# 9. Using UX Methods to Gauge Degree Efficacy

Kelli Cargile Cook Texas Tech University

Abstract: This chapter describes a four-year longitudinal study of a new degree program in professional communication. It describes study methods and reports preliminary findings from the first year. Throughout the chapter, the author argues that student data collected through user experience methods enriches the assessment process as well as benefits students by providing insights into program design and outcomes.

Keywords: program assessment, user experience methods, longitudinal study design, degree efficacy, iterative design

#### Key Takeaways:

- Programmatic assessment is a continuous improvement process that informs curricular decisions and ideally increases student outcome achievement.
- Student voices are frequently absent from programmatic assessment processes, data collection, and curricular design decision-making.
- Adding user experience (UX) methods to the programmatic assessment mix affords program administrators a means to collect student experiences and use these data to inform program design, assessment, and redesign decisions.
- UX methods are intended to be local, ungeneralizable, and fit to specific situations, to specific products, and to the specific users who engage with products.
- Even though UX methods do not produce generalizable results, the data collected can guide faculty and administrators as they seek continuous improvement of a program's design and outcomes.

Program assessment is a common practice on public university campuses. The Office of Planning and Assessment (OPA) at Texas Tech University (TTU) provides guidance on how program outcomes and assessment should be conducted on this campus; its guidance is comparable to peer institutions of higher education and compliant with the *Principles of Accreditation: Foundations for Quality Enhancement* guidelines of the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC, 2018). Section 7 of the *Principles of Accreditation* specifically provides guidance for institutional planning and assessment:

Effective institutions demonstrate a commitment to principles of continuous improvement, based on a systematic and documented process of assessing institutional performance with respect to mission in all aspects of the institution. An institutional planning and effectiveness process involves all programs, services, and constituencies; is linked to the decision-making process at all levels; and provides a sound basis for budgetary decisions and resource allocations (SACSCOC, 2018, p. 19).

While accreditation associations do not require specific methods of assessment, they do encourage a variety of methods. For example, OPA (2017-2018) reported that course level assessments, exams, and capstone assignments or projects were the most common means of assessing student learning outcomes in both graduate and undergraduate courses. Other means of assessment are described in the 2017-2018 OPA infographic in Figure 9.1.

## 2017-2018 METHODS OF ASSESSMENT



Figure 9.1. TTU Office of Planning and Assessment 2017– 2018 means of program assessment infographic.

As Figure 9.1 illustrates, most assessment is performed at faculty and administrative levels. Instructors assess student learning outcomes by evaluating students' work or work products. Only the data collected through surveys, such as teaching evaluations and peer assessments, give any quantifiable insights into how students think or feel about their programmatic successes. As Christine Masters-Wheeler and Gracemarie Mike Fillenwarth's chapter in this collection specifically details, program assessment typically begins with a subject matter expert(s)—often a faculty member or team—deciding on a set of identifiable, measurable objectives that will demonstrate student learning. What is notable about this common educational procedure (as well as in Figure 9.1) is that the individuals being assessed—students engaged in degree programs—are rarely consulted during curricular design, assessment, and redesign processes. While graduate and alumni surveys as well as exit interviews are sometimes employed in program assessment (see, for example, Carnegie and Crane, 2019), most curricular and assessment plans focus on expert or faculty input. Student input, perceived as lacking subject matter expertise, is absent. Yet students have first-hand knowledge of how well a program is working. They can discuss whether courses are working holistically to build knowledge and support skills-development or are disconnecting in ways that a single instructor could not foresee or even imagine. Engaging students adds an important and often silenced voice in the assessment process. This study addresses student silence by centering on student experience while completing a degree: it directly engages students in curricular development and assessment.

The site for this case study is the professional communication department (PCOM) at Texas Tech University. The program studied is the digital media and professional communication (DMPC) degree, which was officially approved and created along with the professional communication department in September 2018. The PCOM department and DMPC degree were inspired by a group of College of Media and Communication alumni who brought their career changes to administrators' attention: they had all earned bachelor's degrees in communication studies, journalism, public relations, or advertising; yet they found, as the years passed, that job opportunities or market pressures had required them to transition from one communication field to another. They encouraged administrators to design a degree-which became the DMPC-that was broader in scope, offering upper-level courses across communication fields rather than educating students with a deep knowledge of a single field. The PCOM department was formed to house these majors and to house the faculty who would provide students with knowledge of business and professional communication practices undergirding courses.

Initiating a new department and a new degree simultaneously provides a unique longitudinal research opportunity to employ user experience (UX) methods to gauge the efficacy of the degree plan and its outcomes through extended input from students from their matriculation to graduation. To take advantage of this opportunity, PCOM department administrators designed a four-year longitudinal research project to study the first four years of the DMPC program by following its majors as they progress through their degrees. The first class of DMPC majors is the cohort of undergraduate majors who declared under the 2018-2019 calendar; these students and those who join them in 2019-2020, 2020-2021, and 2021-2022 will comprise the population of the study. This population of majors may attend Texas Tech at either the Lubbock, Texas or the Waco, Texas campus, where the DMPC degree is approved for delivery. This study employs user experience research methods to gather the perspectives of these majors over time and to use that data to design a viable assessment plan, develop curriculum, and generate recruiting and marketing materials for the DMPC. Using Patricia Sullivan's (1989) definition of *longitudinal field studies* as a guide, this research project is designed to "employ qualitative methods to study a group or a number

of individuals over a period of time" (p. 13). In her discussion of such studies, Sullivan cautions researchers who choose to use this method: longitudinal field studies are resource-, time-, and labor-intensive.

Further complicating the decision to conduct longitudinal research with user experience methods was the awareness that using UX and longitudinal methods may seem contradictory. As this collection's first two chapters argue, *UX methods* are intended to be local, ungeneralizable, and fit to specific situations, to specific products, and to the specific users who engage with products. UX methods, consequently, are associated with lean principles and agile design processes, while a longitudinal study, by definition, examines change over extended periods of time. Put in racing terms, UX research is a series of sprints, while longitudinal research is a marathon. Slightly modifying the race metaphor, however, alleviates the contradiction; if one thinks of the sprints as legs of a distance relay, then each leg (or sprint) moves the research forward until the final leg is completed and the research is done. Planning and conducting a longitudinal study with UX methods thus requires a researcher to set goals for each leg as well as for reaching the finish line.

This chapter (TTU IRB #2019-58) reports the findings of the first sprint, the first completed year, of the longitudinal study. Unlike other chapters in this collection, this chapter is not retrospective; it is a study in progress—or as SACSCOC (2018) notes, a study in "continuous improvement"—as assessment projects should be. This chapter focuses on the study's design and its initial findings. It details the five user experience methods/activities in the study's design, provides a rationale for their use, and maps these methods into a four-year timeframe. It then provides results from initial data collected in order to present a student-user profile. Finally, it discusses the value of including UX methods as assessment tools for degrees in profession-al and technical communication.

This chapter, on the other hand, does not claim to report generalizable findings or claim to be a complete picture of the program under study or of its students. The findings reported are, unquestionably, the first of a four-year study. Furthermore, the initial findings are meager, at best. Yet the findings do provide insights about programmatic longitudinal study design that can aid program administrators, and they also provide preliminary insights into the experiences of student-users who engage in programmatic study.

#### User Experience and Program Assessment

As other authors in this collection have noted, user experience research engages actual users in the design, assessment, and redesign of products, most commonly technological ones. It is the culmination of research, design, and testing to understand the user's experience before, during, and after their encounter with a product. It focuses on the users' motivations for selecting and using a product rather than experts' assumptions of users' needs (Getto & Beecher, 2016; Rose et al., 2017; Still & Crane, 2016).

The design product in this study is not a technological product, per se; it is a degree program, the DMPC. The population under study are the first four years of DMPC majors. In addition to participating in annual surveys and focus groups, samples of DMPC majors will engage with program administrators using three other user experience methods: user profiles, personas, and journey mapping. Through these methods, program administrators hope to gain insights into student decisions and other experiences as they engage with the program's faculty, advisors, and staff, seeking guidance on the degree plan, internship opportunities, and job market opportunities. The insights gained, in turn, will allow programmatic faculty to assess the degree program, to identify strengths and weaknesses, and potentially to modify the program and its curriculum to improve its efficacy. Thus, the research design not only informs the program stakeholders, such as the department chair and faculty who serve on the curriculum committee, but it also has the potential to improve student knowledge of how to fulfill degree plans, how to identify and select internships, and how to market themselves for post-graduation employment. Because of its potential to inform programmatic decisions and bolster student educational success, this study seems well worth the required investments in time, resources, and labor.

#### UX Methods Deployed in the Study

This study will proceed in four phases, from January 2019 through the December 2022 semester, excluding summers. Program administrators will gather student data using five UX methods: *surveys, user profiles, personas, journey mapping,* and *focus groups.* These methods and their phases are depicted in Figure 9.2 and detailed in this section.



Figure 9.2. Study longitudinal phases and UX methods.

#### Surveys and Focus Groups (Phases 1 and 4)

Surveys and focus groups are useful for collecting aggregate data on DMPC majors as a whole, including their attitudes and experiences. Phase 1 of this research relies on annual surveys to collect both quantitative and qualitative data about DMPC majors' demographics and attitudes. These data will be aggregated to develop user profiles and personas. Students who leave the DMPC program will be asked to complete an exit survey to discover their attitudes and motivations for leaving or changing majors. This survey will also assist in identifying program competitors. Phase 1 of this project will be *iterative*, repeating on a semesterly (exit survey) or yearly rotation (annual survey).

While surveys are the first interaction students will have with this research, focus groups will be their last. Conducted in Phase 4 of the study, a *focus group* is an interview with a group of people who are "brought together to discuss their experiences or opinions around topics introduced by a skilled moderator who facilitates an open, nonjudgmental atmosphere" (Baxter et al., 2015, p. 340). Each focus group session will last approximately two hours and be held in a designated focus group room with audio and video recording capabilities. The focus group team will include the moderator and at least one additional researcher to take notes. The focus group will provide a concluding snapshot of student experiences with DMPC courses, degree plans, advisors, and administrators. It will also ask majors for their ideas on degree revisions, innovations, and marketing and recruiting materials.

#### User Profiles and Personas (Phases 1 and 2)

*User profiles* are summaries of the mindset, motivations, and goals of a group of product users. *User profiles* demarcate the characteristics that all or most of the individuals within the group possess; they are developed from actual data collected from the group.

What distinguishes profiles from personas is the difference between group and individual characteristics as illustrated in Figure 9.3. The user profile provides actual data about all or most DMPC majors, while *personas* are fictionalized stand-ins that user experience researchers create to remind them of their actual users. "Personas take a user profile and then fill in the details to create a 'typical' user" (Baxter et al., 2015, p. 41). As such, personas share characteristics of the group, but they also have distinguishing features that extend beyond group characteristics.

For example, based on university advising demographics, the user profile of DMPC majors would have several easily identifiable commonalities: they are all undergraduates at Texas Tech, and, thus far, they are all Texas residents. Individually, however, Persona 1 might be a first-year student from an urban area who resides on the Lubbock campus; Persona 2 might be a first-year student from a

rural community who commutes from home to Lubbock to attend classes; and Persona 3 might be a junior transfer student from an urban area who attends classes online. So while user profiles provide designers with the big picture of the group, personas focus on key differences, such as means of attending classes and classifications. The DMPC user profile design concludes the first iteration of Phase I. Because the annual survey will be repeated twice more, user profiles may be updated after each survey.



Figure 9.3. Distinguishing between user profiles and personas.

#### Personas

In the spring semester of 2020, program administrators will invite a random sample of DMPC majors to meet for the first time in a persona development workshop. This workshop begins Phase 2 of the study. After completing the required Institutional Review Board (IRB) informed consent procedures, administrators will report the aggregate survey results—the user profile—to participants, explaining how user profiles inform user experience research and how they lead to the development of personas. They will then explain how to construct personas of DMPC majors from key demographics, interests, and opinions.

After this introductory discussion, administrators will ask participants to work in groups to generate a specific persona for the study—a "typical" DMPC major. To generate a persona, DMPC majors will complete the following steps as defined in Luma Institute's (2012) *Innovating for People*:

- Write a personal description of each type.
- Give them realistic names.
- Include a representative portrait for each persona.
- Describe their distinguishing characteristics.
- Establish their needs and goals.
- Summarize their mindset with a memorable quote.
- Compose a one-page summary sheet for each type (n.p.).

Using examples like Figure 9.4, administrators will prepare students to construct their own personas of DMPC majors.



#### Figure 9.4. Persona of student, Olivia (McKay, 2015).

The first spring meeting will conclude with the development of three to five personas that will be used in the next meeting. These personas will also be used for training purposes as participants learn more about journey mapping, which is described in the next subsection.

#### Journey Mapping (Phase 3)

Phase 3 of the study requires participants to create two kinds of journey maps, one for their fictional personas and a second for themselves. A *journey map* is a "visual depiction of what users need and what steps they take to fulfill those needs as they interact with a product" (Still & Crane, 2016 p. 95) from first interaction to last. Journey maps generated in this study focus on how personas (and eventually participants) begin their journey with the declaration of the DMPC major and end with their leaving the major or graduation. *Maps of experience*, as James Kalbach (2016) defines them, allow designers to "focus on the story you need to tell in your organization" (p. 274). Through their stories or timelines, these maps allow designers to track a user's experience "not only for pain points, struggles, and fears in an experience, but also aspects that motivate and encourage" (Kalbach, p. 275). Figure 9.5 provides an example of a persona's journey map. Customer Linda's journey to find specific information is mapped: stages of the experience, activities completed and attempted, feelings and needs, and potential opportunities for improvement (Monroe & Chronister, 2015).



Figure 9.5. Journey map example (Monroe & Chronister, 2015).

As Figure 9.5 illustrates, journey maps often look like timelines with interactions drawn and described on them, but they can also include emoticons that depict how the user feels about the interaction. DMPC majors will engage in two journey-mapping activities over the course of the study: future-state and current-state journey mapping.

#### Future-State Journey Mapping

After completion of their fictionalized personas, participants will be asked to return for a second meeting. Participants will learn about and practice future-state journey mapping in this session. *Future-state journey mapping* asks participants to imagine a future journey/path that their persona might take to complete a specific goal, or, in this case, graduation with a DMPC degree. Future-state journey mapping will also be used in later research sessions (Fall 2020 and Fall 2021) when participants are asked to map their own future-state journeys.

In future-mapping sessions, program administrators will explain journey mapping as a concept and practice and then provide participants with supplies they need to complete the activity: poster-size paper or post-it notes, markers, degree plans, elective lists, and undergraduate catalogs. They will ask participants to map their persona's journey from choosing the DMPC program to graduating with the DMPC degree. Participants will have to puzzle through degree plan requirements and catalog course descriptions to successfully map their persona's journey from matriculation to graduation. At the end of the session, debriefings will follow, describing maps and discussing different paths and rationales used. After the debriefing, future-state maps will be used for analysis. These maps will be useful because they depict potential paths that students might follow to earn the DMPC degree. The maps may also expose potential problems ahead as well as participant expectations, hopes, and dreams. They may also provide insights into how DMPC scheduling might proceed based on these majors' intentions and their understanding of the degree plan.

#### Current-State Journey Mapping

*Current-state journey mapping* depicts actual interactions and touchpoints with the product instead of future interactions. Current-state maps can be updated as the user's actual interactions progress toward graduation. After walking their personas through future-state journey mapping, DMPC majors will generate their own current-state journey maps, depicting how they have progressed in the degree.

The procedures for completing current-state maps are similar to future-state maps. To remind students how journey maps work, administrators will use the persona maps that students generated previously and explain how participants will create their own journey maps in this session. After the review, administrators will provide participants with the supplies they need to complete the activity and ask them to map their personal journey from choosing the DMPC program to the current semester. Participants will again puzzle through related documents to successfully map their journeys from beginning to current-state. At the end of the session, participants will debrief the maps, describing their journeys. When journey maps are employed in later years, participants will update their maps to include additional touchpoints (advising meetings, courses, internships, and other activities) that have occurred since their last mapping session. After each session, program administrators will collect the maps for analysis and use in future sessions.

#### Summary of Phases, Methods, and Anticipated Outcomes

As noted earlier, this longitudinal study will continue for at least four years, beginning in 2019 and ending in 2022. While the four study phases will be deployed chronologically (first, surveys and user profiles; second, personas; third, journey mapping; and fourth, focus groups), some phases, such as annual surveys and current-state journey mapping, will be repeated iteratively to refine further what we know about our population of DMPC majors. To encourage

students to participate in these activities, program administrators will provide three incentives: all group meetings will include popular meals, such as pizza or burgers; at the end of each session, one student from each group will be randomly selected to receive a \$50 gift certificate; and all group meetings will include opportunities to meet and work with administrators, faculty, and advisors in the PCOM program. (Funds for six gift certificates were generously provided by an assessment award from TTU's Office of Planning and Assessment.)

Table 9.1 provides a summary of the phases: phase/focus, research questions, methods, and anticipated outcomes. Of particular note in Table 9.1 are the foci for each phase, as each phase's focus is designed to collect data from majors but also to educate majors about degree planning, internship preparation, and job placement opportunities.

| Phase/Focus  | Research questions  | Methods   | Outcomes  |
|--|---|---|---|
| Phase 1:<br>Focus on<br>DMPC majors  | <ul> <li>Who are DMPC majors?</li> <li>What are their career goals?</li> <li>Why did they major in DMPC?</li> </ul>   | <ul> <li>Annual survey</li> <li>User profile development</li> </ul>           | <ul> <li>Collect demo-<br/>graphic informa-<br/>tion and attitudes<br/>about department,<br/>college, and uni-<br/>versity in order to<br/>create a DMPC<br/>user profile.</li> <li>Create user profile.</li> </ul> |
| Phase 1, cont.:<br>Focus on<br>retention   | • Why do majors<br>change or leave the<br>DMPC program?   | Exit survey   | <ul><li> Identify pain<br/>points.</li><li> Identify compet-<br/>itors.</li></ul>   |
| Phase 2: Focus<br>on personas  | • What are the<br>characteristics of<br>personas needed to<br>track typical user<br>experience in the<br>DMPC program?  | <ul> <li>Persona develop-<br/>ment</li> </ul>                                 | <ul> <li>Develop 4-5 per-<br/>sonas.</li> </ul>   |
| Phase 3: Focus<br>on personas'<br>journeys from<br>degree plans to<br>specializations/<br>minors | <ul> <li>By their sopho-<br/>more year, what<br/>courses would<br/>these personas have<br/>taken and what<br/>experiences would<br/>these personas have<br/>had with faculty,<br/>advisors, and peers?</li> </ul> | <ul> <li>Persona current-<br/>and future-state<br/>journey mapping</li> </ul> | <ul> <li>1. DMPC majors<br/>identify pathways<br/>personas need for<br/>major, minor, and/<br/>or specializations.</li> </ul>   |

Table 9.1. Summary of study phases, foci, research questions, and outcomes

| Phase/Focus  | Research questions   | Methods   | Outcomes  |
|--|--|---|---|
| Phase 3, cont.:<br>Focus on per-<br>sonas' journeys<br>from degree<br>plans to special-<br>izations/minors | <ul> <li>What courses<br/>should DMPC<br/>majors take to<br/>complete degree<br/>plans?</li> <li>What courses<br/>should DMPC<br/>majors take to<br/>graduate with<br/>a minor and/or<br/>specialization?</li> </ul> | <ul> <li>DMPC major<br/>current-and fu-<br/>ture-state journey<br/>mapping</li> </ul> | <ul> <li>DMPC majors<br/>identify pathways<br/>needed for major,<br/>minor, and/or<br/>specializations.</li> </ul>  |
| Phase 3, cont.:<br>Focus on<br>internships   | <ul> <li>How will/do cours-<br/>es prepare students<br/>for internships?<br/>What kinds of<br/>internships appeal<br/>to DMPC majors?</li> </ul>   | DMPC major<br>current- and<br>future-state journey<br>mapping                         | <ul> <li>Update current-<br/>and future-state<br/>DMPC journey<br/>maps.</li> <li>Compare students'<br/>identified skills and<br/>coursework with<br/>those requested in<br/>internship oppor-<br/>tunities.</li> <li>Understand<br/>students' intern-<br/>ship interests and<br/>connect to career<br/>plans.</li> </ul> |
| Phase 4: Focus<br>on degree inno-<br>vations   | <ul> <li>What recommen-<br/>dations do DMPC<br/>majors have for<br/>improving degree<br/>offerings and stu-<br/>dent support?</li> </ul>   | Focus group   | <ul> <li>Collect recommen-<br/>dations for degree<br/>design changes and<br/>course improve-<br/>ment.</li> </ul>   |
| Phase 4, cont.:<br>Focus on<br>marketing and<br>recruitment  | <ul> <li>What information<br/>should marketing<br/>and recruitment<br/>materials contain<br/>to attract students<br/>to this major?</li> </ul>   | Focus group   | Collect recommen-<br>dations for market-<br>ing and recruiting<br>materials.  |

## Phase 1 Findings: Surveys and User Profile Development

To begin this study, DMPC majors were invited to complete the initial Qualtrics survey in Spring 2019, and the survey was repeated in early Fall 2019. Responses from both surveys were used to generate a user profile of the current DMPC major. Survey responses included student classifications, genders, ethnicity/races, and motivations for majoring in DMPC. Both Qualtrics surveys required a log-in, which prevented participants from submitting multiple submissions to either survey. Survey settings allowed anonymous responses, protecting student identity. Data from these surveys combined with data collected from the TTU Office of Planning and Assessment have been used to gain insights into the group's demographics, personal motivations, and goals. Those insights have been used to generate a profile that fits the DMPC first class as a whole. Specific insights from the surveys—the DMPC user-profile characteristics—are reported later in this chapter. Currently, the first iteration of Phase 1 is complete. The annual surveys have been launched, and a preliminary user profile has been developed. In addition, program administrators have gathered data from our DMPC advisor and the Texas Tech University FactBook to expand and compare survey findings. This section of the chapter details the results of this data collection phase.

#### An Opening Word About Response Rates and the Challenges of Surveys

Without question, the most important findings from Phase 1 are methodological: Using surveys to gauge student opinion and motivations is challenging. By the time program administrators received IRB approval, they had less than one month in which to launch the survey in Spring 2019. To be sure that the survey did not land in students' email junk folders, they requested that the DMPC advisor send the survey to students using software that allows her to send blanket emails to all majors. The survey was distributed to the approximately 30 majors at that time. In addition, the DMPC advisor sent two survey reminders after seven and ten days. At the end of the semester, two weeks later, administrators closed the survey. Five majors responded, a response rate of 17 percent. As required by the study's iterative design, the survey was reopened, and a request to respond was sent to majors again in Fall 2019. The number of majors had increased at the time of the survey to 61. Two reminders were sent following the initial request, but responses were again disappointing. Only eight majors responded, for a response rate of 13 percent. While these response rates certainly are not as high as administrators would have liked, online survey instruments, such as SurveyMonkey (Porter, 2020) and SurveyGizmo (Fryrear, 2015), suggest that online surveys typically have no higher than 15-20 percent response rates.

Because survey results provide useful information about DMPC majors, the results are reported in this section in spite of the low response rates. While such low rates may be criticized for their lack of generalizability, ignoring the results of those majors who did respond, from administrators' perspectives, would be indefensible. In other words, administrators realized that although the response rate was low, even a low response rate was user data that offered important insights about programmatic efficacy. To ignore the data would be to, once again, ignore the student-users who participated. If the image of students provided by these results was unclear, the image, inexact as it was, was the only one available. Further, administrators knew they would be repeating the survey annually and hoped that the picture would become clearer as the research progressed and other methods were deployed.

A related problem to lack of response is the moving target that is the number of majors in an academic program. When administrators designed the study, they proposed following the first 17 students who chose the major at the time of its first approval. By the time they had deployed the first survey, eight months after the degree was approved, the number of majors had grown to 30. Over the summer into the early fall semester, the number of majors continued to increase. In December of 2019, the number of majors had grown to 91. Although the major has a mix of undergraduates at all classifications, administrators have yet to graduate any majors, and the number of majors is increasing at the rate of approximately 30 students per semester. This growth is a result of the popularity of the DMPC major, which allows students to take courses broadly across the five departments in our College of Media and Communication: advertising and brand strategy, communication studies, journalism and creative media industries, professional communication, and public relations. Another factor that has added to the DMPC major's popularity is its design that appeals to transfer students. The DMPC program is designed so that students can enter the degree with a 60hour core-complete associate's degree from a Texas university and complete the DMPC program with only an additional 60 credit hours. This "core-complete option" has made it a popular choice for transfer students both at the Lubbock and Waco campuses.

While the degree's growth is a boon to the department and college, its effects on the study design have been complicating. Administrators had intended initially to follow the first 17 majors, but that number had increased to 30 by the time the study was approved by the IRB. Of those original 17, only 13 were still in the major (three have changed majors and one has left the university). Because of the increase, administrators decided to send the survey to all majors, regardless of when they chose the major.

#### Survey and Other Data Analysis

The desired outcome of the initial annual surveys in Spring and Fall 2019 was to construct a workable user profile of DMPC majors. This profile would provide a snapshot of the common features of survey participants. From data collected in the initial surveys and from advising records, administrators are now able to identify these commonalities:

All of the current DMPC majors are Texas residents.

- They have an average GPA of 2.85, with a median of 2.82, and a mode of 2.85.
- One-third of majors selected the DMPC program in academic year 2018-2019 when it was first approved; the other two-thirds selected the major in 2019-2020.
- First-year and junior classifications were the highest growth classifications for the DMPC major in 2019.
- DMPC student ethnicities were on par with TTU overall ethnicity figures, although the DMPC program had higher percentages of Hispanic and Black (Not of Hispanic Origin) than university averages.
- Sixty-three percent of DMPC majors have permanent residences in urban Texas cities and metroplexes, including Dallas-Fort Worth, San Antonio, and Houston. The other 37 percent are from rural areas and mid-size urban cities in West and Central Texas, such as Lubbock and Waco.

While these demographics provide us with a relatively broad swath of information about our majors, the two surveys provided more details. Three questions on the survey asked respondents about factors that influenced their choice of a major generally and their choice of the DMPC major specifically.

#### Factors Affecting Major Choice

Majors were asked to rank factors that affected their choice of major from 1 (least important) to 5 (most important). A summary of results appears in Figure 9.6.



#### Figure 9.6. Factors affecting choice of major. 0=least important to 5=most important.

Respondents in both surveys identified two factors—to learn more about things that interest me and to be able to get a better job—as most important. Preparing for graduate school was the least important factor, while the other two factors—to make more money and to contribute to the greater good—were rated mid-field. These results, considered with the results of the more specific choices question, provide a clearer picture of survey participants' motivations. Figure 9.7 summarizes the factors affecting their choice of the DMPC program.



Figure 9.7. Factors affecting DMPC choice.0=least important to 5=most important.

In response to these choices, respondents ranked career opportunities, confidence in ability to do well, and interest in subject as highly important, while barriers to another major and parental/family opinion were ranked least important.

An open question asked respondents to explain, in their own words, why they chose the DMPC major. All respondents completed this question, and three themes emerged in their answers: breadth of coursework, flexibility of scheduling, and career opportunities from the major. Sample responses from the survey are listed below:

- Because it encompassed all of the majors offered in the college, making me a well-rounded student
- It encompasses all of the educational aspects that I have the most interest in for my career.
- I initially liked this major because it seemed broad and I wasn't sure what
  I wanted to do in my professional career. Now that I have a couple internships under my belt as well as a few classes, I recognize the value of
  this degree because of where the communication industry is headed: using
  more broad skills and requiring me to have knowledge in several areas, including but not limited to: writing, photography, cinematography, graphic
  design, media relations, advertising, and public speaking.
- I chose this major because it gave me more freedom to choose other classes in the college. I wanted knowledge in more than one area of study and this was a flexible degree plan to do so.

These quotes provided insight into the ways these DMPC majors were thinking about their major as well as how the program was marketing the major to students.

#### Satisfaction With the Major

In addition to asking students about their choice of major, the survey asked participants about their satisfaction with a number of institutional and programmatic interactions. On a scale of 1 (least satisfied) to 3 (very satisfied), majors were asked to rank their satisfaction with faculty, peers, and classes. Figure 9.8 summarizes their opinions.



#### Figure 9.8. Satisfaction with faculty, peers, and courses. 0=satisfied to 3=satisfied.

In general, results from this question illustrated that respondents are satisfied to very satisfied with their courses and instructors. Of all the categories, course content was ranked lowest in satisfaction; however, this lower ranking may be a result of most of these students still taking required courses. Even juniors and seniors who transfer into the program must complete approximately 12 hours of lecture-style, large-format courses before they can take smaller, more specific courses related to their major.

A second satisfaction question asked specifically about academic advising. The College of Media and Communication has a central advising unit, but each major has a designated advisor who works closely with all students in that major. In addition, the college and the department have regular recruitment and study-abroad fairs where majors are invited to meet and converse with college deans, department chairs, and faculty. As with the previous satisfaction question, survey respondents were satisfied to very satisfied with academic advising they had received. Figure 9.9 summarizes these results.



Figure 9.9. DMPC majors' satisfaction with academic advising.0=least disagree to 5 = agree.

#### **Proficiency Perceptions**

The survey included a question asking students to evaluate their preparation for specific career-related requirements. Their evaluation was based on a three-point

Likert scale, ranking their preparation from "not prepared" to "very prepared." Student responses indicated that they felt prepared to very prepared in almost every requirement, as summarized in Figure 9.10.



Figure 9.10. DMPC majors' perceptions of profic. 0=not prepared to 3-very prepared.

#### Moving From Survey Data to DMPC Major Profile

Although the survey responses were meager, a snapshot appears from the data collected. All of these respondents are from the same state, but their homes are spread across a wide geographic area. Most respondents live in or near large urban areas within the state, but they are attending a university with campuses in smaller cities (Lubbock and Waco). The majority of respondents are White, but a growing number have Hispanic and Black ethnicities. They range across all classifications, but most respondents come into the DMPC program as first-year students or juniors who transfer from a two-year college or another major.

The majors who responded are unified about the decisions they made to choose the DMPC degree. They indicate that they have chosen the degree because they want careers in a field that interests them. They are not interested in seeking a graduate degree or attending a professional school after graduation. They are only moderately motivated by money, and they have chosen their majors based on their interests, not their parents' influence. Thus far, they are fairly satisfied with their teachers, their advisors, their courses, and their peer interactions. They would like to take more courses with content that interests them. Finally, they are confident in their career skills preparation. They are most confident in their ability to work with others in teams and their speaking abilities. Their project management skills are an area where they feel they need more preparation. Overall, however, the survey respondents are happy with their choices, their degree requirements, and the individuals associated with them. Figure 9.11 is an example of a DMPC user profile.

## **DMPC Student-User Profile**



Figure 9.11. DMPC user profile.

## The View from Here and Moving Forward

While the surveys and other data collected have given us an opening profile of DMPC majors, not all aspects of the snapshot are perfectly clear. Several of these problem areas are discussed in this section as well as the solutions being implemented to address them.

#### The Problem of Low Response Rates

As discussed in the previous section, the question of low student response rates is complicated: was the low response rate tied to time constraints, apathy to responding to emails, a dislike or oversaturation of survey requests, something else, or a combination of the above? Whatever students' reasons, one answer seems clear: DMPC majors, as a whole, do not see themselves as co-designers of this curriculum. Or as Kate Crane (personal communication, 2020) questioned, "How do we reprogram students when they've been programmed to receive academic plans, not be partners in creating them?" One possible remedy is to increase student engagement in the process. Incentives may lead to student engagement and help them gain a better understanding of the degree program and its opportunities. This understanding should lead to increased participation, but only time will tell. Another possible reason for low response rates is that students do not respond to email, preferring other channels to communicate. This possibility has led administrators to consider other means of survey completion, such as the classroom touchpoints described next.

#### Response Rate Solution: Classroom Touchpoints

Although the low survey response rate is an obvious weakness of the study, this problem has already led to curricular action. PCOM faculty and administrators have developed and are in the process of approval for two first-year courses (four hours total). The first one, Introduction to Professional Communication, will be a one-hour course which introduces students to the major, provides them with opportunities to speak with college alumni who work in professional communications, and offers the curricular pathways to complete their degree plans. A second three-hour course, Foundations in Professional Communication, will offer a broad survey of careers, competencies, and case studies to introduce students to concepts encountered in their degree plans. Taken as their first courses in the major, both the Introductions and Foundations courses will provide students with a broad foundation for the rest of their coursework. A final course, Capstone in Professional Communication, will conclude their degree. The Capstone will follow the organization of Managing the Communication Function (Gayeski, 2016), a publication of the International Association of Business Communicators. This textbook will prepare majors to move from coursework into the professional or corporate communication workplace. These courses will bookend students' degree experiences; but, more importantly from an assessment standpoint, these courses will provide opportunities to survey and interview students in classes as they begin and end their degrees. Having dedicated classroom touchpoints in the major where surveys can be included should help to solve the response rate problem.

#### Perception vs. Reality

As noted in the DMPC major profile, DMPC majors who responded to the surveys have high confidence in their career preparation. Although administrators are pleased to know that DMPC majors feel confident about their preparation, their overall GPAs (2.85 average) and their coursework status (primarily still being in first- and second-year required courses as opposed to advanced courses) suggest that administrators need measures other than student self-report to assess these skills. Student data about their perceptions of preparation is important; it lets program administrators and advisors know that they are moving them in the right direction, but they need more than student perceptions to evaluate a program's efficacy. The DMPC degree was approved with viable assessment outcomes, but administrators have very little data thus far on those outcomes. The first DMPC majors will graduate no sooner than August 2020. In addition to plans for assessment that were built into an overall assessment plan, the focus groups that are planned for the final phase of the study will help to gather more student input as will the data the college eventually collects on student placement in its annual survey.

Finally, this preliminary snapshot will become more focused as the study progresses into Phases 2, 3, and 4 to collect more student data via journey-mapping and focus group user experience activities. Through these activities, program administrators will gain more insight into who DMPC majors are, who they want to be when they graduate, and which courses best prepare students for those careers. Administrators will also gain valuable information about students' successes as students seek and accept internships and job offers.

# The Value of User Experience Data in Program Assessment

For now, the results of this study are inconclusive and provide only first impressions of DMPC majors. Through iterative studies and multiple methods, DMPC administrators recognize that program assessment is an inexact art: Some methods deployed work better than others. Some results provide better data than others. Failures are part of any UX process and cannot be avoided, but UX processes also produce successes. Furthermore, innovation is not a linear process, and continuous improvement requires longitudinal study whatever methods are used to collect and report data.

The decision to seek student input for assessment requires time, preparation, and a budget. Fortunately, administrators at this institution, with IRB approval, may bring in food for students who participate and offer small rewards for participation. As such, these administrators are particularly thankful for the Office of Planning and Assessment's Innovation in Assessment Award, which seeded their budget with an internal grant.

This study, with its UX emphasis, has moved administrative thinking in this department to another level, one where faculty and student inputs are included regularly and often within the assessment process. Whether the longitudinal study will empower students to become co-designers of the curriculum is yet to be seen. Unquestionably, engaging students and convincing them to participate in this research remains a challenge. If administrators can convince them to engage, they are optimistic that student experiences will influence their programmatic decision-making by introducing ideas and feedback that faculty and administrators could not have foreseen had they simply forged ahead with typical expert assessment mechanisms. Employing user experience methods offers a methodological rationale for including student voices and experiences in program assessment that other means of assessment simply do not. Departmental administrators also feel optimistic that adding student user experience research into the assessment mix will establish an academic culture in the department where students are truly at the center of curricular design and where participation there will inform student choices about courses to take and avenues to explore in the College of Media and Communication and beyond.

### References

- Baxter, K., Courage, C., & Caine, K. (2015). Understanding your users: A practical guide to user research methods (2<sup>nd</sup> ed.). Morgan Kaufmann.
- Carnegie, T. A., & Crane, K. (2019). Responsive curriculum change: Going beyond occupation demands. *Communication Design Quarterly Review*, 6(3), 25-31.
- Fryrear, A. (2015). Increasing your survey response rates. *Alchemer, formerly SurveyGizmo*. https://www.surveygizmo.com/resources/blog/survey-response-rates/
- Gayeski, D. (2016). *Managing the communication function* (3<sup>rd</sup> ed.). International Association of Business Communicators.
- Getto, G., & Beecher, F. (2016). Toward a model of UX education: Training UX designers within the academy. *IEEE Transactions on Professional Communication*, 59(2), 153-164.
- Graduate Management Admission Council. (2021). Free Persona Templates. https:// www.gmac.com/reach-and-recruit-students/recruit-students-for-your-program/ free-persona-templates
- Kalbach, J. (2016). Mapping experiences: A complete guide to creating value through journeys, blueprints, & diagrams. O'Reilly.
- Luma Institute. (2012). Innovating for people: Human-centered design planning cards.
- Monroe, M. A., & Chronister, M. (2015). *Journey mapping the customer experience: A USA. gov case study*. Digital.gov. https://digital.gov/2015/08/12/journey-mapping-the-customer-experience-a-usa-gov-case-study/
- Office of Planning and Assessment. (2017-18). 2017-2018 methods of assessment. Texas Tech University. https://www.depts.ttu.edu/opa/assessments/2017-2018-Methods-of-Assessment-Infographic.jpg
- Porter, B. (n.d.). *Tips and tricks to improve survey response rates*. SurveyMonkey. https://www.surveymonkey.com/curiosity/improve-survey-response-rate/
- Rose, J., Racadio, R., Wong, K., & Nguyen, S. (2017). Community-based user experience: Evaluating the usability of health insurance information with immigrant patients. *IEEE Transaction on Professional Communication*, 60(2), 214-231.
- Southern Association of Colleges and Schools Commission on Colleges. (2018). Principles of accreditation: Foundations for quality enhancement. SACSCOC. https://sacscoc. org/app/uploads/2019/08/2018PrinciplesOfAcreditation.pdf
- Still, B., & Crane, K. (2016). *Fundamentals of user-centered design: A practical approach*. CRC Press.
- Sullivan, P. (1989, October). Usability in the computer industry: What contribution can longitudinal field studies make? In *International Professional Communication Conference Communicating to the World* (pp. 12-16). IEEE.