

Group 2

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COSC 67: Human-Computer Interaction

Section I: Empathizing

Interview Guide

Pre-Interview

- **Who is the user?** *Dartmouth students who ski or snowboard*
- **Why this user?** *Students who have never skied or snowboarded before will not know what their needs are regarding planning an outing*
- **Where and when will interviews take place?** *In person April 8-10 to facilitate face-to-face interviews*
- **What is the goal?** *Learn more about students' ski and snowboard routines and preferences*

Introduction

Hello _____, and thank you for taking the time to speak with us today. My name is _____, and I'm joined here by _____ who will be taking some notes. We're both part of the CS 67: Human-Computer Interaction class, and we're excited to be speaking with you today.

The purpose of this interview is to learn more about your thoughts, feelings, and experiences related to skiing/snowboarding at Dartmouth. We're interested in hearing about your experiences on and off the slopes, any challenges or highlights you've faced, and any insights you can share with us about the Dartmouth skiing/snowboarding community.

Please know that there are no wrong answers! We want to make sure you feel comfortable and at ease during the interview, so please feel free to take your time and share your thoughts in as much detail as you'd like. We're here to listen and learn from you. If at any time you feel uncomfortable with a question, you can choose to skip it or end the interview.

Again, thank you for taking the time to speak with us, and we're looking forward to hearing your perspectives. Before we begin, do you have any questions?

Interview Questions

| Questions | Purpose |
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| Warm-Up <ol style="list-style-type: none"> 1. Walk me through the last time you went skiing. 2. How often do you go skiing during the winter when you're on campus? 3. Where do you normally go to ski when you're on campus? 4. How would you characterize your own skiing ability? | <ul style="list-style-type: none"> → General questions to get the interviewee thinking about skiing → Gauging level of commitment, interest, and ability level → Characterize the type of user to create personas |
| Planning <ol style="list-style-type: none"> 1. What factors contribute to how you plan a skiing outing? 2. Do you have trouble sometimes finding people to ski with? 3. How do you usually get to the skiway/resorts? 4. What are your thoughts and feelings about the Dartmouth Skiway shuttle? | <ul style="list-style-type: none"> → Learn about user's planning process and potential challenges → Get more of a specific background on the user's habits to characterize the rest of their answers |
| Skiing Habits <ol style="list-style-type: none"> 1. Who do you normally go skiing with (if anyone)? What are their ability levels? 2. Why do you choose to ski with these people (or alone)? 3. What's your ski/snowboarding style? Do you like going through trees or going to the park to hit jumps, etc.? | <ul style="list-style-type: none"> → Understand habits and preferences regarding social skiing vs skiing as an individual sport → Understand styles and why someone might prefer certain skiing partners or lack thereof |
| Partner Preferences <ol style="list-style-type: none"> 1. Have you ever skied with someone who is at a different skill level than you? How did that go, and what did you learn from the experience? 2. Do you have any skiing goals or aspirations that you are working towards, such as mastering a particular skill or competing in a certain event? How does this impact who you ski with? 3. What are some characteristics of an ideal skiing partner? | <ul style="list-style-type: none"> → Understand how different factors affect the user's choice in partner |

| | |
|--|--|
| 4. How important is it for you to ski with people who are the same ability level as you? 5. How do you feel about skiing with snowboarders (or snowboarding with skiers)? | → Is our problem one worth solving? |
| Potential Pain Points 1. What skiing equipment do you own, rent, or borrow? 2. What are some barriers that prevent you from going skiing when you want? 3. What factors would cause you to go on more skiing outings? | → Identify other potential pain points than the ones we've noted |
| Tools 1. What tools do you currently use to plan your skiing outings (availability, transportation, gear, etc.)? | → Understand the user's current planning process |
| Wrap-Up 1. What would you change about your skiing routine? 2. Is there anything else you'd like to share about your skiing experience at Dartmouth? 3. Those are all the questions I have for today. Do you have any questions for me about anything we talked about? | → Allow the user to share any information they feel is important to the conversation |

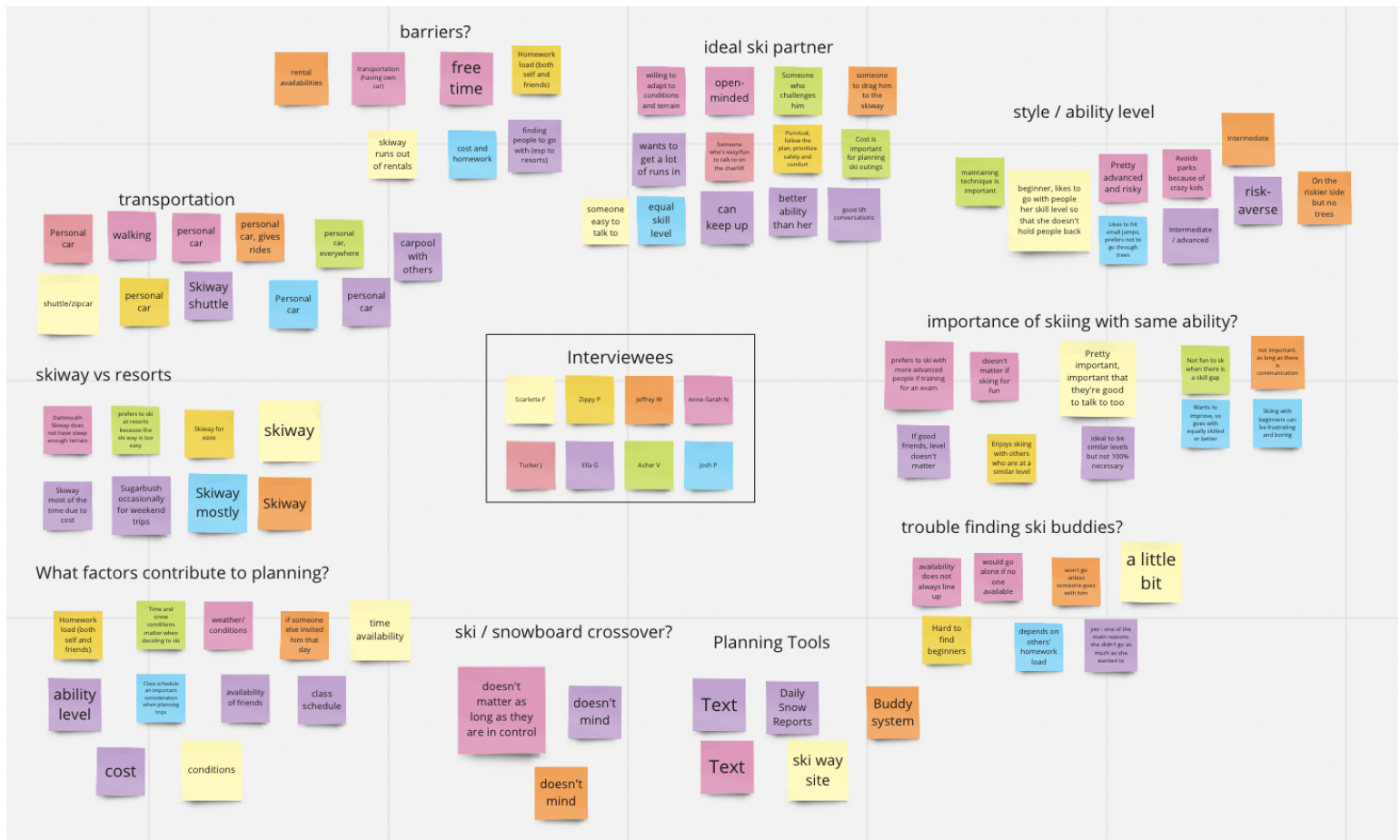
Description of Interviewees

Below are the descriptions of the eight Dartmouth students we interviewed. During the recruitment process, we sought out users within the target population from a variety of backgrounds and skiing experience levels. Some interviewees have their own car on campus, while others rely on other forms of transportation. Additionally, we made sure our interviewees came from diverse socioeconomic backgrounds.

| Name | Gender | Self-Reported Ski/Snowboard Ability | Means of Transportation |
|------------------------|---------------|--|---------------------------------|
| Scarlette F | Female | Beginner | Skiway Shuttle, Carpool, ZipCar |
| Zippy P | Female | Beginner | Personal Car, Carpool |
| Jeffrey W | Male | Intermediate | Personal Car |
| Josh P (Snowboarder) | Male | Intermediate | Personal Car |
| Tucker J (Snowboarder) | Male | Intermediate | Personal Car |
| Ella G | Female | Advanced | Skiway Shuttle, Carpool |
| Anne-Sarah N | Female | Advanced | Walking, Carpool |
| Asher V | Male | Advanced | Personal Car |

Brainwriting

Following our interviews, we summarized interviewees' responses to our interview questions using sticky notes whose colors correspond to each interviewee. By organizing responses by overarching topics, we were able to see patterns and similarities across interviewees' experiences, thoughts, and feelings surrounding skiing at Dartmouth.



Needfinding Data - Empathy Map

SAYS

Class schedule is probably the biggest factor for planning ski outings with friends

As a beginner, I like to go with people my skill level so I don't hold people back

I don't mind skiing with snowboarders as long as they are in control.

Cost is an important factor when planning where and with whom I want to ski.

"Be safe on the slopes people. Please stay in control."

"I don't hate skiing that much, I just don't like the snow or cold that much."

The Dartmouth Skiway should have more available rental equipment

"I rarely use the Skiway shuttle, but I think it is useful for those who don't have a car"

"I wish there was a skiing 'tinder' of sorts to meet people to ski with"

"I wish people were more willing to share their gear and passes to resorts"

THINKS

An ideal skiing partner is someone who is willing to be adaptive and fun to talk to.

If no one is available when I want to go skiing, then I won't go because I don't want to go alone.

Going with similarly skilled or sometimes better skiers is ideal because it motivates you to improve

The Skiway shuttle could be more reliable as it isn't always that convenient

Dartmouth Skiway gear does not always fit right

It can be difficult to find people to ski with that are at the same ability level

As a beginner, I do not want to take risks when skiing

I don't want to go skiing if the conditions are looking unfavorable.

It's hard to find people at Dartmouth who are beginners

I want to both feel safe and not judged when I'm skiing

User

DOES

Drives their own car to the skyway and other resorts

Checks the daily weather reports/snow conditions before planning outings

Skis mostly at the Skiway while on campus for convenience

Skis with friends as a social activity regardless of skill level

Carpools with others if they don't have their own car.

Texts others to plan ski trips

Consider everyone's schedules and workloads when planning outings

Owens gear and buys from Facebook Marketplace

Changes style depending on conditions

FEELS

The Dartmouth Skiway does not have steep enough terrain to challenge really advanced skiers.

It would be nice to meet some new people who I enjoy being around are similarly skilled

Frustrated and sometimes bored when skiing with beginners who can't keep up

More comfortable with taking risks while skiing if skilled enough

Skiing isn't fun unless I'm skiing with other people as a social activity.

Feels bad that they are holding others back when skiing with a more advanced group

The constraints of the Dartmouth Shuttle System feel restrictive

Feels "perceived" when skiing with people of a higher level

Worried that I hold my more experience friends up when skiing with them

Inferences

- People have a harder time planning their skiing outings due to a lack of transportation: students who do not have their own car are forced to try and carpool with others or take the Skiway shuttle which does not run on weekdays and is otherwise unreliable.
- Users have varying and particular ideas of who their ideal skiing partner is, but will ski with almost anyone because it's better than skiing alone.
- Users are willing to go with skiers/snowboarders who are not as skilled as them but will sometimes get annoyed if there is a large skill gap or if they're constantly getting held back.
- Class schedules are often the biggest challenge when it comes to planning skiing outings with friends and ideal ski partners, especially when they have entirely conflicting schedules.

Tensions, Contradictions, Surprises

Tensions

- T1: Skiing is often viewed as a status symbol, so students who are on financial aid are concerned with the cost barrier.
- T2: Advanced skiers become frustrated skiing with beginners, and beginners feel bad for annoying more advanced skiers.
- T3: Students who don't own equipment are annoyed that other skiers are often hesitant to let them borrow their gear.
- T4: Skiers of all levels (but especially more for beginners) often feel like they are being judged when skiing.

Contradictions

- C1: The Dartmouth Skiway shuttle is advertised as an easy way for students to get to the Skiway, but it is often unreliable and only runs on weekends.
- C2: Beginners don't want to drag down advanced skiers, but still want to ski with them to improve.
- C3: Skiers often prefer to go with their friends, but it can be challenging when their schedules don't line up well with one another.
- C4: Advanced skiers are usually okay with going with their beginner friends, but when their friends hold them back it makes the advanced skiers frustrated at times.
- C5: The Dartmouth Skiway is so close and accessible, yet most students rarely go due to availability and scheduling issues.

Surprises

- S1: Some students do enjoy skiing itself, but will go on skiing outings with others as a social activity.
- S2: The vast majority of skiers (all levels) use cars to get to ski destinations.

- S3: The Dartmouth Skiway often runs out of rental equipment.
- S4: The majority of students have a negative viewpoint on the Dartmouth Skiway shuttle.

Section II: Synthesizing and Needfinding

Key Needs

- [C3, C5] An easier way to coordinate skiing outings with others based on availability (class schedule, other commitments, etc.)
- [S1] Means of meeting new people who share an interest in skiing and who enjoy skiing as a social activity
- [T2, T4, C2, C4] Connecting with potential ski/snowboard partners who are of similar skill level
- [C1, S2, S4] Finding alternative ways of getting to the Dartmouth Skiway (due to the lack of reliability by the shuttle) as well as other mountains nearby.
- [C5] An easier way for skiers to balance their responsibilities
- [T1, T3, S3] Low-cost and easy access to skiing gear that fits and will keep the skier safe
- [C3, S1] A way to find skiing partners who will engage in interesting conversation on the lifts

Point of View Statements

- A student who skis at an advanced or expert level **needs to** be able to find other high-level skiers **in order to** improve their skiing and reach their personal goals.
- A student who enjoys skiing as a social activity **needs to** be able to find skiing partners who will ski with the same pace and style and who will make good conversation on the ski lift **in order to** get the most enjoyment out of the experience.
- A student who is just starting to learn how to ski **needs to** be able to find ski partners who are patient and willing to stay back when they struggle **in order to** improve their skills.
- A student who is a beginner skier **needs to** be able to find other beginners **in order to** not feel like they're holding the group back.
- A student **needs to** ski with peers of a similar level **in order to** feel safe and learn in a judgment-free environment.
- A student who is financially constrained **needs to** gain access to low-cost transportation, gear, and lift tickets **in order to** enjoy skiing without feeling financially burdened.

How Might We Statements

- How might we connect Dartmouth students on campus who are looking for skiing partners with certain attributes?

- How might we facilitate a more reliable transportation network for Dartmouth students who want to go skiing?
- How might we reduce the time student skiers spend waiting for transportation, rentals, and lifts while minimizing cost?
- How might we connect beginner skiers with one another so that they don't feel self-conscious about going with better skiers?
- How might we connect skiers with potential new ski partners that are fun to hang out with?
- How might we enable skiers that share similar goals when it comes to skiing to meet one another?
- How might we connect skiers with similar availability?
- How might we encourage skiers who don't enjoy skiing to have a more enjoyable experience?
- How might we help beginner skiers feel less embarrassed about their ability levels?
- How might we help individuals who enjoy skiing manage their time better?
- How might we facilitate more engaging conversations between skiers on ski lifts?

Summary

We identified the key needs of Dartmouth skiers by interviewing eight undergraduate students from a variety of demographic backgrounds and skiing abilities. Based on the inferences we developed from our interviews, we formulated Point of View Statements and How Might We Statements which highlight the key pain points and potential areas for improvement of the overall skiing experience. Three main barriers to skiing brought up by many interviewees are availability, skiing ability, and transportation.

Students who want to go skiing with their friends often run into availability issues, as it is difficult to schedule skiing outings around the Dartmouth class schedule. Due to this, students are either forced to ski alone or seek out new friends with overlapping availability.

Students also expressed tensions regarding skiing with other students of differing ability levels. Beginner skiers discussed feeling like they were holding more advanced skiers back, feeling bad about skiing more slowly or conservatively. Conversely, advanced skiers enjoy being able to ski at a faster pace, and would prefer skiing with partners who can keep up with them.

Lastly, students expressed difficulties with finding reliable transportation to and from the Skiway and resorts. Students who have their own personal vehicles on campus almost exclusively use this method of transportation and are happy to provide rides to other students. On the other hand, students who do not have their own car on campus struggle to find transportation. The limited schedule of the Skiway Shuttle means these students must either find another student to carpool with or seek out more expensive alternatives like ZipCar.

Based on these pain points identified by our interviewees, we have decided to focus on alleviating challenges related to availability, skiing ability, and transportation in the context of skiing at Dartmouth.