

CDM Web Usage Study

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Executive Summary

Students use online resources to make important decisions everyday. When it comes to their education, students want to know where to easily find the information that makes their choices streamlined. The College of Computing of Digital Media (hereafter referred to as CDM) website is a helpful tool for current and prospective students to identify the information they need to make informed decisions about their education. The research team sought to find out what tools students are using to gather information and how they identify the information that is most important. The team also explored what content could be removed from or moved to different location within the CDM website.

Interview findings

The research team interviewed 11 students from various majors in CDM. We organized our findings into the following themes.

- Prospective students use various tools and resources to aid in their decision to attend DePaul.
- DePaul students primarily use the CDM website to access information pertaining to general major information, major course requirements, and faculty information.
- Many features of the CDM website are not being used by students, or the information is hard to find.
- Students did not strongly identify with the “Schools” within the CDM College.

Introduction

Currently, DePaul has a main university website and a separate website for the CDM College. The CDM website is intended for both current students and prospective students. The website is vast and contains a lot of information, which makes the content difficult to maintain. Some of the information presented on the CDM website can also be found on the main university website and on Campus Connect, but it is unknown if this duplicate content is useful to CDM website users. In addition, the information architecture of the CDM website reflects the internal structure of CDM (i.e. the homepage contains links to the three CDM School pages), but it is unclear whether that structure is relevant for students.

The research team conducted 11 interviews over the course of 2 weeks to find out how and why current and prospective students use the College of Computing and Digital Media's website.

To explore this further, we addressed the following research questions:

- Identify if there is content on the web that can be removed or moved to a different place .
- Identify if there is content missing from the web that would be useful for students.
- What information would students like to know?
- What tools do students use to register for classes? Review degree requirements? Learn about academic policies?
- Do the schools in CDM have meaning for prospective students?
- What information do prospective students use to evaluate our programs?

Methods

Participants

Eleven undergraduate students who currently attend the CDM College at DePaul University participated in the study, including three freshmen, one sophomore, four juniors, and three seniors. Participants represented the following academic majors:

- Graphic Design
- Computer Science
- Interactive & Social Media
- Network Engineering & Security
- Information Systems
- Information Assurance & Security Engineering
- Digital Cinema
- Computer Game Development

We recruited participants through social media, the CDM newsletter, and email. We also recruited participants by approaching students in the CDM building labs. To confirm eligibility for the study, participants completed a screener (Figure A, Appendix).

Name	Year	Major	Transfer Student
Josh	Junior	Computer Game Development	
Victoria	Senior	Interactive and Social Media	
Marco	Sophomore	Computer Science	
Erik	Junior	Information Assurance & Security Engineering	X
Summer	Junior	Digital Cinema	X
Jackson	Freshman	Digital Cinema	
Andres	Senior	Computer Science	X
Maria	Freshman	Interactive and Social Media	
Katie	Senior	Graphic Design	
Kyle	Junior	Network Engineering & Security Engineering	
Matthew	Freshman	Information Systems	X

Data Collection Methods

Three researchers conducted interviews face-to-face and remotely using the interview protocol document (Figure A, Appendix). Participants also completed two tasks during the interview using their computers or computers provided by the researchers. Researchers asked participants to think aloud and explain their thought process while completing the task. Participants also provided verbal consent to participate in the study and to be recorded during the interview. In addition to recording participants, we took notes throughout the interview on our computers. Interviews varied in length from 25 minutes to one hour.

Analysis

First, we entered participant responses into a central data sheet. Next, we organized responses into categories based on relevance to the CDM research questions. Lastly, we created personas based on the analysis.

Findings

After analyzing the participant responses, we organized the findings into the following themes.

1. Prospective students use various tools and resources to aid in their decision to attend DePaul.

What information do they want to know?

All participants used either DePaul's main website or the CDM website to gather information before making the decision to apply to DePaul. Overall, students were able to find the information they were looking for, including: major requirements, concentrations, and student projects. Students were also interested in learning about DePaul's ranking compared with other schools and career paths for individual majors.

- Eric said: "DePaul's website was easier to find the information I was looking for compared with other schools."

What tools are they using?

- All participants used DePaul's main website while researching DePaul.
- 9 out of 11 participants used the CDM website while researching DePaul.
- 4 out of 11 participants said they talked with advisors from high school or previous college before attending DePaul.
- 6 out of 11 participants talked with current or former students, including friends and family members.
- Other tools students used to evaluate DePaul before attending include: Social media, YouTube videos, tour of CDM building, Collegeboard.org, and the college ranking website www.colleges.niche.com.

Why do students decide to attend DePaul?

- 7 out of 11 students said that the DePaul's location within Chicago was a big factor in making the decision to attend.
- Other factors include: labs with appropriate software, following a family legacy, scholarships/financial assistance offered by DePaul

What would they like to see that is not already there?

Participants said that, though they were able to find information to help aid in the decision-making process, there were some tools or resources missing that would help them make more informed decisions.

Student work: Currently, student work available on the CDM website is very limited and does not provide students with many examples of projects they could expect to do. Josh, a participant in the game development program, mentioned student work as very important in his

decision to attend DePaul. When he was researching DePaul, he found the www.gamedev.depaul.edu website with student work very helpful in his decision-making process because he could “see what type of work he would be doing” if he decided to attend DePaul. He commented that this website no longer exists.

Notable Alumni: Prospective students were interested in what alumni went on to do after graduating from DePaul. When Marco, a student majoring in Computer Science, was unable to find information about notable alumni, he was concerned that DePaul had a bad reputation or was unknown nationally or internationally.

2. Current students mainly use the CDM website to access information pertaining to faculty, major course offerings and degree requirements, and CDM events.

What information do they want to know?

Current students use the CDM website most often to find information pertaining to faculty, major course offerings and degree requirements, and CDM events.

Faculty Information: Students said they visited the CDM website to find information about current faculty and staff, including advising hours, student reviews, and courses taught. Students were not able to easily navigate the CDM website to find faculty information, and mostly used the search bar to find the Faculty page. Students also commented that the Faculty section is not kept up to date and includes many professors that don’t teach at the school anymore. This means that students have more faculty to sift through when looking for a faculty member. Victoria said that she likes the faculty pages because they are “very transparent - all the information I want to know is right there.”

Major course requirements and registration: When learning about general major requirements, students used the “Degree” page where they accessed “Curriculum and Requirements” on the CDM website. When deciding to take a course, the most important information students needed to know includes: (1) whether the course was part of their degree requirement (2) days and times of classes (3) who is teaching the course, and (4) course workload.

CDM Events: 4 of 11 participants used the CDM website find out about CDM related events, such as career fairs, film festivals, and study abroad. Students also visit CDM-affiliated social media sites to find information about events. Summer said, “most information about events are on Facebook, so I don’t really look at the CDM website for this type of information.”

What tools are they using to register for classes?

Degree Progress Report: When participants were asked to find the information regarding an elective within their major, 7 out of 11 students used the “Degree Progress Report” tool on the MyCDM webpage. When asked to find course information for a course within their major, students mostly navigated to the Degree Progress report, where they were able to find the information they needed.

RateMyProfessor.com: 7 out of 11 students said they used RateMyProfessor.com to aid in the decision-making process of what courses to take.

Degree Planner: 2 students said they also used the degree planner to help layout classes in advance.

“Quicklinks” dropdown on Homepage: Many students used the QuickLinks drop down menu to navigate to other sites.

3. Many features of the CDM website are not being used by students, or the information is hard to find.

Students find that the CDM website is a useful tool in finding information about classes, but much of the content on the website is not used by the students.

Homepage: When visiting the CDM website, this page was often glossed over and did not contain information that the students found useful. The main impact of the homepage is the slideshow at the top of page. When asked what he liked about the CDM website, Eric addressed the image of the CDM building: “I like that I can see my building, the CDM building I mean. This is a place where I don’t have to explain acronyms - everyone here just gets it.”

Navigation: Students mostly used the search bar to find information within the website, only 2 students used the navigation bar to find information within the CDM website. No student used the “Schools” buttons (e.g. School of Computing, School of Design, School of Cinematic Arts) to access information about their major.

Left sidebar: Only one participant used the left sidebar to find information on the website. This is the bar with the following features “Course Catalog”, “Course Schedule”, “Course Syllabi”, “Calendar of Events”: This information was mostly found through using the search bar, or found on external websites such as Campus Connect and MyCDM.

4. Students did not strongly identify with the “Schools” within CDM.

When asked to identify the three Schools (School of Design, School of Computing, School of Cinematic Arts) within CDM, only 3 out of 11 students knew there were three Schools within CDM. Out of the 3 students, none could identify all three Schools within the CDM College and expressed confusion when asked follow up questions pertaining to the three schools. Marco said, “I wasn’t familiar with that distinction. To me CDM is all CDM. Even when I talked with my friends, it’s that we’re students in CDM and we study a certain major.”

Maria said, “Um, do you mean do I know that I’m part of the CDM college? (**Interviewer then explained that there are three schools within the CDM College). Oh... It’s like computing, design, and game development - those are all online on the CDM website.”

The CDM website has multiple access points to these three schools, but none of the students we interviewed used the three schools buttons to access information. Students typically used the search bar to find information about their major.

Personas

Based on the findings, the research team created two personas. Personas are research-informed representations of typical users of the site that can be used as a reference for user-centered website development. The two personas we present are (1) Ivan, the transfer student and (2) Ally, the current student.

	Goals: <ul style="list-style-type: none">• Find available majors at Depaul• See examples of student work• Learn of notable alumni to gauge others' success with Depaul• Learn of notable professors in the program and their evaluations
IVAN The transfer student	Finds Depaul information from: <ul style="list-style-type: none">• Depaul website• Guidance counselor• Friends/family at Depaul or formerly at Depaul• YouTube videos about program• Social media - Twitter, Facebook, etc.
<p>Age: 19 Major: Computer Science Hometown: Chicago, IL</p> <p>Student in Computer Science at a community college who has finished his freshman year but is thinking of transferring to Depaul.</p> <p>He has heard good things from his friends who attend Depaul but he needs to make sure if it is the right fit for him.</p>	Frustrations with website: <ul style="list-style-type: none">• Concerned with lack of notable alumni presented• Would like to see more evaluation information about professors



The current student

Age: 20
Hometown: Cary, IL

Major: Computer Game
Development

Second year student in the Computer Game
Development program at Depaul.

She often uses the CDM website to check
upcoming courses. Instead of using the site
through the links on the homepage, she uses the
search function to find all the information she
needs.

Goals:

- See upcoming courses
- Plan by degree requirements/progress
- Research Professors and their evaluations
- See Events
- See Advisor hours
- See Tutoring schedule
- Check lab availability

Registers for classes by using:

- Degree progress report
- Degree planner
- Quicklinks menu to navigate to other sites
- References on professor rating sites

Frustrations with website:

- Concerned with lack of diversity presented in imagery
- Not up to date, professors no longer teaching at Depaul on site
- Course information is shallow
- Professor evaluations should be more substantial

Discussion & Recommendations

Below are considerations for areas to change within the CDM website, as well as areas for further evaluation and development based on insights from the interview data:

A. Content That Could Be Removed or Moved

1. Removing course information from the left sidebar on the homepage.

-Or- Moving this information to the top of the homepage.



Rationale:

- When asked to find information about their courses, only 1 student used this sidebar.
- 1 student mentioned that the Course Catalog was “helpful;” however, he did not use this link when prompted to look for course related information.

Additional Notes:

- We observed that most students did not interact with the content on the CDM homepage other than using the search bar or the main navigation bar at the top of the page. This may have been due to the nature of the tasks we asked them to complete. However, it could also be a reflection of information architecture of the site. The course catalog, course schedule, and course syllabi links on the side bar are not immediately visible when the CDM website page loads, which may reveal why students are not using these links. Therefore, an alternative consideration for removing this information from the homepage would be to move this information to the top of the page so that it is immediately visible. Future research could investigate if changing the location of these links results in an increase of use.

2. Information about CDM faculty is important to students. Moving faculty content to a prominent position on the homepage or renaming this content in the main nav bar could be helpful for users.

Rationale:

- 8 out of 11 students mentioned that the professor who would be teaching the class is important information to have when registering for classes.

Additional Notes:

- Given that the majority of participants sought information about faculty when registering for classes, it could be valuable to make information about faculty more accessible to students.
- Currently, faculty information is included in the bottom right of the CDM webpage in a “People at CDM” section (below). One participant recommended making this information more prominent and including it as one of the selection choices when a user hovers over the main nav bar on the homepage. We should note that this information *is* a selection option underneath “People” in the “About” category in the main nav bar, but the participant was not aware of this. Users may not immediately connect the “People” title as a place to click to find information about faculty; thus, renaming this area of the site could allow users to identify information about faculty with greater ease. This could be validated in future research.
- One participant was not aware that faculty information was on the site and asked the interviewer if that information was available on the site. He noted that it would be useful to review faculty information so that you could “connect a face with a name before going to class.”

2014

Course Catalog

Course Schedule

Course Syllabi

Calendar of Events

Request Information

Apply Online

Give to CDM

CDM Schools

CDM is organized into three schools to represent the breadth and depth of offerings across the computing and digital media spectrum. Our degree programs offer innovative foundations and practical applications of today's most sought after skills and credentials.

School of Cinematic ArtsSchool of ComputingSchool of Design

Announcements


Registration. Registration for next quarter begins soon. Are you ready? Use your course cart to hold the courses you want so you are prepared to register on time.

Student Ambassadors

CDM Ambassadors are undergraduate and graduate students enrolled in one of our degree programs, and are ready to answer your questions about earning a degree at CDM

Undergrad Ambassadors

Graduate Ambassadors



Tiffany Whitely
Undergraduate Ambassador
BFA in Animation

Upcoming Events


view all

College of Computing and Digital Media Preview Day
Thursday, April 23, 2016

Mayday
Friday, April 29, 2016


DePaul Analytics Group
Guest Speaker: Kevin Goetsch

Visiting Artists Series




Watch The Wachowskis
Learn more about the VAS

Online Learning



Online programs
How it works

In the Loop



In the Loop is the biannual publication for alumni of DePaul CDM.

Institute for Professional Development (IPD)

IPD offers intensive certificate programs designed for IT professionals who wish to learn new technologies and upgrade their skills in a short amount of time.

ProgramsOnline CertificatesCourse Credit

People at CDM

Faculty

Admin & Staff

Alumni

B. Opportunities for Additional Development & Evaluation

1. Evaluating current pictures in the homepage slideshow and on individual website pages. Strategically selecting images for the site which attract and appeal to diverse students while also reflecting current students within the College.

Rationale:

- When asked to comment on what they liked about the CDM website and what could be better, 6 students provided feedback on the photos both in the homepage slideshow and on individual site pages.
 - Students reacted positively to pictures when they identified those they knew in the pictures and negatively when they felt a diverse study body was not reflected.

Additional Notes:

- Pictures on the CDM website evoked feelings of connectedness to the CDM College when students recognized people in the pictures. These students commented that these pictures were a positive feature of the CDM website.
 - Eric said, "Oh, there's Josh, he's an ambassador in my program."
 - Kyle said, "I've been in this room before, it's one of the labs. And this guy here, he taught a class next to one of my classes. You could always hear him, he was loud!"
- Two female students disliked the picture on the main page of the School of Computing page (below) because they felt it did not reflect a diverse student body.
 - Maria said, "Well, this is a weird photo. I feel like they should make it seem more exciting. This is so horrible. They should appeal to more people – this is very stereotypical. (**Interviewer prompted her to expand further) Right now in computing, it's mostly guys and foreigners. They should have photos be more diverse. I don't know, like some of my friends have Gucci heels and stuff. They should have more girls in here. It's mostly guys."
 - Katie said, "This photo doesn't really appeal to women who are interested in the CDM College. I mean...this is just bad."
- One male student reacted positively to this photo because he recognized the faculty member.



2. Developing content on the site which further emphasizes DePaul's location in Chicago.

Rationale:

- 7 out of 11 participants said that that being in metropolitan city like Chicago influenced their decision to attend DePaul.

Additional Notes:

- Developing content which emphasizes DePaul's location could appeal to prospective students.
- Content could include: images of Chicago, highlighting connections to Chicago business community and local job opportunities, describing classes or student organizations that immersed students in city culture.

3. Developing content on the site that highlights the experiences of current students and alumni.

Rationale:

- 6 out 11 participants said that they learned about DePaul through current or former students.
 - Participants that are from the Chicago area originally said they had known about DePaul throughout their time living here. They had talked with students, former students, or family members that are currently at DePaul, or had gone to DePaul.

Additional Notes:

- At present, the CDM website allows prospective students to connect with current students through the Ambassador program. The slideshow also highlights a few DePaul alumni. Further consideration about how to incorporate the experiences of current students and alumni into the CDM website may be helpful particularly for students who are out of state or are based outside of the U.S.

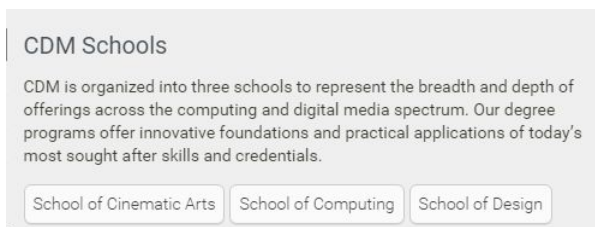
4. Evaluating content on the site related to Schools within the CDM College to determine where it should be located on the site. School-related information may hold greater significance for prospective students.

Rationale:

- 3 out of 11 participants recognized that there were three Schools within the CDM College. However, out of these 3 participants, none could recall all of the schools by name.
- 8 out of 11 participants expressed confusion when asked by the interviewer if they were aware of the school within the CDM College that their major belonged to.

Additional Notes:

- Some participants expressed a stronger identification with majors within the CDM College vs. Schools within the CDM College.
 - (***When interviewer explained that there were three Schools within the CDM College*) "I wasn't familiar with that distinction. To me, CDM is all CDM. Even when I talk with my friends, it's that we're students in CDM and we study a certain major. Is it something you're trying to advertise more, the distinction between the 3 schools?"
 - One participant wished that the homepage included links to all of the majors rather than to the three Schools.



- The School-related pages and content on the CDM website may be more relevant for prospective students, as they reflect examples of student work, research opportunities, and majors. This information may help prospective students become familiar with not only the structure of the CDM College, but also gain a sense of what their experience might look like as a student within that School.
- Although our participants did not mention considering the CDM Schools as they were researching DePaul, this may be because the Schools were not established within CDM when they were evaluating DePaul or simply because they did not recall looking at the School information.

Limitations and Future Work

Limitations

- As the majority of participants were not familiar with their School or Schools within the CDM College in general, our team was limited in the ways in which we could explore the usefulness of or the areas of improvement for content on School pages.
- Our team did not interview students from all CDM majors. Information Technology and Animation majors were not represented in this research.
- Our team did not interview anyone who is currently a prospective student. Students were asked to recall what their experience was like researching DePaul. Due to memory lapse, we may not have captured the entire picture of what this experience was like for some students, especially those who are juniors or seniors.

Future Research

- Interview incoming CDM freshmen to investigate perspectives and experiences of prospective students.
- Conduct surveys with CDM students to further explore themes identified in the present research.
- Interview students with majors not represented in the present study (i.e. Animation, Information Technology).

Appendix A

Screener

- Are you a student in the College of Computing and Digital Media?
- What is your major at DePaul?
- Have you registered for classes in the past 6 months?

Intro

Hello! My name is _____. Thank you for taking the time to meeting with me today. I'm a grad student in the HCI program at DePaul, and I'm working on a team that is conducting a user research study. The goal for this study is to learn more about the ways that prospective and current students at DePaul use the CDM website. For our meeting today, I'll ask you some questions to explore this topic further.

Keep in mind that there are no right or wrong ways to carry out a task, or right or wrong answers to my questions. As you perform the task, your actions and comments will be noted and you will be asked to describe what you are doing. I may ask you some questions during or after performing the activity. This meeting should last about 30 to 45 minutes.

This activity is completely voluntary. You have the right not to demonstrate any activity or answer any question, and to stop our session at any time or for any reason. Your actions and responses will be confidential. Only your first name will be used to identify you. If you wish, you can use a pseudonym rather than your real name.

The evaluation is going to consist of questions about your use of online resources at DePaul, then I'll ask you to perform a few tasks *remote only***using your computer where you will share your screen with me. Is this okay with you?**

We will be recording this session for later review, and will not be shared with anyone other than the researchers working on this study. Is it ok with you if I record this session?

Is it OK for me to begin?

**Start Recording

Warm Up

What year in school are you?

Have you attended DePaul throughout all of the time that you've been an undergrad/grad student?

How did you hear about DePaul?

General Inquiry

1. Did you research DePaul before making your final decision to come here as a student?
 If YES, can you tell me more about the steps you took to learn more about DePaul?
 IF NO, continue to next question, "Why did you decide..."

Additional probing questions based on participant response: Did you...

- 1.a Use any online resources? If so, which ones?
- 1.b Probe: Did you speak with a DePaul or high school advisor?
- 1.c Probe: Did you speak with current/former DePaul student?
- 1.d Books?

2. Do you recall coming across the CDM website while you were researching DePaul? (If participant does not mention it as they describe their research process)

3. How would you describe your experience researching DePaul?

4. Why did you decide to attend DePaul?

CDM Schools

"And as a current student, you're a <insert major here>major, is that correct?"

5. Are you familiar with the school that your major is a part of within the CDM college? Could you tell me the name of the school your major is within?

IF PARTICIPANT ANSWERS YES, ASK THE FOLLOWING QUESTIONS. IF NO, CONTINUE TO "CDM WEBSITE USE" SECTION.

School of Cinematic Arts	School of Computing	School of Design	Dual Majors: School of Design & School of Computing
--Animation --Digital Cinema	--Information Technology --Math & Computer Science --Information Systems --Network Engineering & Security --Information Assurance & Security Engineering --Computing --Computer Science	Graphic Design	--Computer Game Development --Interactive & Social Media

- 6.a Probe: How would you describe this school to someone who is not familiar with it?

- 6.b Probe: Are you familiar with the other schools within the CDM college? If yes, What are the three schools
- Probe: Have you ever gone to your school's page on the CDM site?
 - IF YES What led you to go there?
 - IF NO What information would you expect to be on that page?
 -

CDM Website Use

7. Do you recall the last time you visited the CDM website?

- 7.a Probe: What led you to go to this site?
- 8.Probe: Is that a typical reason you would go to the CDM website?
- 9. Probe: And what happened when you visited the site? (to prompt the participant to explain whether or not they were able to accomplish the task within the site, in case they don't directly mention it, dependent on participant response).

10. Other than doing <insert task previously mentioned by participant>, do you recall other reasons you've visited the CDM website before? Can you share more about that with me?

- 10.a Probe: What was the outcome of visiting the CDM site in these situations?

Do you recall any situations when you visited the CDM website and it was a challenge for you to find information you were looking for?

Class registration

When did you last register for classes?

11. How did you decide what courses to take?

- Probe: Is that typically how you would decide what courses to take?
- Probe: (if no specific resources mentioned) Do you use any resources to decide what courses to take?
- (If they do mention resources) Do you use any resources other than <insert resources participant mentioned>?

12. What information is important to you when deciding to take a course?

Task One

"Okay great. I'm going to ask you to do a few simple tasks and I would like you to show me how you would perform the task, thinking out loud as you perform the task. For example, if you decide to go to the home page to find a link, please say aloud 'I'm going to the homepage to find a link.' "

"For this portion, I will need you to share your screen with me, is this okay with you?

Do you know how to share the screen? If not, I can guide you through it."

--Google Hangout: Go to the menu (vertical three dots)>share screen > entire screen OR green screen icon on left hand side

"Let's get started with the task"

13. "Let's say you wanted to enroll in an elective course, but you weren't sure exactly which course you needed to take. Can you show me how you would find the course number for an elective course within your major?

- 13.e Is this the typical process for registering for classes? If not, what have you done differently in the past?
- 13.f Probe: How did you decide to register for that/those courses?

Task two

14.a Can you show me how you would find information about a course within your major.

- Is there any other resources you use to find information about a course within your major.

15. Are you able to easily find information pertaining to course selection on the DePaul CDM website?

Retrospective

16. How do you feel when you visit the DePaul CDM website? If you'd like to take a few additional minutes to review the site on your computer before answering this question, feel free to do so.

- 16.a Probe: What do you like most about the CDM website?
- 16.b Probe: Could you tell me what could be better about the content on the site?
 - Is there any content that you would add or take away?

Are there any other thoughts you would like to add?

Demographics

First name	Age	Gender	Current or Prospective Student

Wrap up

Thank you for taking the time to meet with me today. Your feedback will help make valuable improvements in the way current and prospective students use the website.

Appendix B