

**CID<sup>2</sup>**

CENTER FOR INSTRUCTIONAL DESIGN  
COMPUTER INTERACTION DESIGN

# Designing for Instructional Design

**Building the foundation for the Center for Instructional Design's  
success through research, design, and user engagement strategies**

**UCI MHCID**

**UCI** Center for  
Instructional Design





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# CID<sup>2</sup>

**CENTER FOR INSTRUCTIONAL DESIGN  
COMPUTER INTERACTION DESIGN**

Team members:  
Megan Cody  
Jacquie Parker

**UCI** Center for  
Instructional Design

Advisor:  
Megan Linos

University of California, Irvine  
Master of Human-Computer Interaction  
and Design  
Cohort 1  
Summer 2017



# Special thanks to...

...our CID partners

Megan Linos

Nancy Wile

Janet DiVincenzo

Stephen Wilcox

Ladawna Minnis

Jennifer Foug

...our MHCID mentors

Gillian Hayes

Bill Tomlinson

Darren Denenberg

Krithika Jagannath

Julia Hayes

...and all the faculty and staff from University of California, Irvine who participated in our survey and interviews

Sincerely,

Handwritten signature of Jacquelin Fabre & Megan Gody. The signature is written in black ink and features a large, stylized initial 'J' for Jacquelin Fabre, followed by an ampersand and the name 'Megan Gody'.

# Executive Summary

## Impetus for the Project

The Center for Instructional Design wants to establish their presence, increase usage, and promote faculty engagement with each other through the establishment of the center as a “hub” for teaching innovation and learning collaboration. In an order to be the thought leaders on campus and to provide services that bridge together the resources and the experts, the new leadership of the Center for Instructional Design called on the partnership with MHCID to better understand how to reach and engage their stakeholders.

## The Challenge

Over the course of the capstone project, team CID<sup>2</sup> implemented user-centered design principles to address the multifaceted challenge. First, help define the focus areas for the center based on current trends in the field, what other universities offer, and what the UCI faculty and staff want. Then use this data to inform the design of the website to be a tool to get users to engage with the center and use their services.

## Process

Team CID<sup>2</sup> utilized both external and internal research initially to have a better understanding of the field of instructional design, which is the practice of creating educational experiences for students which make the acquisition of knowledge and skill more efficient, effective, and appealing. We then used a competitive evaluation, interviews and survey methods to define what was specifically needed by the UCI faculty and what would align with the culture and mission of the UCI. The double diamond method helped us design for the underlying best practices for implementation of these key areas of focus we found from our research.

## Results

Through research, we identified that the two main areas of focus for the website would be Contact Us and Events. We provided a mockup deliverable that made these two areas an effective and efficient call to action for visitors of the site. This allows the CID team to interact with people simply by spreading awareness of the CID staff's availability and willingness to be of assistance, and by promoting the expertise of the staff through the events they put on. Finally, we provided strategic recommendations on methods to engage their users, including a train-the-trainer model for representatives from the different academic departments across the campus, and providing short How-to's or compelling fact sheets in an easily digestible format to catch their attention and to establish trust that the CID is an expert in their field.



**The Center for Instructional Design and the Master's for Human-Computer Interaction & Design** program teamed up to strategically align the center's services with the university's mission to promote student and faculty excellence.

## Why it Matters

University of California, Irvine has set forth a bold strategic plan based on four strategic pillars. The second pillar is “First in Class: Elevating the Student Experience to Prepare Future Leaders.” As a comprehensive research university, there is an emphasis on student growth, which can be achieved by fostering excellence in teaching and learning. Utilizing modern technological tools to create the most effective learning environments is a path to success on this goal.

The Center for Instructional Design lives at this intersection of these pedagogical innovations and technological advancements of Pillar two. Campus-wide utilization of these services is a success for the University as a whole, as the more successful the faculty are in the classroom the more UCI will be a sought-after destination for the most talented and ambitious students.



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# Introduction

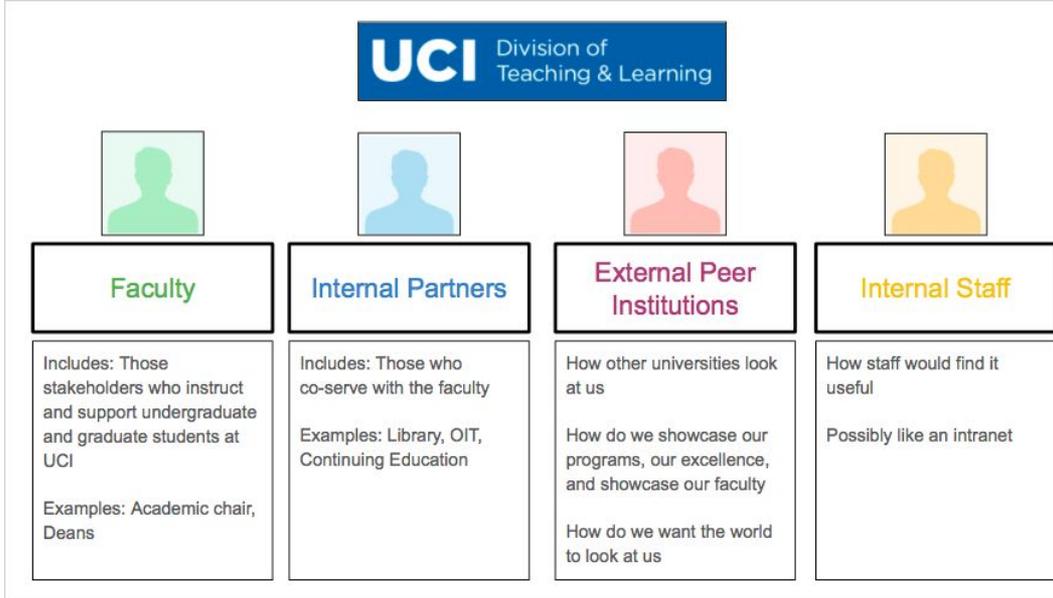
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# About UCI's Mission for Excellence

The University of California, Irvine entrusts the Office of the Vice Provost for Teaching and Learning (OVPTL) to oversee three major Divisions with the University. These include the Division of Undergraduate Education, the Division of Teaching and Learning, and the UCI Summer Session. Specifically through the Division for Teaching and Learning, commonly referred to as the DTL, the Vice Provost is able to focus on ensuring that the faculty and staff have the resources that promote academic excellence and student success.

In order to provide campus-wide guidance and leadership for curricular innovations, the DTL has specific areas of focus within three centers. Two of the centers focus on engaged instruction and research behind best practices and methodologies, the Center for Instructional Design, under the new direction of Megan Linos, has taken on initiatives for the development of pedagogically effective online and hybrid courses.

# Who is CID?



The CID serves faculty, lecturers, postdoctoral scholars, and teaching assistants, along with staff supporting university courses. While the CID was our client, their client, or end user, of the CID is the faculty. We tried to stay true to the mental models and expectations of the personas of these key stakeholders and partners who would be looking the to CID for resources or would visit their website.

# Why CID Wanted to Work with MHCID

Newly-appointed Director of the Center for Instructional Design, Megan Linos, began working with the MHCID faculty as they embarked on laying the foundations for a low-residency masters program in human-computer interaction and design. Through this collaborative process, Megan Linos expressed, “We were eager to set up strategic focus in line with the University’s strategic mission. We were urgently needing a website because it’s only one page right now. ...There was an opportunity to analyze the target audience, the faculty.”



**It’s an exercise in branding. A website is a very powerful tool that defines your role based on how you display the information. We’re hoping to use our website as a way to attract more faculty because we’re building from scratch.**

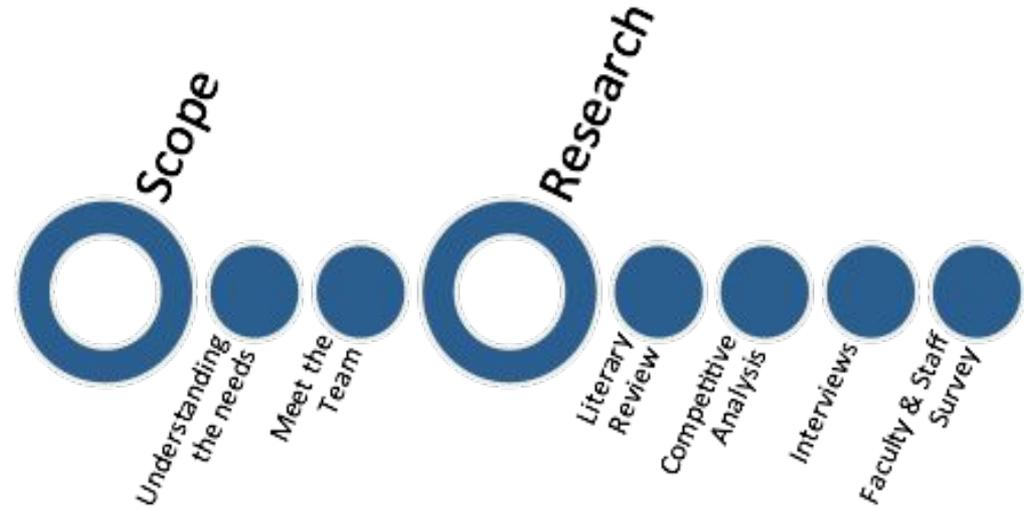


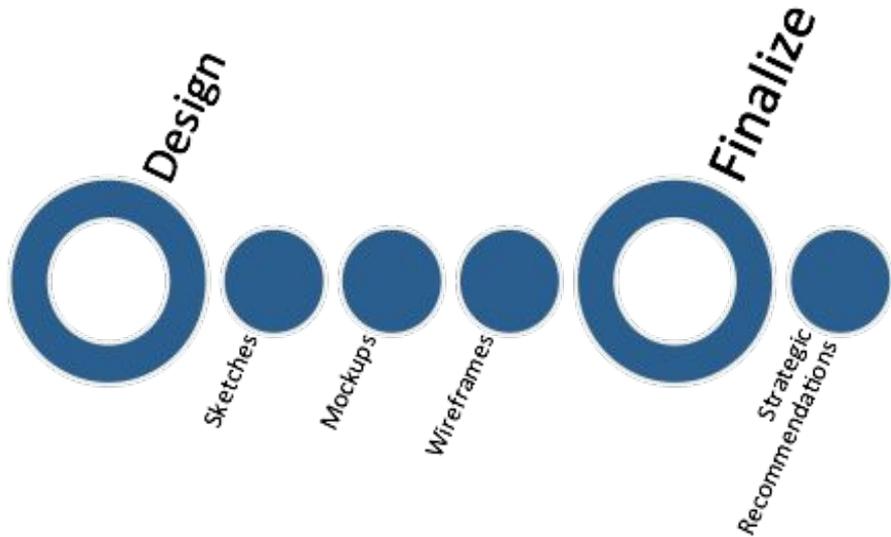
Given the opportunity to utilize user-centered design for a team dedicated to innovative thinking for professor-student interfaces and interactions, the partnership was set up for like minded collaboration from the beginning. The CID wanted to create a sort of strategy or tool, which in this case was the department website, to really voice to our audience all that they can do for them. The capstone project served as a way for the CID to have a third-party consultant view of how to better define what their focus should be, and of how their website and information presentation could be more inviting for faculty engagement.

# Timeline

## Needs Analysis

We researched instructional design trends and key areas of service to uncover areas of opportunity. After initial discussions with the CID team, we performed a literature review and competitive analysis to become more versed in this field of academia. The bulk of our field research came from contextual interviews, for which we interacted with over 20 faculty and staff. We synthesized our data and generated initial set of strategy recommendations that would help inform our design.





## Design & Recommendations

We pushed forward with user-centered design methodologies that helped continue the conversation around best practices for user engagement. The iterative process and feedback loops allowed us to go broad with our ideas in order to identify and hone in on effective techniques. We selected and refined our recommendations, at each stage gaining more insight that ultimately allowed us to present designs that spoke to the most effective activities a user could perform on the site in order to increase engagement.



# Designing for Design Project

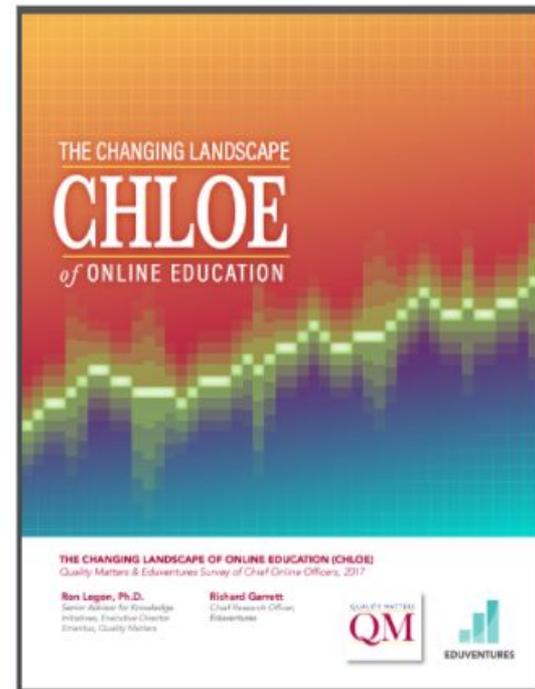
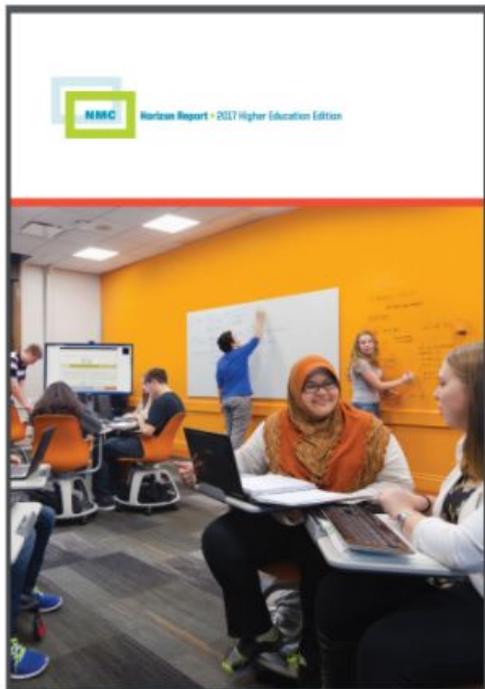
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# Research

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# Literature Review

The key areas of focus for the CID that would align with the current innovations in instructional design are:

## **Faculty Development**

Include: consulting, training, support, and resources, workshops to be successful in the classroom

## **Digital Learning: Online Programs & Course Development**

Provide: best practices for assessments, learning outcomes plan, broad technical aspects of designing courses

## **Faculty Learning Communities**

Showcase: Pedagogical innovation, uses of new technology, and collaborations with OIT, DCE, DUE, library, academic departments, etc.

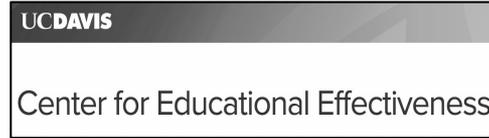
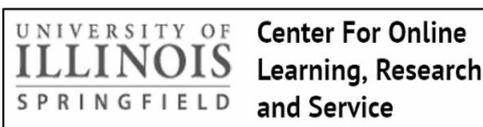
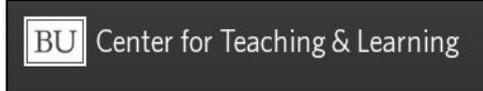
In order to achieve a full understanding of the services and offerings of instructional designers, we began with a literary review of scholarly papers. These secondary sources on current knowledge, substantive findings, and theoretical and methodological contributions helped us create the framework in which we evaluated what other universities offer in our next phase of research, the competitive evaluation.

# External Research: Summary & Purpose

We began the project with a broad look at the field of Instructional Design by doing competitive evaluations on similar programs at other universities. We gradually moved toward an in-depth analysis of the current interactions of instructional designers with the faculty on the UCI campus.

Using a competitive evaluation method, we investigated what related universities have done and are doing to be successful. The goal was to gather intelligence that helped to inform the strategic approach, offerings, and design.

# Universities Evaluated

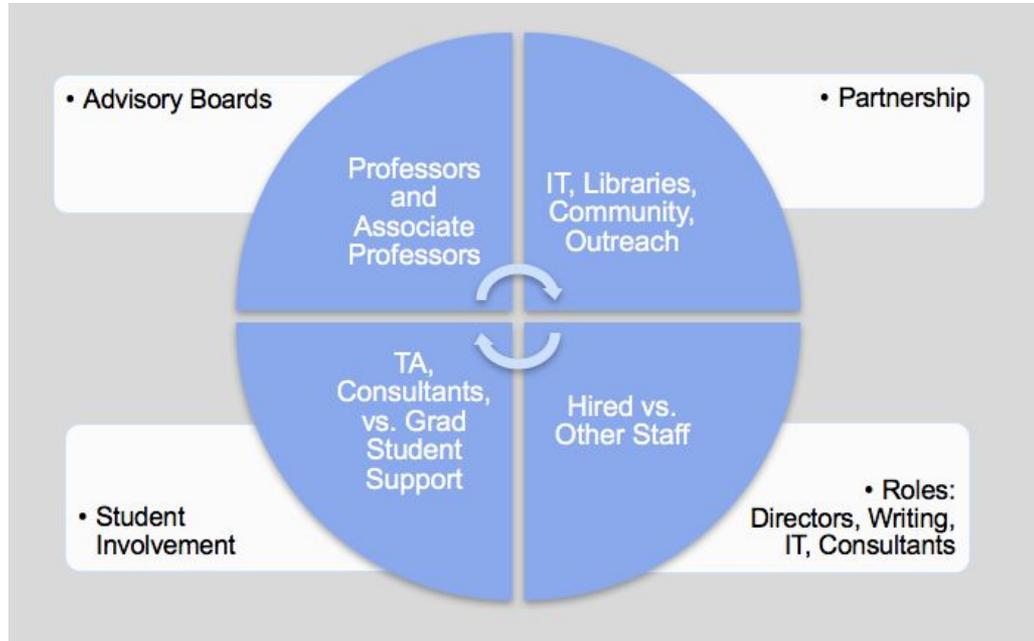


During the competitive evaluation, we focused on the strategic goals, services and programs, key issues, and themes of each of the ten universities. This data helped us understand how the center at each university aligned itself.

Armed with this information, CID had a framework they could follow when laying out their site and while determining offerings.



# Organization Chart



Each university organized their employees in a different manner. Based on the small size of the current team, we decided to not to include an organizational format within our recommendations, since implementation would be difficult at this time. However, we did present an overview of the strengths we saw in other programs' division of roles and focus areas.

# Internal Research: Summary & Purpose

## Surveys

We sent surveys to UCI faculty and staff to learn their thoughts on online teaching, DTL, and CID. We gathered data on what offerings they would be interested in seeing and how useful they would be.

## Interviews

We spoke with UCI faculty and staff who had worked with CID in the past. We wanted to understand what worked about the interaction and what could be optimized in the future. These qualitative one-on-one interviews allowed us flexibility to dive deeper into areas the interviewee had more experience with and skip over areas they do not have thoughts on.

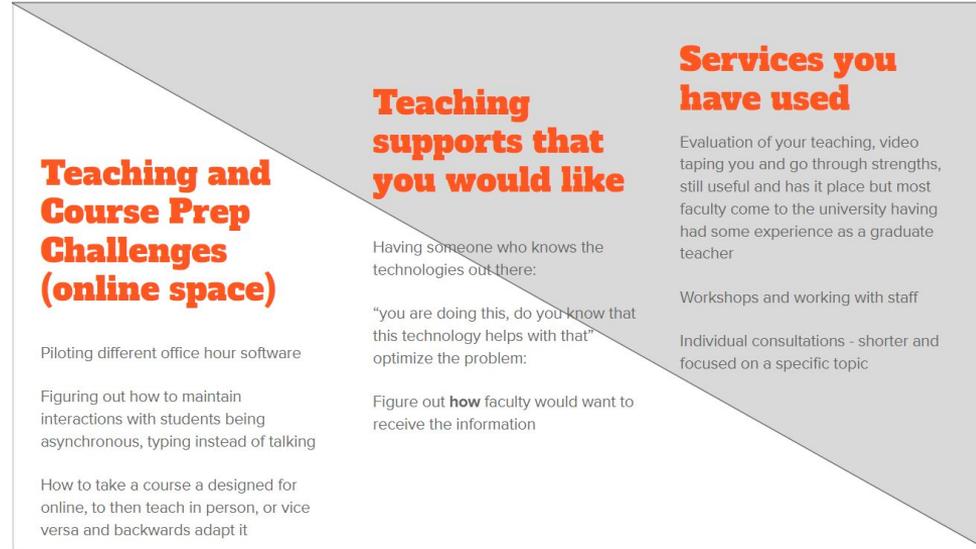
# Internal Research: Process

## Surveys

CID provided a list of faculty and staff who had previous contact with the center.

## Interviews

CID provided a list of faculty who had worked with the department to create online courses. Because of this experience, these faculty members were able to give us an in-depth look at what worked and did not work about the process and experience.



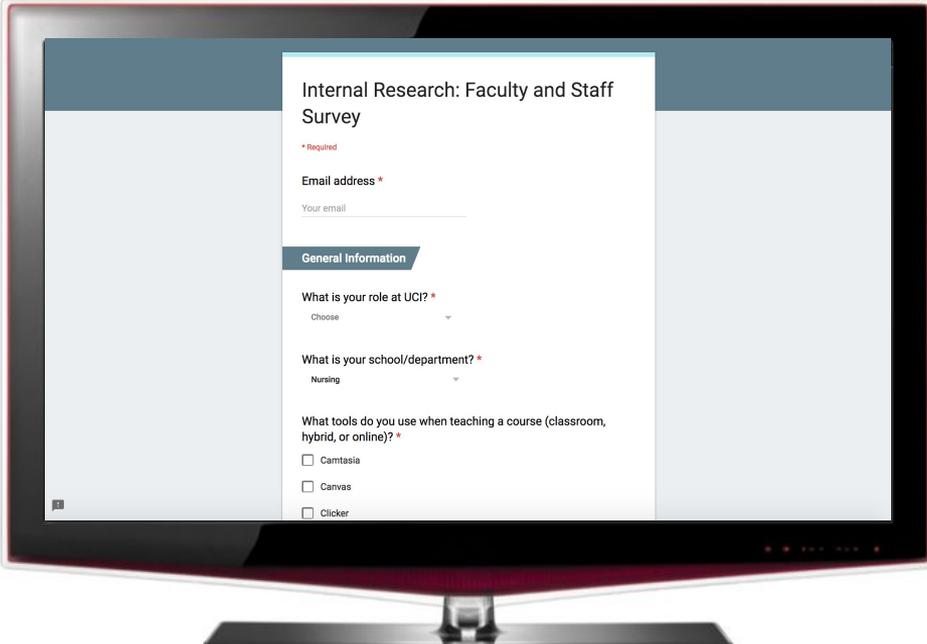
# Internal Research: Survey Findings

## Challenges Currently Face:

- New technology for the classroom
- Online teaching requires more attention to detail
- Assumption that must imitate in-person environment online
- Technology issues and integration

## Improvement Suggestions:

- TAs should be trained on how to use EEE/Canvas/scantron so professors don't have to
- Sessions to observe classes of faculty who win teaching awards



The image shows a computer monitor displaying a survey form. The form is titled "Internal Research: Faculty and Staff Survey" and includes several sections:

- Required:** A red asterisk indicates that the following field is required.
- Email address \*:** A text input field with the placeholder text "Your email".
- General Information:** A section header with a blue background and white text.
- What is your role at UCI? \*:** A dropdown menu with the placeholder text "Choose".
- What is your school/department? \*:** A dropdown menu with the placeholder text "Nursing".
- What tools do you use when teaching a course (classroom, hybrid, or online)? \*:** A list of checkboxes with the following options:
  - Camtasia
  - Canvas
  - Clicker

# Internal Research: Interview Findings

While the original evaluation / consultation method of taping the teaching and reviewing is useful **most faculty come to the university with graduate teaching experience so it is more useful to have targeted, topic or area of improvement specific consultations.**

UCI has always been successful with pedagogical fellowships for TA teaching and graduate student teaching, but we are looking to grow in this area still. Goal: **Get more faculty and grad students on-going training instead of the one time mandatory training.**

Best way to reach faculty is **through their departments and to have another faculty member provide an endorsement.**



One of the biggest things that we are moving towards now, is really helping faculty understand what the role is of the instructional designer as they move to online courses and technology. I wouldn't say we have a missing service, but we have a space where we have to **educate faculty.**

- Vice Provost of Teaching and Learning



# Design

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# Current site

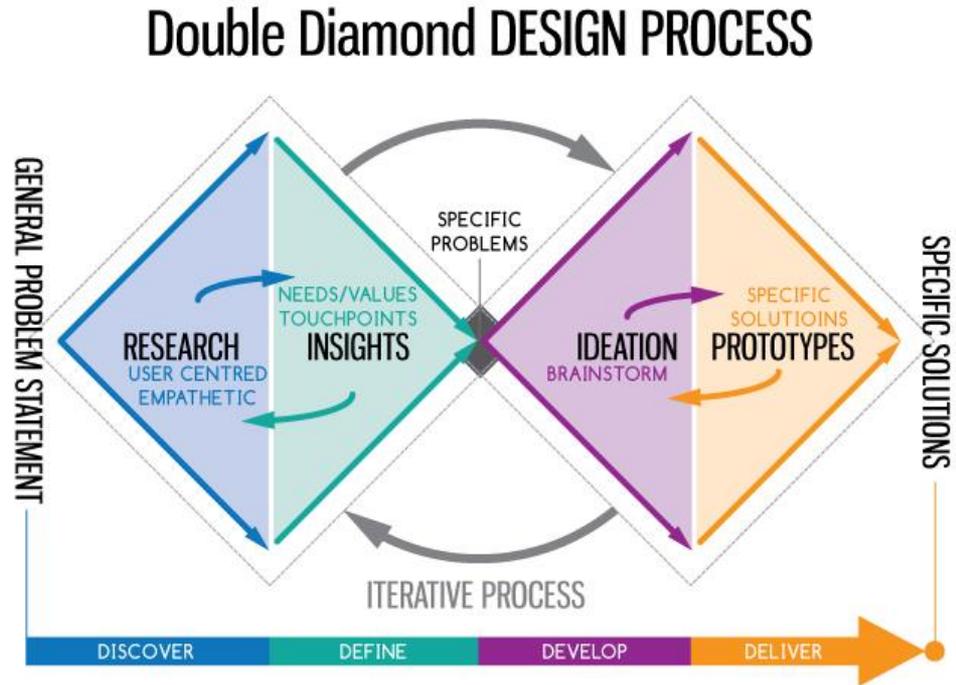
CID has a bare-bones website currently. They recently built up the team and part of this new arrangement was developing a new website.

The team was required to use a WordPress template for their site.

The screenshot shows the website for the Center for Instructional Design (CID) at the University of California, Irvine. The header is blue with the UCI logo and the text "Division of Teaching & Learning". A search bar is located in the top right corner. Below the header is a yellow navigation bar with links for "About", "DTL Units", "Initiatives", "News and Highlights", and "Contact". The main content area is white and features a breadcrumb trail: "Home » Center for Instructional Design". The title "Center for Instructional Design" is prominently displayed. Below the title, a paragraph states: "The Center for Instructional Design (CID) provides support for the development of pedagogically effective online and hybrid courses." This is followed by a section titled "CID services include:" with a bulleted list of services: "Consultation on online course design", "Training on educational technologies for instruction or content development", "Design of online content presentation and assessments", and "Planning evaluation of online course efficacy". At the bottom of the main content area, a line of text provides contact information: "For further information or to request CID services, please contact Megan Linos, 949-824-9405, [wlinos@uci.edu](mailto:wlinos@uci.edu)." The footer is white and contains the UCI seal on the left, the text "UC Irvine Homepage" and "University of California" in the middle, and copyright information "© 2017 UC Regents" and contact details for the "Division of Teaching and Learning (DTL)" on the right, including the address "University of California, Irvine, CA 92697-5670".

# Process

We followed the Double Diamond design process. User Research is vital to the design process and informed the aspects of the website that needed to be the focus.

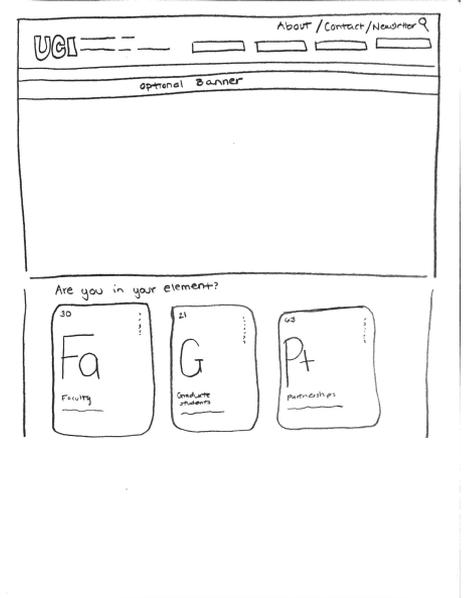
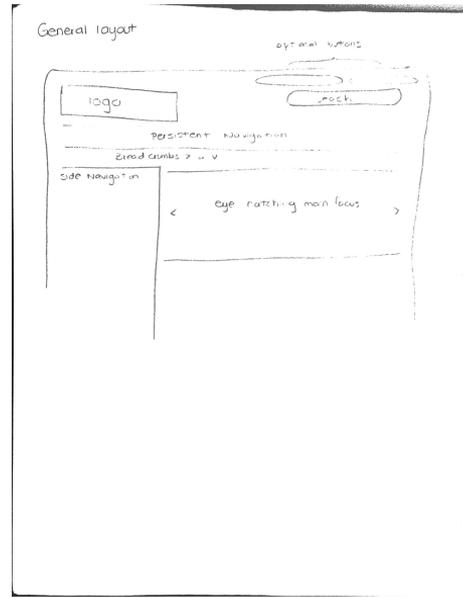
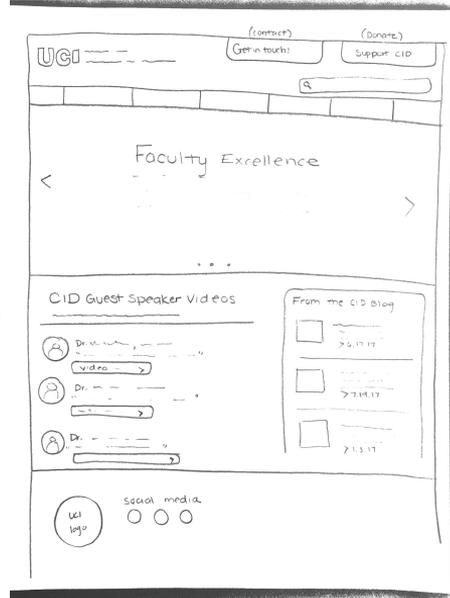


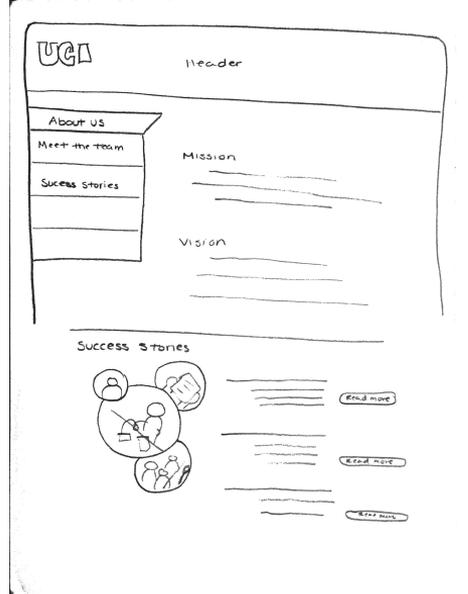
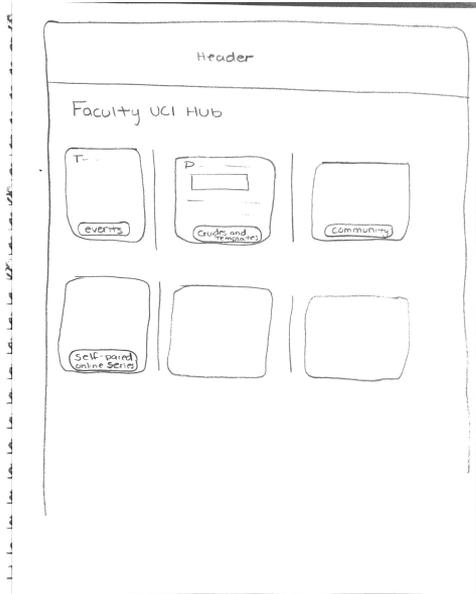
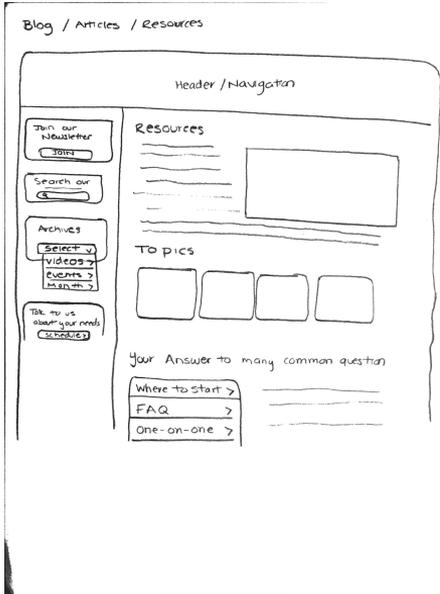
Service Design Double Diamond Process by Koishin Chu is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. Based on a work at <http://designcouncil.org.uk>. Permissions beyond the scope of this license may be available at <http://creativecommons.org>.

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# Sketches

We created sketches in a variety of styles to give the client multiple options and to allow her to pick and choose aspects she liked.

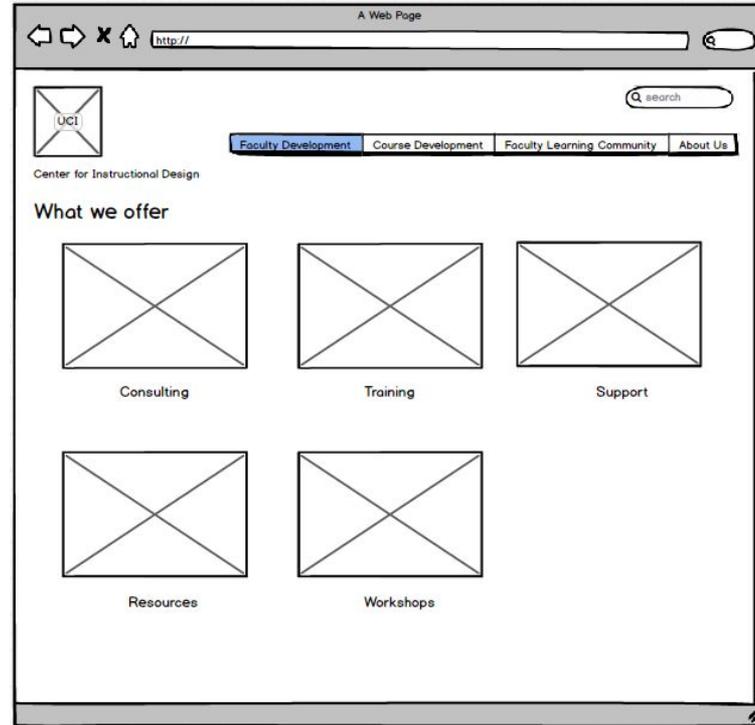


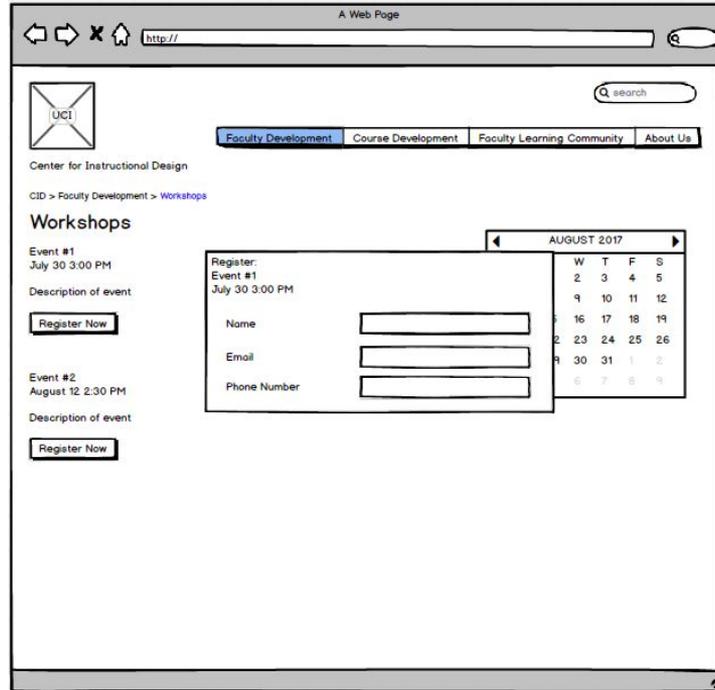
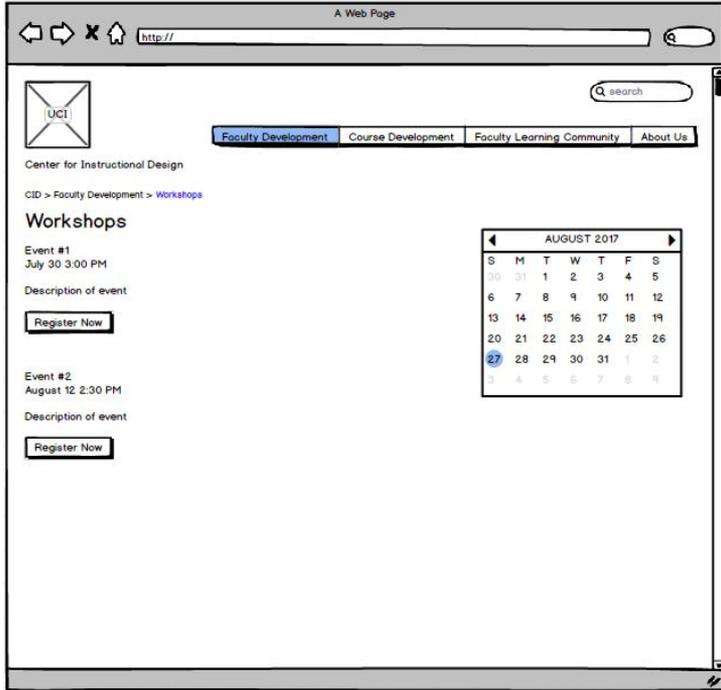


Because the site doesn't have an identity at this point, the client wanted us to have freedom to be creative and give them different styles.

# Wireframes

Wireframes were used to give CID an idea of the framework that they should consider for the site.





We specifically delved into the events page, as that is a main focus for them.

# Mockups Contact Us

One of the main focuses of the CID is to encourage faculty to work with them, so easy and visible contact information was important. The idea of a prominent “Contact Us” button on each page addresses that issue.



# Events

The other focus is encouraging attendance at events that CID hosts. We wanted to match the mental model that people have of a calendar and make registration easy.

The screenshot shows the UCI Center for Instructional Design website. The header includes the UCI logo and navigation links: About, Programs, The Teaching Studio, Services, and Faculty Showcase. The main content area features a list of events:

- 14 September 2017** Thursday, 11 am - 1 pm **The Open Lab**  
Where: AIRB 3010  
Faculty can walk in during "Open Lab" hours and work with an instructional designer to develop Canvas courses, ask technical questions, or receive consultation/training. Topics include, but are not limited to, lecture recording, Canvas course development, online meetings, assessment design, grade book configuration, and more.  
Offered every Wednesday and Thursday  
[Register](#)
- 18 September 2017** Monday, 10 am - 12 pm **Boot Camp for Online Teaching**
- 20 September 2017** Wednesday, 11 am - 1 pm **The Open Lab**
- 21 September 2017** Thursday, 11 am - 1 pm **The Open Lab**

A calendar for September 2017 is displayed, with the 14th highlighted in blue. The footer contains the UCI logo, links to the Irvine homepage and DTL homepage, and copyright information for UC Regents and the Center for Instructional Design (CID).

This screenshot is identical to the previous one but includes a registration form overlay for "The Open Lab" event on September 14, 2017. The form is titled "Register for The Open Lab" and includes the following fields:

- Name:
- Email:

The form also displays the event details: "Thursday, September 14, 2017, 11 am - 1 pm" and a "Register" button. The calendar in the background still highlights the 14th.

# Design Summary

We began our design process knowing the key areas the CID wanted to focus on, having faculty contact them and attend events. Knowing the team was limited to using a WordPress template, we identified the best and most effective ways to increase awareness and promote engagement with CID. The ease of use and prominence of their important features is the way to do this.

Additionally, proving short How-to's or compelling facts in an easily digestible format is a way to engage the faculty without overwhelming them, as well as establishing trust that the CID is an expert in their field.

From our research and from the data in the field, we learned that some university professors have reservations or mixed feelings about teaching online. Yet, educational leaders from both the K12 and university-level have shared that they do believe in the power of technology.

# Technology & Instruction: The Realities

**89% & 96%**  
of teachers think educational technology



improves student  
outcomes

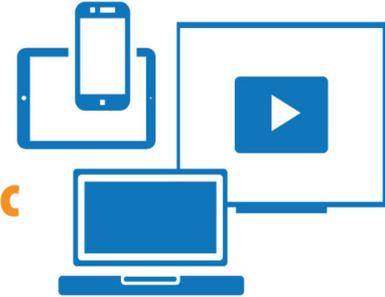


increases student  
engagement



And **65%** say technology helps  
them demonstrate things they couldn't  
show another way.

**3 out of 4 students  
say technology  
helps their academic  
performance.**



Using infographics and powerful statistics is a way the CID can help convey this data to their stakeholders in a way that prompts curiosity and ultimately engagement with the center.



# Conclusion

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# Into the Future

Given that the Center is establishing itself, and is under the constraints of a tight budget, our recommendations based on what faculty said would be an effective way to reach them would be to implement the following two models:

## Outreach from Within:

### **Department-Appointed Representatives**

The data we collected indicated that professors most often look to peers in the same department as trusted resources for instructional inspiration because they know the type of material and the best way of presenting it. Building on these established relationships, we recommend using these credible role models as ambassadors for the CID. If there was a low-cost incentive, like an honorary title or cross-department appointment with the CID, the chosen faculty may see it as an honor to help promote innovative teaching practices within their department.

### **Train-the-Trainer Model**

Currently the CID team does not have the staff nor the bandwidth to have individual representatives working with each department. Thus, the department representative could be the first line of defense to field questions or might even be trained in basic Instructional Design methodologies and practices that he or she could then use to serve others.

# Into the Future

## Effective Engagement:

### How To's

One of the challenges to overcome is the perception that the CID can only help with layout but not content, since instructional designers are not subject matter experts. While the latter is true, instructional designers can prove the value of working with them by presenting quick, digestible one or two page How-to's or fact sheets. The data we collected indicated that professors or



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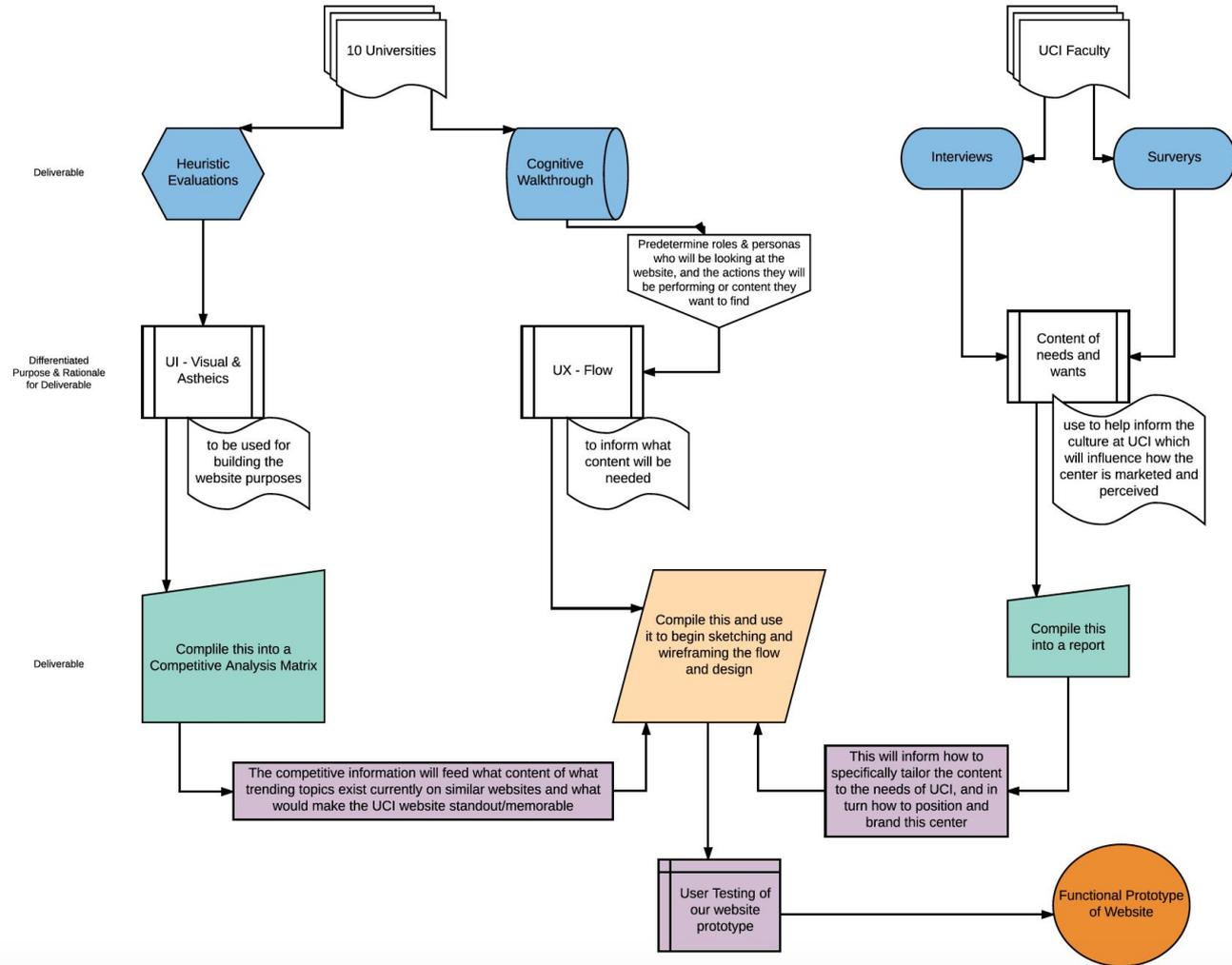
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# Capstone Path



Teaching and Learning News

**Graduate Students Assisting Center for Instructional Design to Envision the Future**



**Jacqueline C. Parker**



**Megan Cody**

Two graduate students, Megan Cody and Jacqueline Christine Parker, from the Online Master of Human-Computer Interaction & Design (MHCID) program are conducting field research to help CID developing the department website that reflects CID's strategic mission.

They will research programs and services provided among 10 peer institutions' teaching and learning centers; conduct survey and interviews with UCI faculty, and brainstorm ideas with the CID staff.

"I am thrilled to have the opportunity working with Megan and Jacquie," says Megan Linos, Director of the Center for Instructional Design. "This is a win-win situation for CID to have a website embracing CID's strategic goals and also for the MHCID students to gain practical field experience before graduation."

This capstone project is expected to be completed by the end of Summer 2017 as the final requirement for the MHCID degree.

Division of Teaching and Learning sent out a newsletter in June introducing the team and explaining how they would contribute to the CID over the course of the Capstone project.

# About Us



Jacquie Parker

- BA in International Relations, Columbia University
- Currently at Illuminate Education, an ed tech company that provides data and assessment software to K-12 districts
- Works both with the Sales and Implementation teams and with partnership programs
- Experience in education working with Orange Unified School District and in business at the World Trade Center



Megan Cody

- BA in Psychology and Criminal Justice, Marist College
- 9 years in Market Research
- Focus on concept, product, and attitude and usage testing
- Experience with moderating one-on-one interviews and usability testing with children and teens
- Experience taking data and converting it into actionable results

# CID Team



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# About MHCID

The Master of Human-Computer Interaction and Design is an interdisciplinary degree build on strengths across numerous schools on campus. Graduates gain an understanding of and experience in user experience research and design, interaction design, information architecture, product design, and human-computer interaction. Students attend intensive accelerated in-person classes on the UCI campus, as well as complete courses online. During the final two quarters, students work on a large Capstone project with an industry sponsor.

During the Capstone project, students utilize the skills and knowledge they learned throughout the program to tackle user experience challenges. The project covers the end-to-end process of a research and development product cycle. The goal of the project is to give students real-world experience in a design and development setting.

Industry sponsors benefit from the partnership by integrating innovating thinking and ideas into existing products or reach out into a new area.



For information about the program or how to be a sponsor, please contact [mhciddirector@ics.uci.edu](mailto:mhciddirector@ics.uci.edu).



# CID<sup>2</sup>

CENTER FOR INSTRUCTIONAL DESIGN  
COMPUTER INTERACTION DESIGN



**UCI** **MHCID** **UCI** Center for  
Instructional Design

Master in Human-Computer Interaction and Design  
University of California, Irvine