

Usability Evaluation of the RIT Website

RIT UT Team:

Danny Cox,
Natalia Echeverry,
Zacharry Georges,
Mitchell Ripka,
Fan Xing

Client:

Raman Bhalla,
University Web Services
Rochester Institute of
Technology



Agenda

<p>1 - Intro Objectives Client & Kickoff Pre-Evaluation</p>	<p>3 - Findings Tasks Highlights Post Test Questionnaires Limitations</p>
<p>2 - Methodology Set-up & Participants Test Design Measurements</p>	<p>4 - Conclusion Recommendations Future Work</p>

Executive Summary

Executive Summary

The client, RIT's Division of Marketing and Communication requested a usability test of the main RIT website after major updates were made to it. The usability testing team conducted a heuristic evaluation to inform their plan before conducting usability tests. The testing included 6 participants and 5 tasks. Participants had varying levels of success when completing each of the tasks. But feedback from participants based on ease of use and satisfaction were positive. The findings suggest users will be challenged to complete some tasks, but that they can find alternative solutions or content which satisfies their needs.

Introduction

Introduction

The RIT website is a primary source of information used by prospective students and their families when considering the college.



Introduction (Cont'd)

Client

Raman Bhalla, Assistant VP of University Web Services

Goals

Increase value from website by improving the potential recruiting outcomes of prospective students

Timeline



Objectives

Usability Testing

Evaluate overall user experience

Identify pain points

Feedback from prospective students

Wayfinding

Seek out potential updates to usability

Research Questions

- 1. Can the participant complete each task?**
 - a. Did they request assistance?
 - b. Did they deviate from the intended path, which resulted in errors or roadblocks?
 - c. How many clicks did they take before feeling completed with the scenario?
 - d. How long did it take to complete each task?

- 1. How easily can the participant perform the tasks, and how satisfied are they after each task? When compared with their actual performance, including the number of errors, deviation from the preset goals, and time usage, what is the obvious variance, and how do researchers interpret the inconsistency in the results?**

- 1. How did the user navigate the site using the search function or the navigation bar, and how satisfied were they with either?**

Methodology

Location & Setup

The study was conducted over Zoom

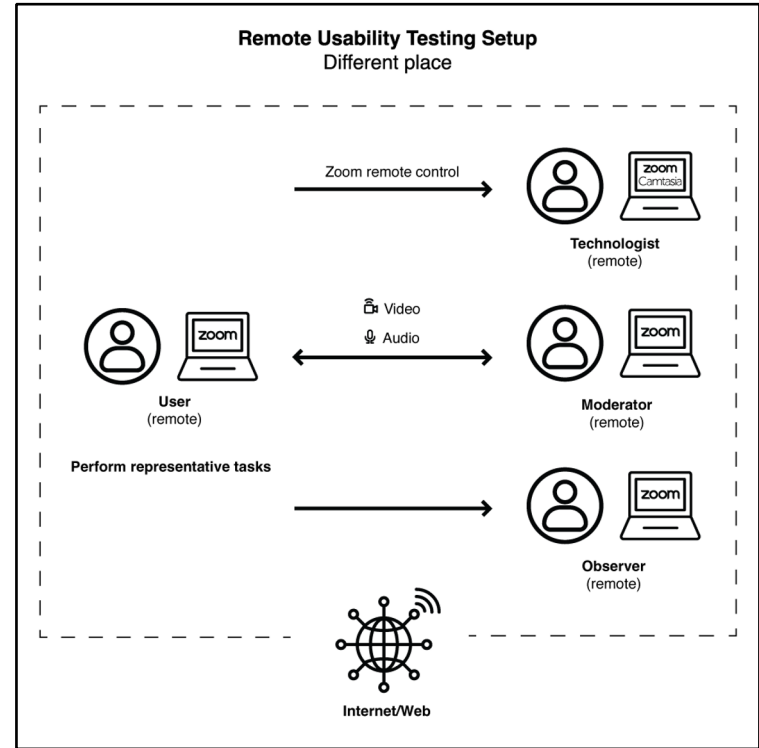
Three researchers were present for each study

The Moderator, responsible for conducting the study and communicating with the participant

The Observer, responsible for taking note of the participants performance

The Technologist, responsible for hosting the Zoom session, and provide participants with remote control access.

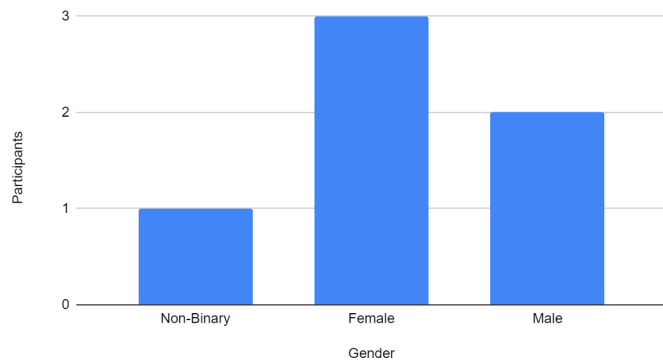
Each participant joined at a specified date and time detailed in a email with the zoom link



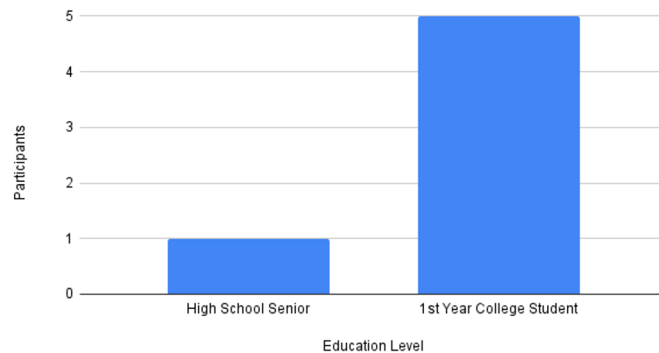
Participants

We were able to get a total of 6 participants out of the 15 that responded to our flyer that perfectly meets our participant characteristics or that serves a perfect participant surrogate

Participants Gender



Participants Education Level



Test Design

- Exploratory design
- Single group: 6 participants perform 5 tasks
- Discover usability issues
- Measurements taken
 - Per task:
 - Mouse clicks
 - Qualitative data – Think-aloud comments
 - Success rate – Participant lands on a specific information page
 - Post task:
 - Level of satisfaction – 1-5 Likert scale
 - Perceived ease of use – 1-5 Likert scale
 - Post-test:
 - Perceived usability (SUS score)
 - Online habits and preferences – multiple choice questions

P _n	Tasks				
P ₁	T ₁	T ₂	T ₃	T ₄	T ₅
P ₂	T ₁	T ₂	T ₃	T ₄	T ₅
P ₃	T ₁	T ₂	T ₃	T ₄	T ₅
P ₄	T ₁	T ₂	T ₃	T ₄	T ₅
P ₅	T ₁	T ₂	T ₃	T ₄	T ₅
P ₆	T ₁	T ₂	T ₃	T ₄	T ₅

T_n = Task



Tasks & Scenarios

Task 1: Find the Mechanical Engineering BS degree page.

Scenario: Have you had experiences in operating machines? Imagine you are a high school senior with a passion for race cars and physics. You even spent time helping a friend of your father's at their auto repair shop last summer. It is your dream to one day work as a mechanical engineer for a company like Toyota. You have heard RIT offers a mechanical engineering degree, but you are not sure what classes are needed to fulfill the degree requirements, so you head to rit.edu to find out more.

Task 2: Find the Cooperative Education and Internships page on the RIT website.

Scenario: Do you have experience in cooperative education? Imagine an admissions counselor told you that all engineering undergraduate programs require at least one co-op. You never heard of a co-op before. So you head to rit.edu to find out more.

Task 3: Find and identify the Electronic Gaming Society (EGS) club on the RIT campus groups page.

Scenario: What games have you played? Imagine you enjoy playing Minecraft on Xbox with your friends at home, where you grew up. You hope to find a similar group of friends if you attend RIT. You want to confirm a specific club on campus that shares the same interests as you, so you head to rit.edu.

Tasks & Scenarios

Task 4: Book a campus tour for December 27, 2022 starting at 11am on RIT's campus.

Scenario: What was the last tour you went on? Imagine over your winter break. Your parents have scheduled a trip to visit western New York so you can see surrounding colleges. During this trip, you want the first stop to be RIT, so you head to [rit.edu](https://www.rit.edu) to schedule a guided tour for December 27th.

Task 5: Find a way to book a virtual Q&A session with an admissions counselor.

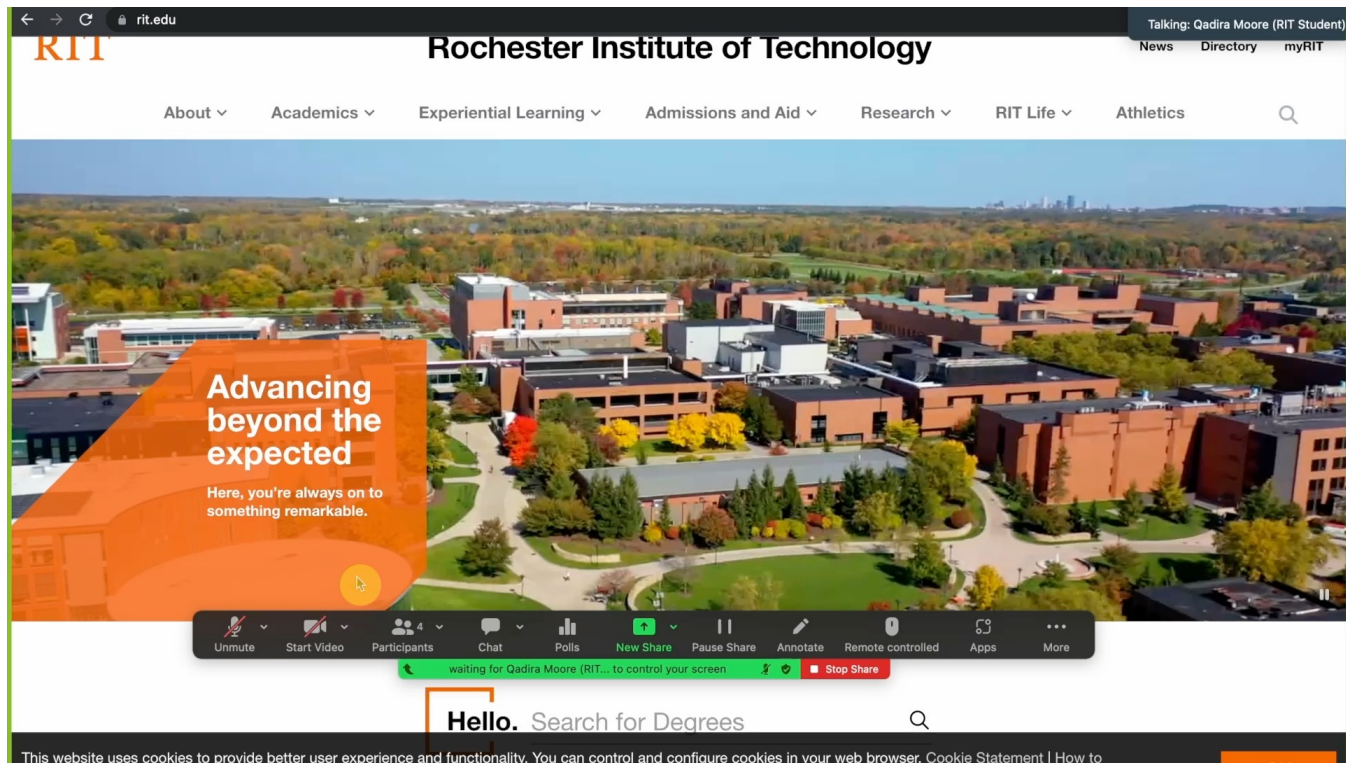
Scenario: Have you had virtual meetings with a counselor? After you visit the campus, you realize you still have questions about the admissions process. In an information session you attended, you remember the presenter said to speak with an admissions counselor virtually. So you head to [rit.edu](https://www.rit.edu) to find out how to schedule an appointment with an admissions counselor.

Tasks and Findings


Task 1

Find Mechanical Engineering BS Degree


Success criteria: The participant lands on the Mechanical Engineering webpage.



Task 1 100% Completed



☰ Rochester Institute of Technology
🔍



Mechanical Engineering
Bachelor of Science Degree

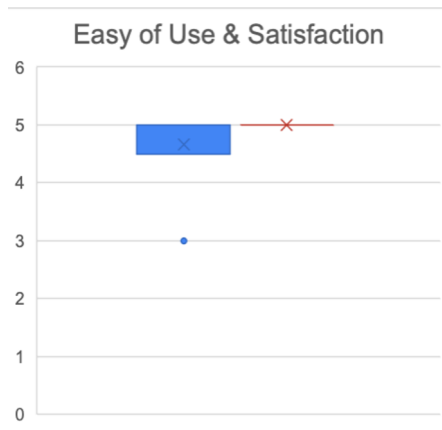
←
Academics / Mechanical Engineering BS

Mechanical engineers put energy and machines to work—from rockets, robots, and airplanes to automobiles, satellites, and renewable energy systems. In RIT's mechanical engineering BS degree you'll study math, science, physics, engineering science, and engineering systems.

🎓 Accelerated Bachelor's/Master's Available

📅 Co-op Required

🌐 STEM-OPT Visa Eligible



	Easy of Use	Satisfaction
Max	5	5
Min	3	5
Mean	4.666	5
Median	5	5
Stdev	0.816	0
Sample Size	6	6
Q1	5	5
Q2	5	5
Q3	5	5
IQR	0	0

Task 2

Find the Engineering Co-op

Success criteria: The participant lands on the Engineering Co-op webpage.



RIT / Academics / Areas of Study / Engineering and Engineering Technology / Engineering Co-op

Set Yourself Apart

What's different about RIT's engineering education? It's the opportunity to co-op and intern with top companies in every single industry. You'll earn more than a degree. You'll gain real-world experience from full-time, paid cooperative education and internships.

You'll stand out from your competitors.

100%

Participation

All engineering and engineering

97%

Undergraduate Outcomes
Rate

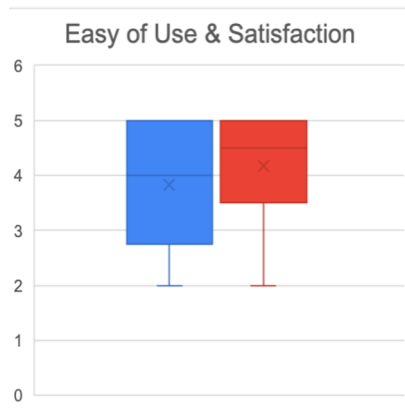
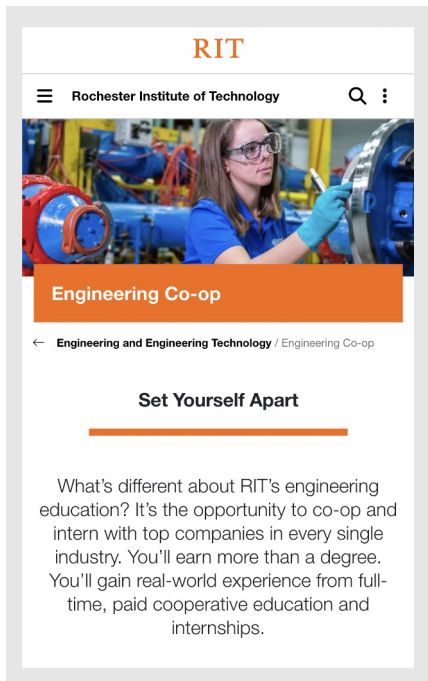
12th

Among top schools for co-
op or internship programs

\$19.75

Median Average Hourly
Salary

Task 2 0% Completed



	Easy of Use	Satisfaction
Max	5	5
Min	2	2
Mean	3.5	4.166
Median	3.5	4.5
Stdev	1.169	1.169
Sample Size	6	6
Q1	3	4
Q2	4	4.5
Q3	5	5
IQR	2	1

Task 3

Finding The Club For You

Success criteria: The participant verbally tells the moderator the club's name Electronic Gaming Society while on the campus groups webpage.

Find a Student Club and Organization

All RIT Events

Join a Club

Whether you are into art, gaming, music, politics, science, sports, or theater, you'll almost certainly find others at RIT who share your enthusiasm.

Browse Now

Start a Club

Be inspired to create and build something new. Pioneer your path and create a new student club at RIT today.

Become a Leader

More than 300 Student Clubs and Organizations

Task 3

Finding The Club For You

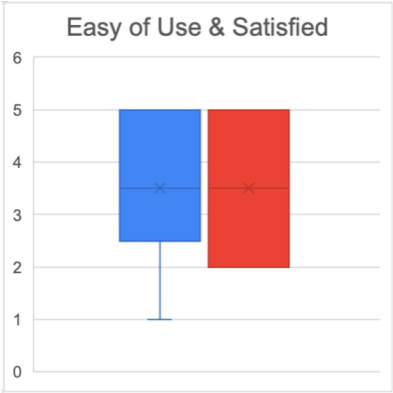
The screenshot shows the RIT campusgroups.rit.edu website. The top navigation bar includes Home, Groups, Events (739), and Support. The main content area is titled "Groups (472)" and features a search bar and a "Group Category" dropdown menu. Below the search bar, there is a grid of category buttons with counts, such as "All 472", "Academic Success Center Programs & Initiatives 4", "University Arenas 0", "Administrative 0", "Campus Life Programs & Initiatives 25", "Center for Leadership and Civic Engagement Programs and Initiatives 4", "Center for Recreational Sports Departments & Programs 3", "Center for Residence Life Programs & Initiatives 5", "College of Liberal Arts 1", "College of Art and Design 2", "Golisano College of Computing & Information Sciences 5", "Compliance & Ethics 1", "Division of Academic Affairs 8", "Division of Diversity & Inclusion 9", "Division of Enrollment Management 1", "Division of Student Affairs 15", "College of Engineering Technology 2", "Kate Gleason College of Engineering 3", "National Technical Institute for the Deaf 2", "Office of Sustainability 2", "Performing Arts 4", "Research 3", "Saunders College of Business 1", "Special Event 0", "Student Government 1", "Student Clubs & Organizations- Campus Life 251", "Representative Student Organization (RSO) 5", "Student Service Organization (SSO) 3", "Student Clubs & Organizations: Fraternity & Sorority Life 34", "Student Clubs & Organizations- Center Leadership & Civic Engagement 3", "Student Clubs & Organizations- Recreational Sports 49", "Student Clubs & Organizations- Residence Life 6", "Student Clubs & Organizations- Academic Affairs 1", "Student Clubs & Organizations- CAD 2", "Student Club & Organization- COS 2", "Student Clubs & Organizations- COLA 1", "Student Clubs & Organizations- GCCIS 5", "Student Clubs & Organizations- KGCOE 7", "Student Clubs & Organizations- SCB 1", and "Student Clubs & Organizations- SOIS 1".

Below the category grid, there is a "Join" button and a "Group Details" section for "A Cappella Council". The details include the RIT logo, the group name "A Cappella Council", the description "Student Clubs & Organizations- Campus Life - A Cappella, Music", and the membership type "Lifetime membership". A blue "Join" button is located at the bottom right of the group details section.

In the bottom right corner of the screenshot, there is a video call inset showing a woman wearing a light blue hijab.

Task 3 50% Completed

The screenshot shows a list of student organizations on the left and the Electronic Gaming Society (EGS) membership page on the right. The EGS page includes a 'Join' button and contact information for Alexia Amoriello.



	Easy of Use	Satisfaction
Max	5	5
Min	3	5
Mean	3.5	3.5
Median	3.5	3.5
Stdev	0.816	1.516
Sample Size	6	6
Q1	3	2
Q2	3.5	3.5
Q3	5	5
IQR	2	3

Task 4

Scheduling Campus Tours

Success criteria: The participant filled in the entire form of Undergraduate Campus Visit for December 27th, 2022, at 11 am, and press submit button.

There's no place like RIT, so nothing beats a campus visit.

There is nothing more important to RIT than the safety and well-being of the special community that makes our campus such a remarkable place to live and learn. This concern extends to the many who visit our campus for events, tours, conferences, etc.

Visitors are asked to self-monitor for any symptoms related to COVID-19 before coming to campus. If you have known exposure to COVID-19 or have any of these [symptoms](#), we ask that you do not visit. Masking is optional in all locations except public transportation and at health care facilities. Individuals should take proper precautions, such as masking, based on their personal risk. For detailed information, please review the RIT Ready [website](#) for COVID-19 safety procedures.

You must sign up at least 24 hours in advance. Self-guided tour maps are available on the outside entrance of RIT's Bausch and Lomb Center.

If you are deaf or hard-of-hearing prospective student or are interested in the ASL Interpreting or Community Development and Inclusive Leadership programs, please [click here](#).

Use the calendar to select available dates.

December 2022


Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Legend:

- Available
- Unavailable / Filled
- Not Scheduled

https://join.rit.edu/portal/ugrd_campusvisit#

Task 4 66% Completed



Undergraduate Campus Visit

Date of Visit: Tuesday, December 27, 2022

*If you are deaf or hard-of-hearing prospective student or are interested in the ASL Interpreting program, please [click here](#).

Please select your student status to see availability.
 I am interested in RIT as a...* (Student Status)

Intended Term

Additional Guests (not including student registrant)

Note: If a guest with the student requests ASL interpreting services during the visit, please contact visitrit@rit.edu. (3 days advanced notice is requested)

Plan Your Visit

Instructions: Please select a time below. Your selection of a specific time will reserve your place in that given activity.

Individual Interview
approximately 30 minutes

There are no available openings for this date.

Campus Tour
~60-75 minute walking tour

11:00 AM

Student Information

Student First Name*

Do you want to add a preferred name?
 Yes
 No



	Easy of Use	Satisfaction
Max	5	5
Min	1	2
Mean	4	4.333
Median	4.5	5
Stdev	1.549	1.211
Sample Size	6	6
Q1	4	4
Q2	4.5	5
Q3	5	5
IQR	1	1


Task 5

Meeting with Admission Counselor

Success criteria: Arrive at the form that will allow users to book a virtual appointment with an admission counselor.

The screenshot shows a web browser window with the URL `rit.edu/admissions/first-year`. The page features a navigation menu on the left with the following items: **Visit and Events**, **How to Apply**, **Student Perspectives**, **Financial Aid and Scholarships**, **International Students**, **Accepted Students**, **For School Counselors**, and **Contact Us**. Below the menu are three orange buttons: **Request Info**, **Visit**, and **Apply**, followed by a grey button for **Frequently Asked Questions** and a link to the **RIT 官方中文网站**. The main content area has a large heading **Come Thrive with Us** and a paragraph: "Through future-focused academics and a vibrant campus life, our students shine. Come join the RIT community, where your individuality, creativity, and innovation are always celebrated. Here, you can be uniquely you." Two orange buttons, **Why Students Choose RIT** and **Explore Majors**, are positioned below the text. A secondary heading **Visit and Events** is followed by a paragraph: "Whether you can visit in person or want to experience virtually, we offer opportunities every day for you to get to know RIT, meet our students and staff, and ask questions. [View all the ways you can experience RIT >](#)" Below this is a large graphic with the text **Experience the amazing** and a video player showing a woman in a blue hijab. An orange button **Schedule a Visit** is overlaid on the video player. The browser's address bar and Incognito window title are visible at the top.

Task 5 0% Completed



Prospective Student Appointment

Tuesday, January 17, 2023 at 2:45 PM until 3:30 PM Eastern Standard Time

Are you deaf or hard-of-hearing? *

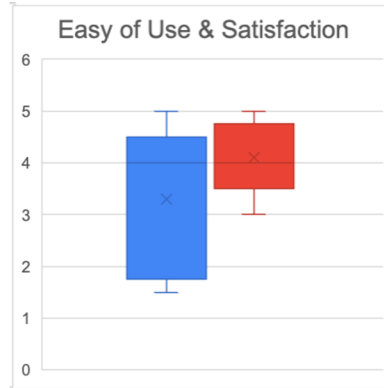
Yes

No

RIT

Admissions and Aid

- Overview
- Freshman Admission
- Transfer Admission
- Graduate Admission
- International Student Information
- Deaf and Hard-of-hearing Students
- US Military / Veterans
- Online and Professional Education Admissions
- Financial Aid and Scholarships
- Visit Campus



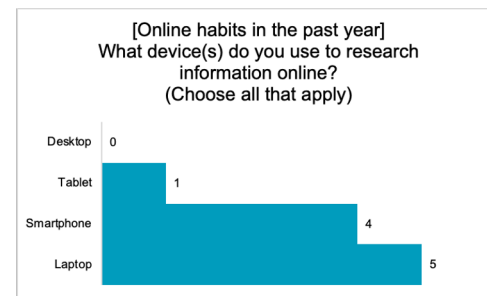
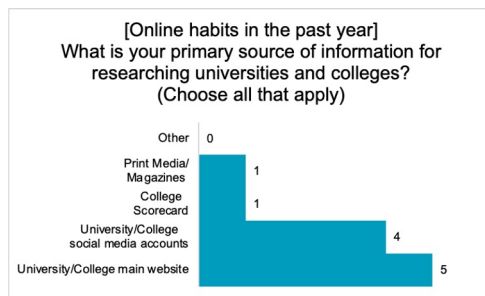
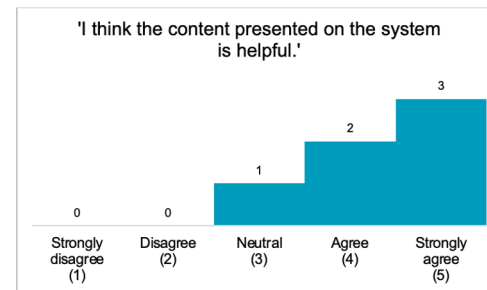
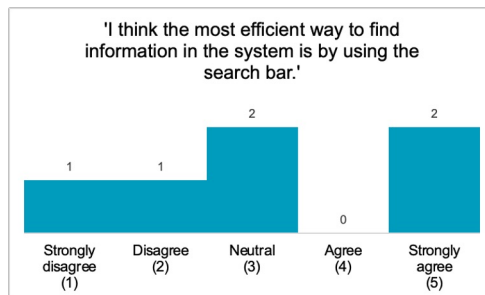
	Easy of Use	Satisfaction
Max	5	5
Min	1.5	3
Mean	3.3	4.1
Median	4	4
Stdev	1.483	0.741
Sample Size	5	5
Q1	1.75	3.5
Q2	4	4
Q3	5	4.75
IQR	3.25	1.25

Post-test questionnaire

- Two parts questionnaire:
 - Overall experience using the system
 - 10-question SUS
 - 2 Likert scale questions
 - Online habits in the past year:
 - 6 multiple choice questions

Analysis:

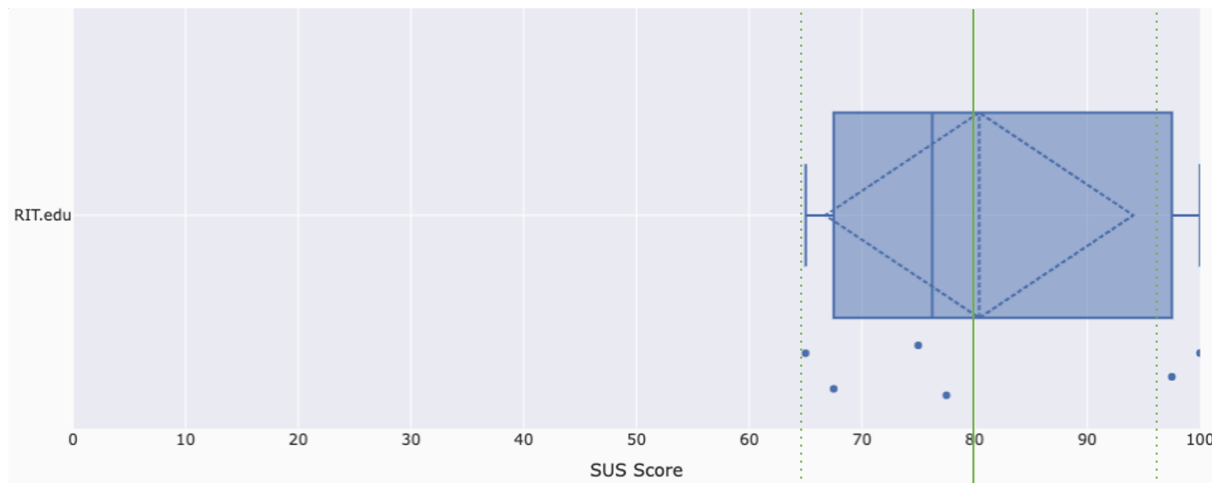
- **83% of participants consider the content presented in the system helpful.**
- University/college websites and their social media accounts are the main sources of information.
- Laptops and smartphones to research information online.



Post-test questionnaire

- Standard **System Usability Scale (SUS)**
- Overall RIT.edu SUS score: **80.42**
 - *Industry Benchmark SUS = 80*
- Conclusiveness*: **35%**

Mean	80.42
Median	76.25
SD	14.95
SE	6.1
t-statistic	15.69
CI lower	64.72
CI upper	96.12



Limitations and Review

- Not all participants are prospective undergraduate students.
- Deviation from original plan to include counter balancing for learning effects.
- We only test on the desktop version of the RIT website.
- Some surrogate participants are experienced users of the RIT website.
- Small sample size limits generalizability and conclusiveness of SUS score.
- This study does not include evaluation of the “application” and “tuition and fees” sections in the study.
- Challenges conducting testing remotely versus in-person controlled testing.
- The scenarios could be further refined for clarification.

Suggestions and Future Research

Recommendations

- **Increase the visibility of important links within user flows.**
- **Change or update how prospective students find clubs and organizations.**
- **Discuss and review content based on user flows.**

Future Work


- **Qualitative findings of this test can guide future tests**
- **Recommend testing the website on mobile devices**
- **A/B testing on laptop/desktop vs smartphones**

Q&A


Appendix

Recruitment Flyer

Flyers were placed around campus and shared digital to friends and family.



Have you started your college applications yet?




We need you! For a website usability evaluation


<p>What Use a website to browse information and get a \$25 Amazon gift card for sharing your thoughts!</p>	<p>Where Zoom</p> <p>Duration 60 minutes</p>	<p>When Nov 28th - Dec 10th Flexible scheduling!</p>
--	--	---

Interested?
Please email us at usabilityrit@gmail.com or scan the QR code above to fill out a short form!

*This is part of a project for a graduate course at RIT.



Have you started your college applications yet?



We need you! For a website usability evaluation

What:
Use a website to browse information and get a **\$25 Amazon gift card** for sharing your thoughts!

Where: Zoom
Duration: 60 minutes

When:
Nov 28th - Dec 10th
Flexible scheduling!

Interested?
Please email us at usabilityrit@gmail.com or scan the QR code to fill out a short form!

*This is part of a project for a graduate course at RIT.

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

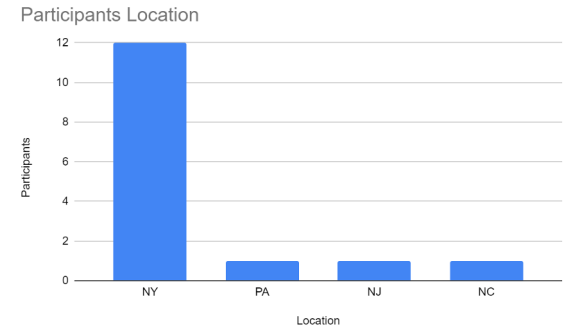
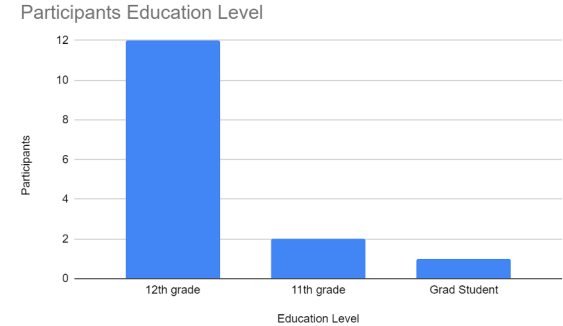
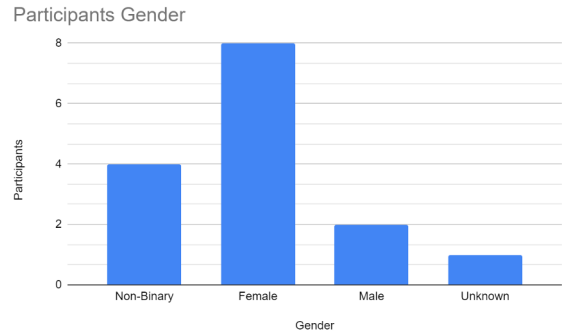
We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

We need you! For a website usability study. Interested? Email us at usabilityrit@gmail.com or scan the QR to fill out a short form!

Screeners

Along with our flyer we shared a link to a screener questionnaire to filter potential participant that fit our intended demographic.



Consent Form

To ensure we can effectively capture data we requested participants to consent to allowing use them in our study as well as record the study for further review.

Participant No: _____ RIT.edu – Web Presence

INFORMED CONSENT FORM

INTRODUCTION
Thank you for volunteering to be part of this research study. In this research study, we are evaluating the RIT website for prospective undergraduate students.

STUDY SUMMARY
This study will take no more than one (1) hour to complete. You will be asked to use the RIT website to locate information and complete forms relevant to prospective undergraduate students. The evaluation will be followed by a few survey questions intended to capture your thoughts and opinions on the website you just used.

The session will be recorded using video and audio and notes will be taken to record your opinions and actions.

This document states that you are beyond 18 years old and agree to be video/audio taped while participating in this study. This information, including the video tape, may be used to improve products. It may also be shared with others for educational purposes.

Although it may not appear as such, this is not a test of you or your abilities. We are interested to learn how students interact with the website, whether the website makes sense to you in the context of applying to RIT, and your opinions of the website.

All we require is that you use the website and attempt to complete each task as best you can. The moderator may stop the study or take you out of the study at any time they judge it is in your best interest. They may also remove you from the study for various other reasons. They can do this without your consent. And if you feel uncomfortable, you can stop participating at any time without loss of benefits. If you are a current RIT student there is also no penalty or academic action that will be taken based on anything you say, do, and/or any of the outcomes of this study.

RISKS
We do not foresee any risks associated with your participation in this research study.

BENEFITS
There are no anticipated direct benefits to you for participating in this study. The study will be used to help direct future research into the RIT website use and to inform design of potential future updates to the RIT website.

Participant No: _____ RIT.edu – Web Presence

CONFIDENTIALITY
Your name will not be used when data from this study are published. Every effort will be made to keep your research records and other personal information confidential.

We will hold as confidential your personal information (such as name and phone number) and use it only for data analysis purposes, to link data to the subject. The only connection between your participation in this study and the study itself will be the signed consent form.

You will be assigned a participant number. Only the participant number will be recorded on the test instruments. No personally identifiable information will be recorded on the test instruments nor stored within the software you use today. Participant identities will not be made part of any published findings resulting from this study.

INCENTIVES
At the conclusion of the study session, you will be given a \$25 dollar gift card.

CONTACT
Participation in this study is voluntary. You have the right not to participate at all or to leave the study at any time. Deciding not to participate or choosing to leave the study will not result in any penalty or loss of benefits to which you are entitled, and it will not harm your relationship with RIT.

PARTICIPANT RIGHTS
If you have any questions about the study or the procedures, you may contact us at usabilityrit@gmail.com.

Contact Charles Schneider, Professor of Usability Testing at chuck@mail.rit.edu if you have any questions or concerns about your rights as a research participant.

CONSENT

Print Name _____

Signature _____

Date _____

Post-Task Questions

To gauge the participants ease of use and satisfaction with each task we ask the same two post task question at the end of each task and recorded the responses .

1. On a scale from 1 to 5, if 1 means it was not easy to complete the task and 5 it was very easy. How would you rate it?
2. On a scale from 1 to 5, if 1 means you were not satisfied completing the task and 5 it was very satisfying. How would you rate it?

Post-Test Questions

For our post questionnaire we decide to use the System Usability Scale (SUS) a standard 10 question questionnaire use to evaluate the the usability of anything from hardware to software. We added an additional 2 questions for the our specific study.

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.
11. I find the most efficient way to find information in the system is by using the search bar.
12. I think the content presented on the system is helpful.

Post-Test Questions

Additional we asked 4 question to better understand our participant online habits in the past year to help determine any opportunity for future studies.

1. What is your primary source of information for researching universities and colleges?
2. What device(s) do you use to research information online:
3. What is your preferred internet browser?
4. On average, how many hours have you spent browsing for college degrees online