Adobe wants to take its user experience around user assistance to the next level. For this project we are interested in taking a fresh look at how people currently get assistance when they run into difficulty using a piece of software. The research should cover both the many different ways that people get assistance using the computer (built-in application help, Google, newsgroups/blogs, etc.), as well as other non-computer sources of help.
Introduction | Research Question

What are the methods and paradigms that people use to give and receive help with software applications?

Introduction | Research Objective

To study the variety of strategies that Stanford students use to find help in interacting with computer applications.
Our Perspective | Research Objectives

- Identify methods and resources people use to get help & give help.
- Find successes and breakdowns: what works and what doesn’t?
- Find design principles that maximize success and minimize breakdown.

Our Perspective | Brainstorming

Documentation
Tool tips
Expert
Classes
After-school tutoring
Manual
Instruction
Context-help
Google
Searchable help
Clippy – pseudo-intelligent agents → expert agents
Analogies
Peers/colleagues/experts
Books
Observation
Our Perspective | Definition of ‘help’

help (hĕlp):
n. “contribution towards the fulfillment of a need, effort, or purpose”
Our Method | Key Factors

- Ask participants to define help
- Consider participants from different technical and academic backgrounds
- Qualitative focus: best insights for design principles would not come from a survey alone – so everyone uses Google, now what?

Our Method | Three Instruments
32 Screener Surveys

- Get pool of respondents for study
- Extent and type of computer usage
Our Method | Three Instruments
6 Interviews

- Types of applications where help is most needed
- Discuss successes with help systems
- Discuss frustrations with help systems
- Discuss what is important in a help system
- Discuss how help is given

Our Method | Three Instruments
6 Self-Report Diaries

- Free form to see how others regularly define “help”
- See real-world examples of the experience of getting help
Data Analysis | Process

**individually**
- shared and reviewed interview notes
- reviewed diary entries
- looked for patterns

**as a team**
- discussed common themes/patterns
- developed affinity diagrams
- determined user needs
help (hēlp)
n. “an exchange of information to one or more people intended to explain a concept or provide sufficient information to accomplish a goal”

“exchange of information”:
help is provided by a source to people

‘intended’:
help does not always solve the problem, but may mitigate the problem. The highest goal of help should be to solve a problem.
Data Analysis | Refining definition of ‘help’

help (hēlp)
n. “an exchange of information to one or more people intended to explain a concept or provide sufficient information to accomplish a goal”

“explain a concept”: one of the major functional roles of help is to educate.

Data Analysis | Refining definition of ‘help’

help (hēlp)
n. “an exchange of information to one or more people intended to explain a concept or provide sufficient information to accomplish a goal”

“information to accomplish a goal”: the other major functional role of help is to provide a how-to.
Data Analysis | Initial Findings

When do people seek help?

- **Obstacles**
  - Syntax questions
  - Error messages
  - Unexpected outcomes

- **Goals**
  - Learning concepts
  - New & efficient techniques
Data Analysis | Initial Findings

How do people get help?

**Self-help**
- Intuition
- Exploration
- Trial & error

**In-application**
- Tool tips
- Help menus

**Peer-based**
- Observations
- Asking others

**External resources**
- Web queries
- Books
- Tutorials
- Classes

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Data Analysis | Paths For Seeking Help

- **Brian**: Trial & Error → Google
- **Troy**: Google
- **Eric**: Google
- **Jen**: Help Menu → Google
- **John**: Help Menu → Ask Others → Google
- **Russell**: Ask Others → Google

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Data Analysis | Users Speak

“Once you’ve spent more than 30 seconds with a problem, it’s time to use Google. Help systems are hard to navigate and I can find the answer on Google much quicker.”

PhD student in
Statistics And Education

Data Analysis | Users Speak

“I get frustrated when I can’t find good tutorials for a new task. Sample ways of doing things are very useful. It’s pattern matching – monkey see, monkey do.”

Undergrad student in
Math & Computer Science
Data Analysis | Users Speak

“I started using Firefox, but I didn’t know about tabbed browsing until my roommate showed me how to surf the web even faster.”

*Undergraduate student in International Relations*

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Data Analysis | Users Speak

"I wanted to play War Craft III via a LAN... I “googled” several times with terms like “Warcraft III Lan”, “Warcraft IP Server”, etc. Eventually I had to ask my friend and he told me to “google” “warcraft lancraft”."

*Undergraduate student in Computer Science*
Data Analysis | Users Speak

“I am usually annoyed, not amused when I am looking for help. Efficiency is the key: I find Clippy completely annoying.”

MA Student in Design Program

Data Analysis | Users Speak

“It would be cool if a help system could ask you: ‘So what have you already tried?’ or ‘What do you want your idea to end up looking like?’”

Masters Student in Humanities
Data Analysis | Subtle Note

Ultimately, it’s not only the question of how users find help, but of whether the information is out there in the first place!

Google is a portal: if the information isn’t there, it will not find it.

Findings | Design Principles

Users like to give help

Give them a platform to do so
Findings | Design Principles

People learn in different ways → Address distinct learning styles

Findings | Design Principles

Users embarrassed to ask for help publicly → Provide input from peers anonymously
Findings | Design Principles

Mismatch between help-system language and user language $\rightarrow$ Allow others users to give help in common language

Findings | Design Principles

Need for speed $\rightarrow$ Provide answers quickly
Findings | Design Principles

Need for accuracy and reliability \(\rightarrow\) Allow the most accurate information to rise to the top

Findings | Design Principles

People like to receive help the way they give help \(\rightarrow\) Use methods that people already use
Findings | Summing Up

- Accuracy & reliability
- Multiple Entry Points
- Collective Intelligence
- Common language
- User’s desire to help
- Speed & availability

Self-modifying, user-edited help system
(E.g., Wikipedia, PHP Online Manual, Macromedia Help)

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- Ms. Ingrid Erickson
- Mr. Michael Albers of Sun Microsystems
- Mr. Bob Murata of Adobe Corporation

Questions?
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<tr>
<th></th>
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<td>Presentations</td>
<td>Provides 1-on-1 tutoring</td>
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<td>Teaches graphic design</td>
<td>Teaches grandma</td>
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