Venn diagram similar to Figure 1 was developed, including all three aspects and highlighting how each was applied in a particular course. Thus, some courses would focus more so on theory, with bits of practice and method, and other courses might focus on method, with heavy doses of practice and a bit of theory guiding the discussion.

Our initial idea was to include courses that were focused on the iterative design cycle while making space for courses that would allow students to learn about cultures and communities. We would lean on courses in our departments to support the curriculum, such as courses on web design, technical writing, information design, digital rhetoric, graphic design, content strategy, communication, and design thinking. As our work on the curriculum progressed, Scott Schopieray, Associate Dean for Technology and Innovation in the college, helped us brainstorm ways in which technology could support our curriculum, both as a topic of discussion and as ways in which we could develop courses in humanities computing.

In the Spring of 2014 we were approved to hire two tenure-system faculty members in each department (AAHD and WRAC). This extended the program's areas of expertise and broadened the scope of what could be within the core curriculum. With the hiring of assistant professor in WRAC, Ben Lauren, we had a keen expert in project management, rounding out our XA specific courses. Zachary Kaiser was the assistant professor hired in AAHD, he brought a theoretical and critical approach to digital design.

The program itself was then discussed in a 2015 User Experience Professional Association (UXPA) article, where our colleagues Ben Lauren and Scott Schopieray joined us in describing the program in detail for industry professionals. The article outlined the learning objectives of the core curriculum which is explained in the following section.

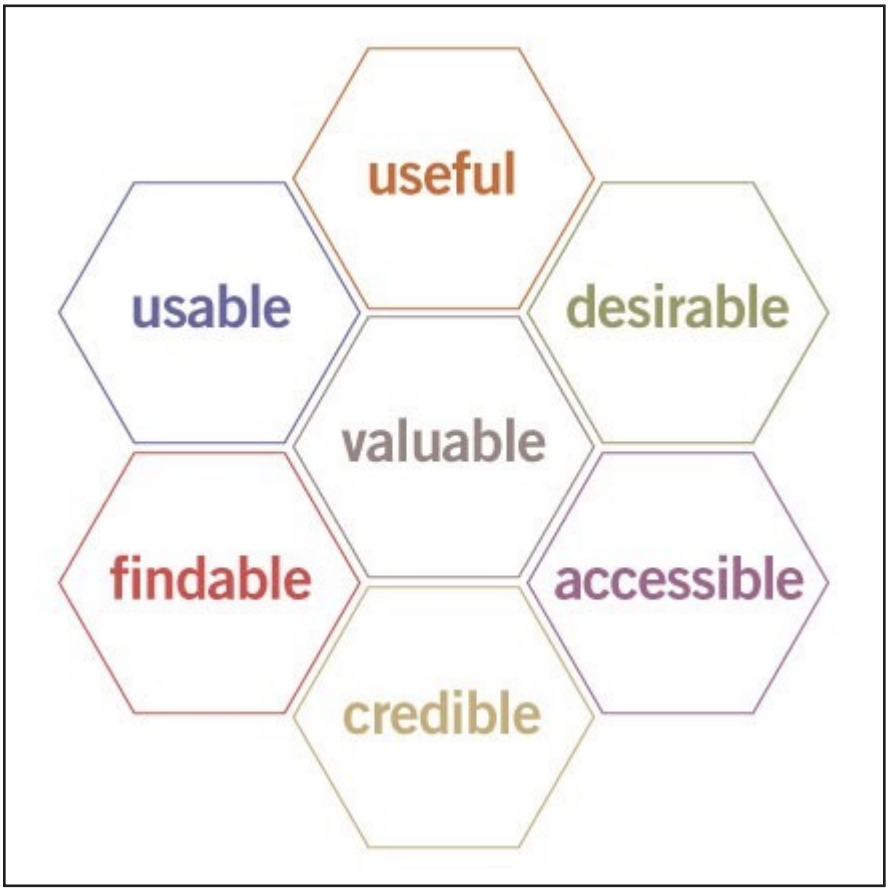


Figure 2. The User Experience Honeycomb (Moorville 2004).

Program Organization and Planning

College of Arts and Letters

The Experience Architecture program is a degree program designed as an inherently, necessarily interdisciplinary major, within the College of Arts and Letters (CAL) at MSU. CAL is the college that supports arts and humanities undergraduate and graduate education and provides opportunities for students to deepen their awareness of their place in a global world, to cultivate digital fluencies and ethical thinking, and to engage in professional development in order to make a successful transition to meaningful work prior to graduation. The XA program is the only degree program housed in the college and this position enables it to be an interdisciplinary major in the Humanities focused

on user experience. The initial curricular goals emphasized studies in rhetoric and design while drawing on courses from across the university in computer science and information technology. With the goal of teaching students to be architects of digital experiences, we see the XA major as a way to positively influence the ways in which we have traditionally built products and services by focusing on human experience first instead of prioritizing technology. With CAL's mission to build strength in design and digital humanities at the undergraduate level, it was crucial the program within the college be supported by areas of study and practice from across the college, bridging expertise in user research, information architecture, project management, and prototyping. As mentioned previously, the coursework is primarily across two departments: Art, Art History, and Design (AAHD) and Writing, Rhetoric, and Cultures (WRaC).

AAHD Department Profile

The Department of Art, Art History, and Design (AAHD) is made up of five major disciplinary undergraduate programs: Apparel and Textile Design (ATD); Art History & Visual Culture (HA); Graphic Design (GD); Studio Art (STA); and Art Education (STA). Additionally, the department offers undergraduate minors and maintains an MFA graduate program. Coursework across these programs engage students in individual expression, collaborative problem-solving, and experimental processes through making both digital and analog artifacts across the disciplines of art, art history, and design. The mission of AAHD is to integrate the history and practice of art and design in the MSU community, contributing to a greater understanding of the human condition.

WRAC Department Profile

The Department of Writing Rhetoric, and American Cultures (WRAC) houses the First-Year Writing Program for all students across MSU, in addition to facilitating undergraduate programs in Professional and Public Writing (P2W). WRAaC now offers an undergraduate Minor in Writing and maintains a graduate program in rhetoric and writing. Coursework across these programs gives students exposure to aspects of career and civic writing skills, including community research, audience analysis, drafting and revision, editing and typesetting, project management, publication, digital rhetoric, and multimodal composition. The mission of WRAC is to prepare students within the culturally, technologically, and economically dynamic environments of the 21st century and to shape research and extend scholarly conversations in rhetoric and writing studies.

Together, these two departments form the core faculty for the XA program, curriculum oversight, and its leadership. United, this partnership showcases how interdisciplinarity plays a crucial role when it comes to guiding and enacting cooperation between departments and fields.

Curriculum and Departments

Goals for the Initial XA Curriculum and the XA Core Courses

The initial XA curriculum offered courses that balance theory with practice combining hands-on learning of the research, theory, and practice of creating compelling experiences. Originally established as a collaboration between The College Arts & Letters and The College of Engineering, the coursework offerings allowed students to select courses in visual design, web and mobile application development, content management, and computer science, to deepen their skillset. The first XA majors took 56-63 credit hours of required coursework; and additional credit hours to total 120 credits.

As a degree program rooted in the Humanities, new courses were developed to uphold this as the standard and meet the mission of the program to be a cutting-edge, interdisciplinary field of study and practice, with an emphasis on experiences in digital environments that prioritize the people that use them. New courses established an "XA Core" that included courses in: User Research, Information Architecture, Project Management, and Prototyping. All of our courses are created with the help of our industry partners and our course content is reviewed and updated each time we teach these classes to ensure that they meet industry standards and address recent innovations.

User Research: Understanding how to conduct user research with a strong focus on ethics and participation is part of our core instruction. We teach user research practices, deploying both qualitative and quantitative methods, with a particular emphasis on empathy and ethnographic practices. This course is influenced by the work of Clay Spinuzzi, Tharon Howard, Steve Portigal, Kim Goodwin, Indi Young, Tomar Sharon, Erika Hall, JoAnn Hackos, and Ginny Redish.

This course is a chance to teach our students various methods, such as interviewing, observation, contextual inquiry, space assessment, and usability testing. We also discuss how to sell research both internally to the team and externally to partners and clients. Students take on projects that allow them to conduct site visits, run testing sessions, and deliver findings to external and internal clients.

Information Architecture: This course provides students with the theory behind the practices we deploy as user experience professionals and focuses on the theoretical underpinnings of user experience with an emphasis on information systems, information design, and usability. The curriculum in this course is influenced by the work of Patricia Sullivan, Michael Salvo, Whitney Quesenbery, Peter Morville, Louis Rosenfeld, Peter Merholz, Brenda Laurel, BJ Fogg, Jesse James Garrett, Don Norman, and Alan Cooper.

Our students learn about the history of user experience and theories coming from the many fields that have shaped the research and practices of it. Students are able to take a deep dive into several areas of user experience, focusing on theories from anthropology, computer science, human computer interaction, human factors, philosophy, and technical communication.

Project Management: The XA project management class addresses the intricacies of communicating effectively in the workplace as an essential skill of project managers.

The course emphasizes strategic communication and empathy through hands-on project work that creates opportunities to learn about individual and team-based project management and gives students a basis for thinking through issues that influence the workplace—from emerging working environments and the effects of globalization on team dynamics to helping architect valuable employee experiences in the workplace.

The project management class also invites industry professionals to participate as part of the student experience. Finally, students learn that iterating communication strategies is an important part of facilitating projects in inclusive, empathetic ways and can help make user experience a more central part of what companies do.

Prototyping: The XA prototyping course offers an exploration of the process models used in the designing of interactive experiences. A focus on the organization of information, user and system interactions, and interface design prepares students for building effective prototypes appropriate for communicating interactive concepts. Students analyze and practice a range of prototyping tools and methods commonly used in industry, such as storyboarding, lo-fi sketches and wireframes, and hi-fi interactive prototypes.

The course emphasizes the various ways in which a prototype design functions in the project process—to demonstrate a concept to stakeholders, to perform a user test, and to illustrate system behaviors

to developers. Finally, students learn that prototyping is necessary in identifying major usability errors early on in the process, enabling iterative testing and feedback in a quick and cost-effective way.

Drawing from other programs across the university, students can supplement their degree by taking courses in content strategy, visual rhetoric, design thinking, logic, rhetoric and culture, programming, technical communication, and web design.

Interdisciplinary Courses
(coursework with the College and beyond)

Coursework in Computer Science: Incoming XA students will have a strong understanding of how to use computers, implement file structures, navigate the internet and mobile devices, and be curious about how computers work. It is not assumed or required that students have prior programming experience. The goal of including computing courses in the curriculum is to provide students with basic skills about software development such that they could work with software developers in the workplace and research settings. The initial XA curriculum offered coursework through the College of Engineering, Department of Computer Sciences and Engineering (CSE). Required courses in the Fundamentals of IT, Programming I, and Programming II were part of the initial requirements in the XA degree. These courses were selected due to the minimal math requirements/prerequisites necessary for this level of programming coursework, yet the courses didn't fulfill the needs of our students. Soon after the degree was launched, plans to develop our own introduction course in Computing Science and Engineering (at the college level) would be the necessary next step in the development of the program. In this course, a focus on the fundamentals of software development for Experience Architecture majors, including principles, concepts, and reasons for employing different types of languages (examples include markup, markdown, scripting, object-oriented, and hardware-based) and working with development teams was emphasized.

In parallel to these CSE courses, students were required to take a 1 credit Humanities and Computing Project (I and II) courses offered through the College of Arts and Letters. This course was to be taken at the same time (co-requisite) as when students were enrolled in the CSE Programming I and Programming II courses, to guide students in connecting their computer science knowledge back to the program and at a greater level, the Humanities.

Coursework in Graphic Design: Graphic Design is the art of visual communication. Coursework in graphic design ranges in medium, content, and collaborations. In each course students explore ideas through various forms across disparate environments. The courses simultaneously call upon timeless and emerging design principles to present informative, representative, and persuasive messages to both passive and engaged audiences. Through a curriculum that prepares students to define and solve problems across all media, students are prepared to grow and adapt as visual communicators at the cutting edge of technology.

The Experience Architecture initial curriculum offered a range of courses in graphic design in which the students could select a series of courses that would function as a track and/or emphasis in design. Courses in Design Thinking, Concepts of Graphic Design were required for XA students, these courses establish methods of critical thinking, processes to understand people and the systems through which they interact, and the theories, concepts, and tools central to the development of communication systems. The Interactive Web Design, Typography, and Motion courses were available as electives for XA students. These are studio- and project-based courses that guide students through more intensive projects. These projects help to articulate their role as future UX professionals within the larger scope of design and identify their specific skill sets in a project process.

Coursework in Professional Writing: Professional Writing courses empower students to be creative thinkers and community leaders and are for those interested in gaining advanced skills in writing for and with people online and in print. In the program, students engage in career-related and civic/public writing skills, including community research, audience analysis, drafting and revision, editing and typesetting, project management, publication, digital rhetoric, and multimodal composition.

The study and practice of rhetoric is a major component of our XA program. Focused on how best to address audiences and work with participants, our courses on rhetoric and writing seek to provide an education where XA students learn to be better user experience researchers and practitioners. These courses include an emphasis on culture, visual rhetoric, content strategy, and technical writing, as well as help guide our curriculum in information architecture and information design. Students in the initial XA program were required to take Rhetoric, Persuasion & Culture, Introduction to Web Authoring and Advanced Web Authoring. Selective course options were Information

and Interaction Design, Technical Writing, and Digital Rhetoric.

Coursework in Philosophy: As mentioned previously, the curriculum focuses on the needs, issues, problems, and challenges of everyday people. We start with people not technology, and as a result, work to understand cultural values from the bottom-up. For this reason, the initial curriculum includes a course offered in the Department of Philosophy, a course in Logic and Reasoning. In this course students learn the logical structure of arguments, how to identify good and bad reasoning, and how to critique and craft your own arguments.

Extracurricular Experiences to support industry partnerships

Maintaining and sustaining our industry partnerships is an important component of our program. Two extracurricular initiatives were created to support and maintain these professional relationships with the program, faculty, and students. A position called an Experience Architect in Residence (or XA in residence [XAiR] for short) was established and funded for the first four years of the program.

Keith Instone, was the first "XA in residence" from 2015 to 2017. Keith was co-founder of Tech Toledo, LLC and was an Information Architecture lead at IBM for the previous ten years. At the time of his residency with the XA program, Keith was an adjunct professor at Bowling Green and a freelance UX professional. Keith's work includes advising us on program development and course content. He held workshops with our students and connected them with industry conferences. Keith also talked to other practitioners about our program and our students. He met regularly with faculty to advise on course curriculum development, ensuring the objectives were in-line with the expectations in industry. It is important to note that in 2005, Keith put out a call to academics and practitioners to work together, and so he was the perfect individual to serve as our first XAiR.

Emily Bowman served as the second Experience Architect in Residence from 2017–2018. Her UX work focused in the area of automotive UX research. She was a Senior UX Designer at General Motors and then became their UX Experience Design Strategy Lead. Prior to this role, she was the Design Group Manager at Empirical UX Research and Design. Emily was also an active leader of the Ladies that UX Detroit. In her role as the XAiR, Emily supported the program through strengthening connections with industry organizations and professionals. She offered a professional perspective on user experiences design and mentored students in preparing themselves for future careers in UX.

Another experience that builds on the students' connections to in-

dustry partners is the *Day of Professionalization*. When it was originally conceived, this day took place in the spring at the end of the semester. Invited professional guests would speak on panels and/or review the work of students. In fall of 2019, the day became an event that occurred in each semester in order for all students to have the experience no matter if they were graduating in fall or spring. Over the years, speakers have come from all over to share their knowledge and experience on a range of topics that inform our students and our program. For example, in spring 2021 Jessica Bellamy presented on social justice as design, in fall 2021 Lisa Welchmen discussed digital governance, in spring 2022 Melissa Eggleston did a workshop on trauma informed design, in fall 2022 Renée Reid worked with students to understand inclusive design, and in spring 2023 Kaleena Sales discussed challenging Eurocentric design and decolonizing problem solving.

These collaborations with industry are a central part of the XA experience. As Ben Lauren et. al. note, not everyone has to partner with industry professionals, but it is important that "we continue to learn from each other in ways that synthesize experiences across contexts, values, and beliefs" (2023). This echoes the efforts of Rebecca Walton, Kristen Moore, and Natasha Jones (2019), where they note we should work to build and maintain coalitions over extended periods of time. Bringing in industry professionals informs our program in a way that helps our students plan for their spaces to enact change.

XA Faculty

Our program's faculty is composed of internationally known researchers in the fields of rhetoric and writing, internet studies, and design working with partners in Africa, Asia, Australia, Europe, North America, and Zealandia. Our faculty is composed ofWe have teacher-scholars from the Department of Writing, Rhetoric, and Cultures (WRAC) and the Department of Art, Art History, and Design (AAHD), as well as academic specialists within the College of Arts & Letters (CAL). Several of our faculty are leaders in their respective academic communities, leading organizations (SIGDOC, ATTW, AIGA, CAA) and mentoring junior scholars and students (AIGA, Women in Technical Communication).

Consistently locating funding for their work, our XA faculty have made a significant impact on the research direction of their respective fields and digital humanities writ large. Our work has been funded by the National Endowment for the Humanities (including their program on the digital humanities), Institute of Museum and Library Services, and internal MSU funding including the College of Arts & Letters Undergraduate Research Initiative. Over the past several years, XA

faculty have published several books, peer-reviewed publications, and presented their research. Many of our faculty and academic specialists are also conference leaders and board members of professional and academic organizations such as— HASTAC (Humanities, Arts, Science, and Technology Alliance and Collaboratory) one of the world's first and oldest academic interdisciplinary networks, AIGA (the professional association for design) the oldest and largest professional membership organization for design, CAA (College Art Association) the preeminent international leadership organization in the visual arts.

Our faculty is also well-connected to industry partners who are connecting with us on issues of curriculum and student opportunities such as internships and permanent employment. These partners include leading experts in content strategy and user experience, user experience design, former employees and employers from our time in industry, current and past clients, and sponsors of our internships. Ten years on and our alumni are working with job titles such as UX Designer, UX Researcher, Web Audit Coordinator, Senior Accessibility Specialist, Product Designer, Experience Architect, Web Developer, Senior Software Engineer, UI Designer, Digital and Technology Analyst, Accessibility Program Manager, Senior Product Designer, Chief Executive Officer, Legal Quality Operations Manager, Accessibility Engineer, Senior Digital Product Designer, Digital Experience Manager, Professor, and more.

Curriculum Redesign

In the fall of 2018, an assessment began to see how the program was living up to its initial design. The XA adviser at the time noted significant difficulty when it came to getting students into certain courses, especially those that never materialized, such as the AL courses. XA students also noted the anxiety and difficulty associated with the intro to computer science courses (CSE). After some research, we discovered these CSE intro courses were informally being used to weed out students they felt unable to complete their own curriculum. The initial attempt to get students some background in computer programming and a better understanding of coding languages was ideal, but the execution of a program outside of our curricular control was not in line with our goals.

After realizing the CSE courses were less than ideal for our students, noting that certain AL courses were not created, and with a high rate of our students transferring into the program and seeking a better time-to-degree lifecycle, we entered the spring 2019 semester with the goal of revising the curriculum. We connected with The Hub at MSU,

an innovation space that explores curriculum, unit strategic plans, and a pedagogical research space, to begin conversations around what the program could be. All XA faculty gathered, brainstormed, and collected data via several design thinking activities. While the guided activities were helpful, we soon realized that many of us already had experience doing these activities on our own, so we decided to do this ourselves.

After reserving a space off campus, we planned an entire day to redesign and rebuild the curriculum as it had initially been envisioned, but with some modifications coupled with the understanding that the industry was changing. This gave us a chance to develop a more iterative curriculum that could be informed by feedback, thus making it proactive, not reactive. By doing this, we understood we were not chasing industry, rather, our goal was to produce leaders who would put people over profit and change industry in positive ways.

For the retreat, we built an agenda that had a specific goal: revise the XA curriculum so that it meets the mission of the program. The goals were then broken down into subsequent outcomes - in revising the curriculum, students will be able to: connect courses with professional work they will do when they graduate; navigate a more accessible curriculum; create change agents in industry.

To host our discussion and the multitude of documents and data we had collected since the program's inception in 2013, we created a website to act as our own hub for data collection. In Figure 3, you can see the landing page and the agenda, with each section guided by a faculty member.

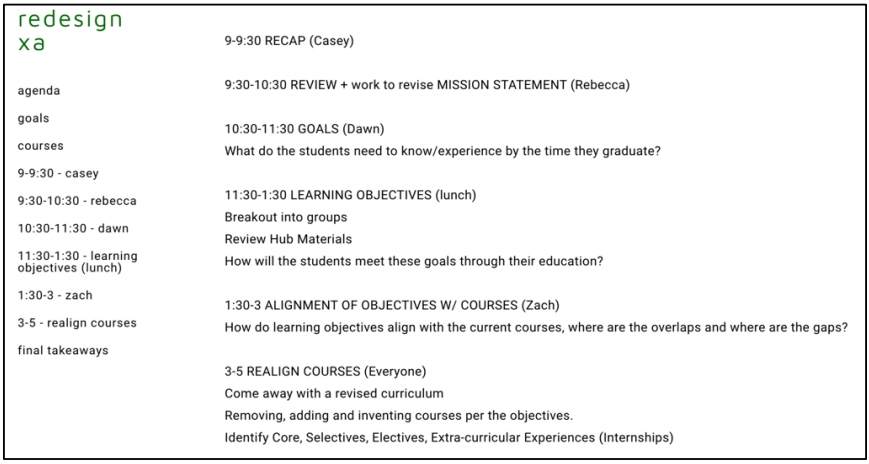


Figure 3: The landing page for the website we created to help guide us through the day's discussions and activities. On the left is

the navigation with links to subsequent pages.

The agenda gave us a reminder of the work we had been doing since XA's creation in 2013, as well as the work ahead of us for the day.

Recap

We framed our recap within three factors: social, technological, environmental, and economic. In Table 1, you can see we framed these factors in two ways: where XA currently resided at the time and where we wanted to see XA in the future. The key takeaways were that as we worked with students and stayed connected with industry, we felt XA could do more to enact the change it was designed to do.

Factors	Where is XA now?	The Future of XA
Social	Consumer behavior + society and culture (flattened) Focus on the individual user vs. social/cultural collectives Consumption as participation Users, consumers, clients	**Quality of life** **Accessibility anchored** More connection, less privacy Communities that don't exist yet Multicultural perspectives Global contexts Understanding systems of elementary education, how children learn to function in the future Help people Advocates Consider movement back to craft, complete rejection of technology consumerism Facilitate communication between disparate people
Technological	AI as artistry Apps! Apps! Tools Tools Production driven/client driven Increasing access to content through paywalls, pirating Legal and ethical considerations	**Understand that trends influence trends** Tools and hardware sort of ubiquitous and seamless, less "latent things" stress Connected broadly across spaces (Hub, Hive, Hatch, Lib) History of technology understand now and the future Principles over tools Principles (and tools) Effects of automation on making things Challenge the use of current technological tools Remote making

Factors	Where is XA now?	The Future of XA
Environmental	Digital only Nonprofit and gov't sector invisible Utopian beliefs in high tech/Silicon Valley UXPA and LinkedIn as culture	City structures changing in response to transportation evolution How do people behave/interact in changing environments/changing city structures Invisible technology tools Not just virtual Protect, engage, help others, do both (through/with/around) interfaces Michigan Trail Maps
Economic	Get job on current UX/UI market - present Education primarily driven by the university/semester model Increasing specialization with "less" generalist Uncritical approach to market forces	**Making money and change** UBI/Universal Health Care = people choosing things they love over money/stability Subverting power structures Job/title may not exist yet Education will be available in multiple ways that are valued (certification)

Table 1: A table of factors with the current state of XA and where we wanted XA to be in the future.

The recap also consisted of an overall reminder of the origins of XA, a presentation on the data collected from The Hub on student concerns, many of which surrounded their difficulty in navigating a program with courses that did not exist and CSE courses that were overly difficult.

Data from The Hub's survey pointed to several elements we needed to explore at the retreat:

Benefits of XA	Challenges of XA
• Collaboration • Community • Mentorship	• Navigating the Program • Breadth of Skills • Potential for Collaboration Between XA and Other MSU Programs • XA Capstone

Table 2: the benefits and challenges of XA.

With these elements in mind, we moved on to the next stage of exploring what the mission statement of the program was and if we were holding true to it. At the end of the recap was a reminder of our agenda and final deliverables:

Deliverables
1) Revision of core
2) Suggested pathways & electives
3) Faculty list (core, affiliate, requested hires)
    a) Who faculty are, what they do
    b) Our needs

This laid the foundation for our efforts and a reminder that we needed to end the meeting with clear and concrete artifacts that could guide the conversation from theory and into practice.

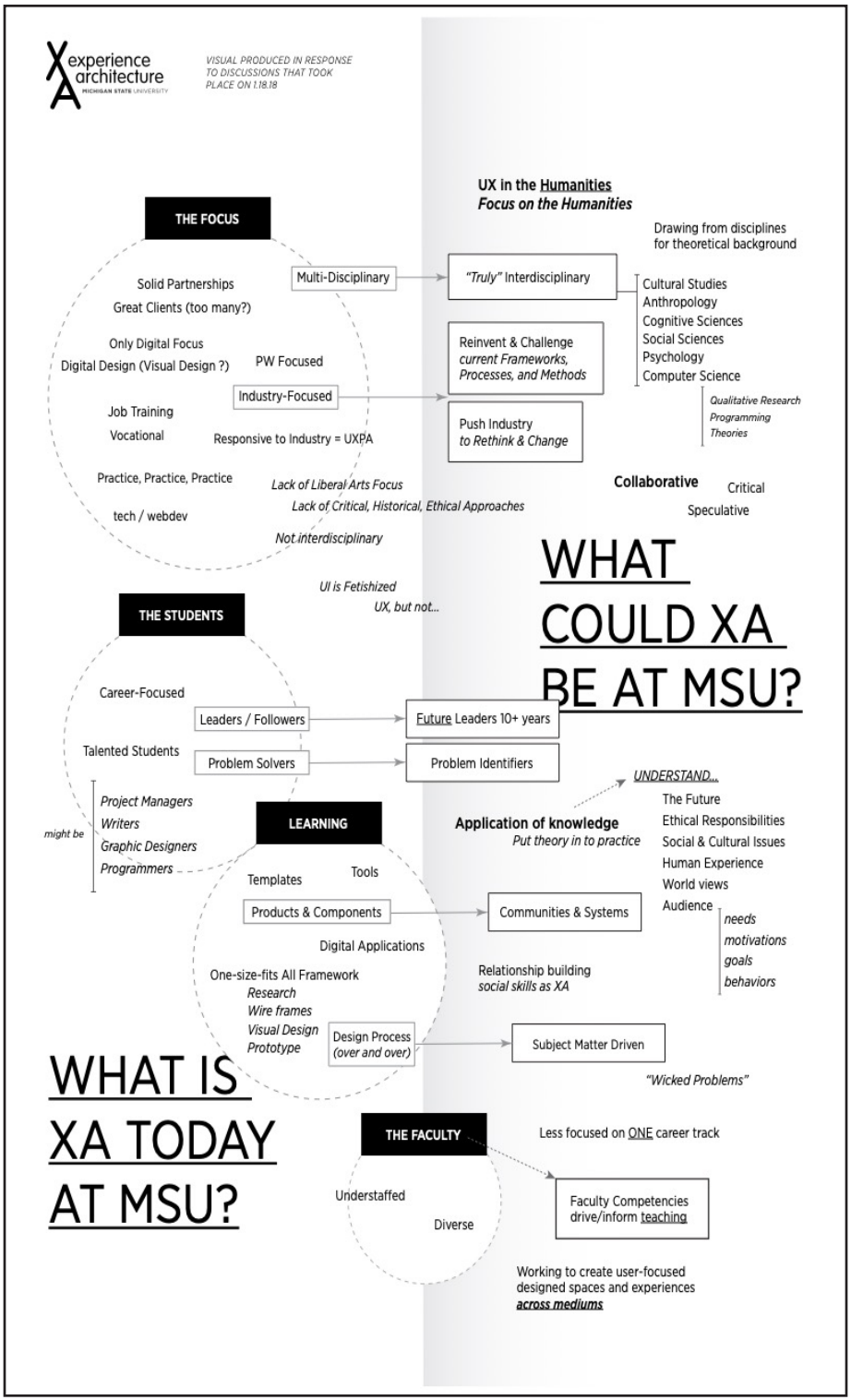
Mission Statement
At the redesign we noted the XA mission statement had not changed since its initial creation of the program in 2013. In that time, a lot had changed. Our program was becoming more diverse, our faculty was growing (but not fast enough!), our connections to industry were expanding, and we were seeing the impact that our first few cohorts were having on industry. Essentially, we were beginning to see if everything that had been planned was working.

Having a better understanding of the mission of the program, we then worked to revise the mission statement.

2013 Original XA Mission Statement

- The B.A. in Experience Architecture is a program for students who want to specialize in experience architecture as an area of expertise. Majors develop a theoretical understanding and advanced skills in experience architecture with an emphasis on user experience in digital environments. The major prepares students for careers in user experience, interaction design, design research, usability, information architecture, project management, interface development, and web development. It may prepare students for graduate work in design, rhetoric, writing, and information studies.

After revisiting the data from The Hub and generating our own definitions based on our experiences teaching classes, experiences with industry, and a general understanding about the impact our students were having, which led to our final understanding of the impact our students could have on industry, we revised the main statement better reflect our core ideals that moved from a more concrete set of outcomes to a roadmap for how we imagined the efforts of our students being deployed post MSU.


experience architecture
MICHIGAN STATE UNIVERSITY
VISUAL PRODUCED IN RESPONSE TO DISCUSSIONS THAT TOOK PLACE ON 1.18.18
UX in the Humanities
Focus on the Humanities
THE FOCUS
Solid Partnerships
Great Clients (too many?)
Only Digital Focus
Digital Design (Visual Design ?)
PW Focused
Job Training
Vocational
Practice, Practice, Practice
tech / webdev
Multi-Disciplinary
Industry-Focused
Responsive to Industry = UXPA
Lack of Liberal Arts Focus
Lack of Critical, Historical, Ethical Approaches
Not interdisciplinary
UI is Fetishized
UX, but not...
"Truly" Interdisciplinary
Drawing from disciplines for theoretical background
Cultural Studies
Anthropology
Cognitive Sciences
Social Sciences
Psychology
Computer Science
Reinvent & Challenge current Frameworks, Processes, and Methods
Push Industry to Rethink & Change
Qualitative Research
Programming
Theories
Collaborative
Critical
Speculative
WHAT COULD XA BE AT MSU?
THE STUDENTS
Career-Focused
Talented Students
Leaders / Followers
Problem Solvers
Future Leaders 10+ years
Problem Identifiers
might be
Project Managers
Writers
Graphic Designers
Programmers
LEARNING
Templates
Tools
Products & Components
Digital Applications
One-size-fits All Framework
Research
Wire frames
Visual Design
Prototype
Design Process (over and over)
Communities & Systems
Subject Matter Driven
UNDERSTAND...
Application of knowledge
Put theory in to practice
The Future
Ethical Responsibilities
Social & Cultural Issues
Human Experience
World views
Audience
needs
motivations
goals
behaviors
Relationship building
social skills as XA
"Wicked Problems"
WHAT IS XA TODAY AT MSU?
THE FACULTY
Understaffed
Diverse
Less focused on ONE career track
Faculty Competencies drive/inform teaching
Working to create user-focused designed spaces and experiences
across mediums

2019 Revised XA Mission Statement

- Experience Architecture (XA) is a cross-disciplinary User Experience (UX) degree that makes its essential focus staging improved and just experiences in the world. It is a values driven program engaging UX as a vehicle for future change agents. We believe that people deserve to engage with usable, accessible, and sustainable spaces. We position XA students to engage these spaces and contribute to designing a world in which they would want to participate.

In Figure 4, you can see the data collected from the activities we conducted at The Hub to better understand XA's role at MSU and in the world.

Figure 4 (facing page): A visual representation by Rebecca Tegtmeyer of what XA could be compared to what it was at the time of the redesign meeting in spring 2019.

Goals

A faculty member then guided us through a landscape analysis of other programs exploring some of the same ideas of XA, but mostly grounded in design only, or lacking the Humanities lens.

We created learning buckets and asked ourselves: "What do the students need to know/experience by the time they graduate?" We created specific buckets that we then populated with descriptions and examples of what we imagined each bucket could contain.

Buckets

1. Tools & Languages
2. Artifacts (What are the things they need to make or are making?)
3. Soft Skills (or "Power Skills")
4. Theories & Concepts
5. Research Methods
6. Principles (Guidelines?) (Awareness of…)
7. Values
8. Other

These buckets had a variety of data we collected as a group.

Buckets	Descriptions
Tools & Languages	Industry tools; understanding the limitations of tools (an overreliance on tech); Adobe Suite; software as Lego blocks; Experience Design as a physical space; etc.
Artifacts (What are the things they need to make or are making?)	Portfolios (their ability to discuss processes); writing project narratives (case studies); designing presentations; learning plans; project plans; workplace documents; websites; iPhone/Android applications; etc.
Soft Skills (or "Power Skills")	Oral communication/presentations; reflective reports; classroom engagement; collaboration; problem solving; inquiry/research/critical thinking; self-learner; ideation; breaking and learning; leadership; etc.
Theories & Concepts	Biases of technology; culture biases (worldviews); systems thinking, social cognition; pattern recognition; critique of capitalism; environmental concerns; social justice; spatial navigation; service design; activity theory; computational thinking; participatory design; etc.
Methods	Ethnographic; qualitative; narrative; scenario-based design; mapping; modeling; morphological thinking; storytelling; data analysis; critique methods; iteration; memory systems and archives; speculative design; etc.
Principles (Guidelines?) (Awareness of…)	Visual communication, typography; accessibility; motion design; interaction design; cross-disciplinary work; media literacy; critical analysis of tech; ethics; racialization of tech; technical communication; etc.
Values	Thoughtfulness; courage; empathy; social justice; community engagement; empowerment; advocacy; growth mindset; determination; global citizenship; sustainability; understanding how actions in digital spaces inform/impact physical behaviors; etc.
Other	Automation of the profession; impact of tools; political-economy of automation; etc.

Table 3: Buckets and Descriptions of each bucket.

These buckets provided insight into how we had been approaching these aspects of the major and how we can better support those that support the new mission statement.

Learning Objectives

Given XA's interdisciplinarity, we felt that when it came to the revised learning objectives, we want faculty from both spaces to connect and talk with one another. We had already collected data on each core XA course via a grid document that collected the course name, the language that the registrar used to describe it, the course objectives listed in the registrar, the course outcomes from different iterations, and the

major assignments used to help students meet those outcomes. Below is a sample and summary of what we did for XA 242, the intro course.

Class
- XA 242 Introduction to Experience Architecture

RO Description
- Basic principles of user-centered design as applied to user experience. Usability, information architecture, interaction design, and service design practices, tools, conventions, and professional community.

RO Course Objectives
- To introduce the theory and practice of user-centered design as it applies to researching, architecting, and designing products, services, processes, and experiences relating to user experience. To learn about the history, practices, and professionalization of user experience architects, including genres, contexts, and locations. To develop an understanding of the lifecycle of user experience projects, including planning, researching, designing, adapting, and measuring user experience.

Course Outcomes
- These varied from instructor to instructor, but they focused on a few main topics:
  - Articulate a detailed representation of the field by describing the role of an experience architect in an organization.
  - Evaluate the tools and resources available to experience architects.
  - Begin to learn how to manage XA projects.
  - Understand the theories and practices associated with architecting flexible, dynamic structures that deliver information to users when and where they need it.
  - Learn how to evaluate the user needs of a product, service, or policy to recommend methods of building positive experiences.
  - To become acquainted with the concepts of "experience" and be aware of the many environments (both physical and digital) in which these experiences occur.
  - To make connections across the various components within a system and understand that experiences happen in the smallest and broadest moments.
  - To practice effective methods of offering actionable, constructive feedback to peers and provide just-in-time, useful critique.

Major Assignments
- These varied from instructor to instructor, but they focused on a few main topics:
  - Exploring the Field of XA
  - Building a Communication Portfolio
  - Analyzing XA Tools
  - Understanding People
  - Understanding Industry
  - Client Project

After consulting the large document populated by faculty with these data points for every class, we began to find overlaps with course outcomes and an overall theme within the core courses. We then worked to align objectives with courses, how they fit into the new curriculum, and what it could look like. In doing this, we observed we needed to revise two main areas: prototyping and project management. We realized that prototyping was happening in the bulk of our courses—it was happening in the intro course, the web authoring courses, in GD and STA courses, and thus having a course whose sole purpose was to explore prototyping was deemed redundant. We also found that the project management course was more or less teaching students certain software systems rather than what it is to be a leader, a manager, or someone who listens and supports colleagues and peers. We decided to remove the project management course and replace it with a leadership course that explored human connection and understanding. This shift echoed our feelings that if our students were going to enact real change in the world, they were going to have to do it from leadership positions - that in order to remove and redesign systems, our graduates needed to be in a position to do that very thing.

After removing those two courses, we sought balance between courses focused in XA, rhetoric, and design. We felt this balance could give students a better lens to see the work to enact such a change, while also taking advantage of XA faculty knowledge and experience, as well as some hopeful hires. We created Table 4 to better understand our course offerings and where we were operating over capacity. Note that the AL designations are there because we eventually shifted those to be XA.

	Spring 2018		**Fall 2018**		**Spring 2019**		**Total**
	Students	**Limit**	**Students**	**Limit**	**Students**	**Limit**	**Stu./ Lmt.**
AL 242.1	20	18	28	18	22	18	70/54
AL 333.1			22	18			41/36
AL 333.2			19	18			
AL 366.1	21	20					21/20
AL 375			19	18			19/18

	Spring 2018		Fall 2018		Spring 2019		Total
	Students	**Limit**	**Students**	**Limit**	**Students**	**Limit**	**Stu./ Lmt.**
AL 444.1	20	20			21	20	60/60
AL 444.2					19	20	
AL 466	11	10			26	20	37/30
STA/ GD 260	48	50	20	20	52	50	120/120
STA/ GD 303	21	20	20	20	21	20	62/60
WRA 210.1	21	20	22	20	22	20	130/120
WRA 210.2	23	20	20	20	22	20	
WRA 410.1	20	20	20	20	23	20	80/80
WRA 410.2					17	20	
WRA 491.1			18	15	13	15	31/30
						Total	**671/628**

Table 4: A breakdown of XA courses by courses, enrollment, and student enrollment limits.

Finding a better balance was crucial to help guide students through the curriculum, better connect with our new core goals and outcomes, and offset the over-capacity experiences our students and faculty were encountering. This aided in our approach to ensuring that the realignment would stay on task with our mission.

Realign Courses

Initial courses that were never created by the college were AL 150 Humanities and Computing Projects I and AL 251 Humanities and Computing Projects II. The CSE courses that had been required, CSE 201 Fundamental of Information Technology, CSE 231 Introduction to Programming I, and CSE 232 Introduction to Programming II, were removed from the curriculum entirely and replaced with XA 310 Computational Thinking for the Humanities.

As you can see in Table 5, the redesigned curriculum evenly spread courses between XA, WRA, and GD. We added the AL 250 course to

aid in our students' ability to prepare for internship applications via resumes and cover letters. We then replaced the Intro to Philosophy course with the Philosophy of Technology class to better connect diverse theories of technology and its impact on economies, populations, and cultures.

Final alignment:

Core Classes		
XA - 4 classes	**WRA - 4 classes**	**GD - 4 classes**
XA 242 - Intro to XA XA 310 - Computational Thinking XA 333 - Researching XA XA 466 - XA Capstone	WRA 210 - Intro to Web Authoring WRA 401 - Rhetoric, Leadership, Innovation WRA 410 - Advanced Web Authoring WRA 415 - Digital Rhetoric	GD 160 - Digital Graphic Design: Tools and Methods GD 260 - Concepts of Graphic Design GD 303 - Experimental Design Practices GD 468 - Interaction Design
AL 250 - Career Strategies for Arts and Letters Students	PHL 355 - Philosophy of Technology	
Electives		
XA 375 - Information Architecture XA 482 - XA Internship	WRA 320 - Technical Writing WRA 420 - Content Strategy	GD 467 - Motion Design STA - 380 - Electronic Art STA - 384 - Experiments in Digital Video STA 385 - Interactive Environments and Digital Fabrication

Table 5: Final alignment of XA courses after redesign.

Student + Alumni Success

Client-based projects have been at the heart of the program since it was created. This plays a crucial role in the introduction class and the methods class, both of which require students to work in teams to work with a client, conduct research, develop mockups, and present findings with real feedback.

We have been fortunate to have partnered with some amazing units on and off campus. We have worked with the MSU Library to help redesign their landing page, their Sparty Cafe, and their Rovi Gaming Library. We have worked with the MSU Bughouse to help them develop better wayfinding as patrons move through their space to examine their exhibits. We have worked with the MSU Museum to support their

Science on the Sphere (SOS), a physical exhibit that explores interaction within the context of the museum environment. We worked with the MSU Theatre Department to help them create a better checkout system for purchasing tickets and organizing their waiting lines for performances. We have also worked with a local organization, Techsmith, to test new and updated versions of their software.

All of these projects and clients have given students case studies to put on their portfolios to showcase their process. As a result, we have alumni who work for a variety of organizations. They have worked for Google, Facebook. Ford, Rivian, General Motors, General Mills. Our alums are senior accessibility leads at banks, at software companies, and mobility organizations. They have gone on to create their own fashion lines and non-profit organizations.

The success of our students and their entry points into these organizations gives us hope that the new curriculum is helping them enact change. We have seen a shift in our student population as well. As of spring 2023, an internal data collection from our office of Planning and Budgets shows that we have hit over 180 majors in XA. The population data notes: 17% of students identify as African American/Black, 14% as Asian, 5% as Hispanic/Latinx, and 5% as international. Over 32% identify as first generation and over 31% have received a Pell Grant. Our efforts to diversify our curriculum and create more inclusive spaces have worked, but there is still room for improvement.

Design Thinking

Since the redesign, we have met several times to revise and update course goals and outcomes to ensure they connect with the revised program outcomes. In the Appendix, you can find the revised XA Program Outcomes that emerged from our new mission statement from the redesign. In the fall of 2022, we used Design Thinking activities to help us realign course learning outcomes and goals for all XA core courses to ensure that the experience across those classes were consistent. We felt it was important to have a standard syllabus with precise goals, outcomes, recommended texts, and deliverables for new faculty teaching the course. We have many graduate students who are doing this work, as well as practitioners who have taught our classes, and we believe this template will ensure a common experience for all XA students. Below is a sample of what we did to XA 242:

XA 242: Introduction to Experience Architecture (3 credits)

Basic principles of user-centered design as applied to user experience. Usability, information architecture, interaction design, and service design practices, tools, conventions, and professional community.

Deliverables:

- Projects or artifacts to be placed on professional portfolios.
- Five year plan - how students will navigate the program and life post MSU.

Goals: During this course, students will work together to:

- illustrate a detailed representation of the field by describing the role of an Experience Architect in an organization and their work within multiple communities.
- interpret and become acquainted with the concepts of "experience" for people, communities, cultures, and be aware of the many environments (both physical and digital) in which these experiences occur.
- compare and connect the various components within a system and understand that experiences happen in the smallest and broadest moments, regardless of medium.
- explore methods of ethically aligning experiences to user and community needs.
- relate the complexities of the field by describing the various roles and skills of an Experience Architect in the current landscape and prepare for possible futures.

Outcomes: By the end of this course students will be able to

- Identify and explore experiences that focus on usability, accessibility, and sustainability when it comes to designing, building, testing, and deploying products, processes, or services.
- demonstrate level-appropriate skills in research, prototyping, and user testing.
- identify and evaluate appropriate principles and technological tools used in industry.
- demonstrate the ethical theories and practices associated with Experience Architecture and reference the multidisciplinary influences that have shaped the field.
- describe the importance of diversity, equity, community, and justice in their design, research, and management processes.
- generate artifacts to be added to their professional portfolio to aid in their preparation for industry.

Recommended texts:

- *The User Experience Team of One: A Research and Design Survival Guide* - Leah Buley
- Do Black UX Designers Get the Recognition they Deserve? - Jacquelyn Iyamah
- *The Design of Everyday Things* - Don Norman
- *Design Justice: Community-Led Practices to Build the Worlds We Need* - Sasha Costanza-Chock

In Chapter 6: Design Thinking in Don Norman's book The Design of Everyday Things, he notes: "Good designers never start by trying to solve the problem given to them: they start by trying to understand what the real issues are" (218). As MSU is an R1 institution, the move to understanding the real issues begins with research. There are a multitude of problems with which we interact every day. In his 1992 paper, "Wicked Problems in Design Thinking," Richard Buchanan framed larger issues that could be explored via design thinking, like poverty, basic needs, food insecurity, climate change, and more. This laid a solid foundation for all of our courses to get students to think beyond just prototypes and web applications—we wanted them to think about social justice, diversity, equity, inclusion, and more. Design thinking has given our curriculum the chance to expand beyond the design solutions students initially expect they can solve after graduating to larger design solutions within societal frameworks and large-scale institutions.

Conclusion

In the article, "Killer Robots and the Humanities: Building an Interdisciplinary UX Program. User Experience Magazine," Potts et. al. note the goal of creating the XA program: "With the goal of teaching students to be architects of digital experiences, we see the XA major as a way to positively influence the ways in which we have traditionally built products and services by focusing on human experience first instead of technology." While the XA program may have originally focused on digital spaces, over time, as the need within industry rose, and as our research expanded, we realized that products and services included digital spaces, physical spaces, and systems.

A landscape analysis of industry reveals a better understanding of the importance of the Humanities when it comes to the development and design of systems and spaces. As UX professionals advance in their own organizations and conduct more research, many have found the shortcomings of their own undergrad and grad programs. They are hiring learning experience designers to build internal education modules to help teach their own employees not just about their own ideals and values, but how those align with the rest of humanity; you know, their primary users. We are also seeing more requests for UX researchers and UX designers, project managers with backgrounds in leadership and rhetoric and writing and with experience working across disciplines and fields. Again, we note this not to use industry to persuade other academics on the value of our program, rather, we are using these points as a reminder of the impact the Humanities are having on

industry. As we see more machine learning and AI that are informed by unjust and exclusive systems, the Humanities need to act to ensure that inclusive and just spaces are being designed and built for humans. Experience Architecture, as a Humanities program that researches such spaces and graduates alumni who are equipped to enact the change needed, is helping by advancing such action. This is the role of XA and the Humanities as a whole. We believe that XA can lead the way in interdisciplinary work and bring people together to make the world a better place.

Jesse James Garrett states, "Experience Design is the design of anything independent or across media with human experience as the explicit outcome and human engagement as the explicit goal" (qtd. in Cummings, 2009). As digital and physical spaces begin to merge across time and space (interactive car systems, AR museums, and so on), the more our work transcends mediums is revealed. The fulcrum of Experience Architecture is interdisciplinary because the world is interdisciplinary. It reminds us of our roles as humanists to seek out connections beyond our field with the hope of bridging the gaps in humanity. In doing so, we hope that our students will think beyond just an experience and focus on the role that human engagement plays not just in everyone's immediate everyday life, but in the lives of everyone at any time. We believe this way of thinking can aid in enacting three core principles of our program of creating usable, accessible, and sustainable spaces and systems.

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Liza Potts is a professor in the Department of Writing, Rhetoric, and American Cultures at Michigan State University where she leads WIDE Research and is a co-founder of the Experience Architecture program. Her research interests include networked participatory culture, social user experience, and digital rhetoric. Her work has been funded by the National Endowment for the Humanities (NEH), the Institute of Museum and Library Services (IMLS), and others. Liza has published three books and over 70 publications focused on disaster response, user experience, and participatory memory, as well as several digital projects from community archives to leading the Sherlockian.net team. Her professional experience includes working for technology startups, Microsoft, and design consultancies.

Rebecca Tegtmeyer is a graphic design educator and practitioner. Through her active research, writing, making, and teaching agenda she investigates the role of a designer and the creative process through a variety of forms—from static to dynamic, time-based to print. Working both individually and collaboratively she approaches design as a catalyst in facilitating systems that challenge and inspire—further extending the capabilities and responsibilities of a designer in today's complex world. Current research projects focus on collaboration from a variety of perspectives from collaboration practices in design education to investigating the tools and processes for remote collaborative making. Rebecca is co-author and co-editor of the title, *Collaboration in Design Education*, with Marty Maxwell Lane.

Appendix

0.0 CURRENT BA IN EXPERIENCE ARCHITECTURE CURRICULUM

Experience Architecture (XA) Core Required Coursework

XA 242 – Introduction to Experience Architecture

Basic principles of user-centered design as applied to user experience. Usability, information architecture, interaction design, and service design practices, tools, conventions, and professional community.

XA 310 – Computational Thinking for the Humanities

Develop critical and ethical engagement with computational thinking. Uses problem-solving processes including pattern recognition, data representation, and algorithms. Explore relationships between computation and user experience, rhetoric, and design.

XA 333 – Researching Experience Architecture

Researching for product, services, and processes as applied to user experience. Contextual inquiry, field studies, card sorting, participatory design, interviewing, focus groups, and usability testing.

XA 466 – Experience Architecture Capstone

Integrate knowledge and skills acquired from previous courses. Conceptualization, planning, implementation, and assessment of a project, service, system or an idea in a collaborative setting.

WRAC, Professional and Public Writing (P2W) Required Coursework in the XA Curriculum

WRA 210 – Introduction to Web Authoring

Analyzing, evaluating, and authoring Web sites. Principles of design rhetoric. Practices of Web accessibility.

WRA 401 - Rhetoric, Leadership, and Innovation

Exploration of rhetorical theories applied to managing and leading communication in civic and professional organizations. Emphasis on team dynamics and on managing and leading teams and projects. Discussion of entrepreneurial thinking in professional and public writing.

WRA 410 – Advanced Web Authoring

Developing and maintaining large-scale, interactive Web sites. Visual design, usability, audio and video integration, ongoing site management, and web accessibility.

WRA 415 - Digital Rhetoric

Rhetorical, social, political, economic, and ethical dimensions of digital communication, including identity, community,

genre, and events. Rhetorical dynamics of communication across digital spaces such as apps, websites, software, and other experiences.

AAHD, Graphic Design (GD) Required Coursework in the XA Curriculum

GD 160 - Digital Graphic Design: Tools and Methods

Introduction of digital tools and methods specific to contemporary graphic design.

GD 260 - Concepts of Graphic Design

Overview of form and communication analysis and manipulation. Investigation of theory, concept and visual tools central to developing visual communication systems.

GD 303 - Experimental Design Practices

Studio-based survey of experimental and futures-oriented design practices that are interdisciplinary in nature, intersect with emergent practices in the visual arts, and address broader issues of power, normativity, and social justice.

GD 468 - Interaction Design

Digital interactivity as a tool for visual communication, design and distribution of ideas. Conceptual, formal and typographical explorations relating to screen-based activities such as interface design, user-interaction and basic animation.

Additional Coursework within the College

AL 250 - Career Strategies for Arts and Letters Students

Identify, explore, and prepare for suitable career options. Topics include self-assessment, career development strategies, and job search skills.

PHL 355 - Philosophy of Technology

Examination of the desirability of technology, its social forms, and its alternatives. Conventional productivist, ecological progressive, and radical humanist outlooks.

Elective Coursework:

XA, Experience Architecture (XA)

XA 375 – Information Architecture

Theory and practice for architecting information, including understanding and developing taxonomies, folkonomies, site structures, tagging systems, and guided navigation for user experience.

XA 482 - Experience Architecture Internship

Field experience in a professional environment that supports, user experience, interaction design, design research, usability, information architecture, project management, interface de-

velopment, and/or web development. Work under the supervision of a professional.

AAHD, Graphic Design (GD)

GD 467 – Motion Design

Time-based design utilizing sound and motion for visual communication and personal expression relating to the field of graphic design. Conceptual and formal explorations relating to the moving image such as motion graphics, stop-motion animation, and kinetic typography.

AAHD, Studio Art (STA)

Electronic Art and Intermedia (EAI) concentration explore new forms of artistic output brought about by science and technology. EAI builds on the history of Intermedia, which is a philosophy that historically explored the intersection among art disciplines. Expanding on the fusion of art genres, EAI applies this model within the academy more broadly to encourage new forms of research and creative activity by combining research epistemologies and praxis from many disciplines both within and outside of the arts.

STA 380 - Electronic Art

Using the computer as a tool for making art. Creation of innovative electronic art and new media projects that introduce students to conceptual as well as technical skill sets.

STA 384 - Experiments in Digital Video

Introduction to core skills and concepts used in digital video production, with an emphasis on art-making, conceptual thinking, and experimentation.

STA 385 - Interactive Environments and Digital Fabrication

Systems-based approach to design and fabrication of functional experimental art devices, combining principles of mechanical, electronic, software design, robotics, sensors, actuators, and other control devices. Exposure to new paradigms of creative practice and will develop intricate, interdisciplinary group projects.

WRAC, Elective Coursework:

WRA 260 - Writing, Rhetoric, Cultures, and Community

Introduction to rhetorical practices, processes, and strategies. Study of intersections of rhetorical theories and cultural engagement, with emphasis on analyzing and composing for different professional and public settings. Exploration of different knowledge-making processes and influences on writing.

Reading- and discussion-intensive course.

WRA 320 – Technical Writing (W)

Principles and practices of communicating technical information for different audiences and purposes, and across multiple media. Methods of audience-based research, information design, project management, and technical style (verbal and visual).

WRA 420 – Content Strategy

Applied theory and best practices for content strategy. Understanding the content management lifecycle, aligning content strategy to business goals, assessing communication needs for audiences and participants. Issues in project leadership, management, intellectual property, and organizational communication for creating flexible, dynamic content and content structures.

0.1 ORIGINAL PROGRAM LEARNING OBJECTIVES (FALL 2013)

(Knowledge) Students will understand…

- Principles of user-centered design
- Best practices in information architecture (brainstorming, story boarding, contextualizing, mapping, diagramming, wireframing, programming, prototyping, testing, analyzing, etc.).
- Heuristics for assessing the usability of interactive experiences
- Methods of researching human experience
- Methods of developing multiple solutions that connect systems, people and networks

(Skills/Abilities) Students will be able to…

- Possess advanced communication skills
- Demonstrate an ability to think critically, analytically, productively and creatively
- Engage in integrated reasoning when confronted with conflicting information or problems
- Conduct an analytical and holistic assessment of an individual situation
- Identify and deliver innovative technological solutions, after an environment assessment
- Be skilled when working with various technologies
- Working across and integrate a variety of technologies
- Demonstrate strong collaboration and leadership skills in project management team situations, and with internal and external stakeholders

(Dispositions, attitudes, beliefs) Students will…

- Embrace the necessity to engage in lifelong skill development given the rapid changes to career-relevant technologies
- Build technologies from a perspective of this work as a humanities-centered endeavor

0.2 EXPERIENCE ARCHITECTURE LEARNING OUTCOMES

1. Students will emphasize the importance of diversity, equity, community, and justice in their design and research processes.
2. Students will evaluate how their own experiences and positionality influence their design and research processes.
3. Students will reflect on experiences in order to monitor continued learning and growth.
4. Students will integrate knowledge of culture and partner communities into their design and research practices.
5. Students will apply user-experience research techniques such as card-sorting, usability-testing, expert reviews, etc. into their design and research processes.
6. Students will analyze how technologies influence human action and decision-making.
7. Students will explain the practices and knowledge associated with working in fields associated with XA (including user-experience, user research, artificial intelligence, computer science, content strategy, accessibility, etc.).
8. Students will create projects through iterative and recursive processes that include inquiry, research, feedback, reflection, and revision.
9. Students will generate projects across a variety of media, such as websites, mobile apps, and text-based reports.
10. Students will evaluate the steps and processes involved in executing multi-step and iterative projects.
11. Students will utilize a variety of modes, including writing, speech, sound, graphic design, programming languages, etc. in their design and research processes.