UEAC Explorer Programming

Discovery Work Report - June 2018

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The Academic Technology Design Team (ATDT) is partnering with the advisors in the University Exploration and Advising Center (UEAC) to better understand the students these advisors serve. Over the course of the Fall 2017 and Spring 2018 semesters, the ATDT completed discovery work to gather data on these students from a variety of sources, to inform programming recommendations for the UEAC.

Interviews

ATDT wanted the project to be built around feedback directly from students. The cornerstone of the discovery work, then, was a series of ethnographic interviews with current students advised by the UEAC. To build these interviews we consulted several resources. The first, *Practical Ethnography: A Guide to Doing Ethnography in the Private Sector* by Sam Ladner, detailed how to conduct sound research in a context of limited time, resources and subjects. To craft and revise questions carefully, we consulted work by David K Jordan, Professor of Anthropology at UCSD geared toward helping graduate students doing fieldwork. We also reviewed *Qualitative Research Methods: A Field Guide*, a handbook developed by Family Health International and Natasha Mack. We read work by Beth Leech, a journalist and researcher at Rutgers University, on asking questions and interviewing to ensure maximum gathering of data. Finally, we found a validated ethnographic interview guide for an Academic Pathways Study, conducted by the University of Washington over several years to improve the experience of their engineering students.

This led to the creation of the script included as an appendix, which was used to guide discussions with UEAC students. Questions were broad and covered topics like how students chose to come to CU, how they found out they were admitted, what majors and careers they were considering, and how their first year had been so far. Themes that emerged in these conversations are highlighted below.

12 students total were interviewed for an hour each. We invited 119 ACO-Engineering students from a randomized list--from that, six signed up and six attended. We started with randomized lists of ACO - Business students, but due to low response rates, we invited all 709 of them ultimately. From 709, twelve signed up to interview and six attended. This resulted in interviews evenly split between the Engineering and Business tracks. Of these 12, two were female and ten male, which reflects the demographic makeup of the larger group. Four were out-of-state and eight were in-state. All were US-born, and one was confirmed first-generation for college. Each student received $15 for their time in the form of an Amazon gift card.

Other Data Gathering

After these interviews were complete, ATDT talked in-depth with two UEAC advisors about what the advising year looks like for them, their take on students' biggest needs and issues, and their perspective on an advisor’s role in ACO students’ first years. We also interviewed two student
Peer Advisors, one of whom had a linear path through CU, and one of whom changed majors more than five times.

During this time, ATDT met with campus partners who work in overlapping areas, including SASC, the BOLD Center, and Career Services about potential partnerships and transferable knowledge. Additionally, ATDT met with a vendor who provides a student support content portal to Colorado State University, You@CSU. This portal is geared toward providing students vital, holistic information in a self-directed, self-paced format.

ATDT also explored the web presence of similar advising or coaching units at peer institutions, to understand how other schools currently support students in these situations. We looked specifically at tools used by the Academic Success Center at Oregon State, and Student Success Programs at Purdue University, as models for how the UEAC might expand their web presence.

Toward the end of spring semester, ATDT reached out again to UEAC students to hold focus groups on initial prototypes of ideas. These are reviewed in greater depth later in this report.

Interview Themes

Low Familiarity with Campus Resources

When we talked with these students in February, they had already had one semester on campus and were in progress with their second. Still, we found them unaware of many basic resources offered by CU Boulder and lacking in understanding of how to take advantage of them.

When students were aware of particular departments, resources, or events, they mostly described hearing about it through word-of-mouth, or by physical exploration. For example, one student was familiar with the Engineering Career Services office, but only because the student walked by the office every day. Others described apps they’d downloaded because they overheard a conversation about it.

Transition & Autonomy

When asked in general terms about their first year at college, the majority of students expressed enjoying newfound autonomy, while also being overwhelmed by it. “Being away from your parents, as much as I love them, it’s good to have that freedom and try to figure things out by yourself and to overcome problems by yourself,” said one. “It makes you feel like, ‘you got this, you can do this.’”
They appreciate being able to select their own classes, but several were urgently seeking structure of some kind to avoid being overwhelmed by choice. They described feeling less supported compared to high school, when parents and teachers would actively intervene and help them manage schedules and academic performance. “It’s definitely a humbling experience to come to college, because no one cares about you,” claimed a student. “If you don’t come to class you’re teachers aren’t going to, like, call your parents and be like ‘where are you?’.”

It appeared to be slowly dawning on a few students that they needed to be proactive in setting themselves up for success. One student described a realization that it wasn’t enough to send just one email about an urgent issue, when the recipient might not be able to solve the problem, or might not answer the email for a week. Instead, the student said they might try to send emails to a few different people to ensure timely resolution.

This is a point of tension for them, but they attribute this tension not to a normal transition process, but to a lack of support. For instance, some of them have trouble scheduling last-minute appointments with advisors due to high advising workloads. Rather than work on scheduling in advance, they don’t schedule at all, and feel they have not received the support they need.

Rigidity in Major Preference

The students we talked with did not convey any open-mindedness toward selection of major. Each one of them was more focused on getting into their chosen major than on ascertaining its fit or exploring alternate options. Though we knew they were a combination of ACO - Open Option, Pre-Engineering and Pre-Business, most self-described to us as business or engineering majors. They told us, “I'm going to be aerospace,” or, “I'm in business.” Some clarified later in the interview when we asked how they found out they’d been admitted, explaining they hadn’t directly been allowed into their college of choice. Some did not clarify and described only being in Leeds or Engineering.

These students didn't see themselves as explorers, at least in early spring of their first year. Their mission was still to be accepted into their initial chosen major.

Most had not, at this point, thoroughly explored alternate routes in case they were not able to IUT or meet the requirements of a pre-program. The attitude overall was to address it after spring grades were posted, if they hadn’t gotten in. One student had already not received the required grade in a Leeds pre-requisite, but was planning to retake it sophomore year, choosing to delay IUT into the second year rather than reroute the plan.

Major/Career Loop

This subset of students strictly equate major with future career. Unfortunately, these students are also deferring questions about career for several years, because they “have time.” This prevents them from gaining more knowledge of potential careers and reflecting on fit with their
own skills and goals. It allows the misconception that major and career have a 1:1 relationship to continue unchallenged.

They remain committed to a major based on limited knowledge of a particular career, and have trouble considering alternatives. They believe their entire future career depends on this choice, and they have few models to work with that allow for jobs in fields unrelated to major, changing majors, or choosing a career that does not require particular majors. This adds pressure to remain on track toward a particular major.

Parent and Family Role

One area that surfaced during these interviews, which has been confirmed in previous ATDT projects, is that of parent and family involvement in the onboarding process. Some students described their parents as monitoring their CU emails over the summer and actively reminding students to complete tasks.

Though they allow family members to handle logistics, they take ownership of critical decisions such as major choice. We asked students directly whether and how their parents or families were involved in their choice of university and major. Each student we talked to attributed choice of major to themselves rather than their parents.

That said, many appeared to be modeling choices made by parents, relatives or close family friends. Several would-be engineers had family in engineering already, for example. We didn’t press this issue too deeply with most of our students, but one did open up when asked a more directed follow-up. “I felt innate pressure because my dad’s an engineer, my sister is an engineer,” said this student. “It’s more like they’re in a group and if you don’t go towards that, you’re letting them down. It’s kind of a silly worry. I never did communicate that to them.”

Initial Recommendations for UEAC

Based on the above needs, the ATDT created preliminary recommendations for UEAC programming. These were subsequently revised in focus groups with students and with UEAC advisors.

Challenges

During discovery work, we met with Becca Ciancanelli, the STEM Coordinator for CU’s Student Academic Success Center (SASC). Ciancanelli motivates SASC students by providing an opt-in “contract” that offers rewards if fulfilled. In Ciancanelli’s plan, students select academic and metacognitive skills from categories that they will actively practice, and they fill out regular self-reflection surveys so their activity is tracked.
ATDT proposed to develop a list of twenty activities to UEAC students, who would select which tasks to complete and earn some kind of incentive. Activities would focus on exposing students to information they need and developing self-sufficiency skills to promote, not just academic success, but transition to college and gathering of information on skills, interests, and possible alternate majors. As noted above, students 1) need resources actively pointed out to them; 2) need to be told how to gather information and broaden their experience, for example through informational interviewing; 3) need a sense of structure, a plan, or a set of instructions to follow during their transition.

Print Material

Because students aren’t very engaged in the onboarding process over the summer (some students confessed they didn’t start checking their email until coming to campus), the ATDT explored possible print mailing options targeted specifically to UEAC students. An indirect benefit of mailing print to UEAC students is exposure to their families. Depending on level of family involvement, the print material could educate and illuminate both students and their families. It would focus on introducing families to the UEAC and increasing trust, spelling out steps for student success, and giving students a sense of a plan.

Website Buildout

The UEAC, as a new unit, doesn’t have an extensive web presence. Expanded web resources will be useful given student sentiment that they can’t access their advisors quickly enough. If UEAC resources are available online, particularly those that can be personalized to some degree, students may be able to do some of their own research and exploration while waiting to meet with their advisors.

Students may also appreciate having some types of content available to them without having to meet with someone first. When ATDT met with You@CSU, the developer described how students could take a brief quiz and content would customize without them needing to state directly that they were interested in a particular topic. This was helpful on topics like depression, which students may not feel comfortable adopting as a label for themselves, but which may still be relevant to them if they’re experiencing symptoms.

Given that UEAC students do not identify as explorers, and may have trouble discussing uncertainty they do feel with families or advisors, developing resources they can access without having to identify in a particular way could be helpful.

A stronger UEAC web presence would also be visible to families, and some content could be customized to them to help them understand the UEAC and its role in their students’ first year.
Prototyping & Focus Groups

The ATDT invited previously interviewed students back to review prototypes of central project ideas. Two focus groups of two and four students, respectively, spanned 1.5 hours. Students discussed the print material prototypes and the proposed challenges.

At this point, the print mailer had evolved into a “trail map” of the first year going up a mountain, with points along the way being particular “challenges” and the endpoint finding a “best fit major.” We had shown this to two peer advisors before running it by first-year students. We planned to move forward with a poster-sized map sent to each student over the summer if budget allowed. We also brought formats we’d experimented with earlier, including a tabloid-sized trifold and a smaller square paper with a starburst fold that would open dramatically.

We also discussed the idea of challenges with the students, giving a few examples of activities we’d developed and asking for overall interest in challenges as a whole, as well as ideal timing for each one.

Map Feedback

We were surprised when students expressed a preference for the smaller trifold version of the map, rather than the poster. Students were shown the poster prototype first, and expressed admiration but confusion when viewing it for the first time. When shown the trifold, impressions were more positive. One student talked about being able to look at it while sitting in a chair rather than having to clear a table to unfold it. Another mentioned that the smaller image was easier for the eye to take in all at once. Though peer advisors (shown only the poster) had discussed hanging the map on the wall, the first-years didn’t express interest in that. They also brought up that they might not take any version of the map with them to school if received over the summer. They suggested delivering it to dorm rooms for students during the first week on campus.

Challenge Feedback

The biggest takeaway from the focus groups on challenges was that our list of 20 potential activities was far too many, even if they were optional. Students said we should select three to five and not designate them as optional.

We asked about a limited number of specific activities to gauge interest: completing CliftonStrengths, meeting with a career advisor, and researching three unfamiliar majors. The first two were highly interesting to students, while all of them would have refused to research majors without any guidance. One student made a point about meeting with a career advisor, which was that they would assume that a meeting meant they had to have a career plan figured
out to meet. We discussed ways we could message and structure this activity to make it clear that the advisors would help students create potential plans rather than require them.

Final Programming Recommendations

Taking the focus group feedback, we modified our ideas and present the final recommendations below.

Print Mailing - Trifold Map

We recommend the mailing of a tabloid-sized map in trifold to each student over the summer, budget permitting. ATDT has prototyped this map and will finalize it in early June, so students can receive it by early July. This enables families to see the map as well.

Challenges

Tasks for students are limited to three per semester. Given the feedback that students may leave their maps behind when they arrive for the fall semester, the advisors have suggested creating fall and spring checklists that reiterate tasks for those semesters, to be given to students during advising appointments or drop-ins. ATDT will prototype these checklists over the summer. ATDT recommends the tasks also have their own page on the UEAC website, which students can reference for further detail.

Web Development

To start building out UEAC’s web presence, the ATDT recommends development of content in a few areas.

First, ATDT recommends the development of “Student Profiles” on the UEAC website. These should provide examples of CU Boulder students who successfully IUT’d, who found an Arts & Sciences major, and who majored in one thing but pursued a career in something unrelated. These profiles should help students understand the many potential paths to success at CU Boulder, as well as any families who access the content.

ATDT also recommends development of an FAQ page, with sections for both students and parents and families. This will help both students who are seeking out the UEAC site specifically, as well as those who are using search strings in Google about advising questions. This will also help families who may not understand what the UEAC is and who may have questions about how their students will be served.

ATDT recommends making use of the Web Express form feature to enable dynamic content for students based on selected interests, preferences, or concerns. ATDT has prototyped and demoed this feature for the UEAC, which will create and finalize content, as well as implement.
Finally, the ATDT recommends that Google Analytics be added to the UEAC website to enable monitoring of web traffic and establishing of benchmarks, to be tracked in the upcoming 2018-2019 academic year.
Appendix - ACO Student Interview Script

Introduction and Explanation

- Thank you for speaking with us today. We’re from OIT’s Academic Technology Design Team and we’re partnering with advisors from the UEAC to understand student experiences in coming to college, choosing a major, and figuring out career options.
- There are no right or wrong answers here! We’re just here to hear about your experience.
- Here is a consent form. Could you please review it, ask us any questions and sign it. We’re happy to send you a version via email afterwards if you’d like.

1. Let’s start by talking a bit about how college is going so far.
   a. What classes are you taking this semester?
   b. Are you involved in any extracurriculars?

2. Let’s talk a little bit about before you came to CU.
   a. Can you tell us how you decided to come to CU? [looking for how they describe decision-making process]
      i. Can you tell us how you found out you were accepted to CU?
         1. *Probe about the letter* - Can you tell us how CU communicated to you that you were accepted?
      ii. Were you looking at multiple universities or colleges? How did you decide on CU?
      iii. Were you considering multiple majors or programs? How did you decide?
      iv. Would you say your family was involved in the decision-making process? In what ways? How?
         1. *Probe about steps they took to help decide; ways they research or learn about options; preferences for receiving information; role of parents/family*

3. Once you decided to come to CU, what types of things did you do over the summer to prepare?
   a. Were you in touch with anyone at CU over the summer?
      i. Did you contact any offices over the summer?
   b. Would you say your family was involved in your preparing for CU over the summer?
      i. If yes: How were they involved?
      ii. How did you feel about their level of involvement?
   c. How did you feel about coming to CU over the summer?
   d. Did you have experiences over the summer with CU that you would describe as particularly good? Can you tell me about one of those?
      i. *If needed:* “So what was it that made it a good experience?”
e. Did you have experiences over the summer with CU that you would describe as particularly bad? Can you tell me about one of those?
   i. *If needed:* "So what was it that made that a bad experience."

4. *You’ve told us a bit about the summer. Let’s return to how the current year is going. Have you picked a major?*
   a. If yes:
      i. How did you choose this major?
         1. Can you walk us through how you got to this major? How did you approach this process? [mindset]
      ii. Have you considered other majors?
         1. Related to your intended major
         2. Unrelated to your intended major
      iii. Can you tell us how you became interested in this major?
         1. If needed: What were some of the experiences that were important in getting you interested in your major?
      iv. Did you ever feel pressured to pick a major? Could you walk us through that? What’s an example of a conversation you had with ____?
      v. What does it feel like to know what you’re majoring in?
   b. If no:
      i. What are some of the options you’re considering?
      ii. Can you tell us how you became interested in ______ (major)? (one at a time)
      iii. What do you think are the main factors that will help you make your decision? What will you think about when you have to pick one?
      iv. One of the most common questions I hear people ask students on campus is “what are you majoring in?” How do you answer people when they ask you that question?
      v. Do you ever feel pressured to pick a major? Could you walk us through that?

5. *Thinking about your options for majors, how have you gone about gathering information?*
   a. Who have you talked with about your major options?
      i. If Advisor: Tell us more about those conversations.
         1. What’s it like to talk with your advisor about choosing a major?
      ii. If Family: Tell us more about those conversations.
         1. What’s it like to talk with your family about choosing a major?
      iii. If Friends: Tell us more about those conversations.
         1. What’s it like to talk with your family about choosing a major?
      iv. Have you had discussions about choosing a major that you would describe as particularly good? Can you tell me about one of those? *If needed:* "So what was it that made it a good experience?"
v. Have you had discussions about choosing a major that you would describe as particularly bad? Can you tell me about one of those? If needed: “So what was it that made it a bad experience?”

b. What informational resources have you used? Google? Etc?
   i. Have you used any resources that you would say are particularly good?
   ii. Have you used any resources that you would say are particularly bad?

c. What questions do you still have about your major or choosing a major?
   i. Can you tell us some of those questions?

d. What concerns do you have about your major or choosing a major?

6. Have you thought about jobs and careers after your degree?
   a. Are there particular jobs or careers that currently interest you?
      i. What interests you about these jobs or careers?
      ii. How have you found out about these options?
      iii. What questions do you have about how your major affects your job options?
      iv. What concerns do you have about how you major affects your job options?