

# Using Language to Improve Usability

tekem - 10 November 2004 - Weisbaden

Whitney Quesenberg

Whitney Interactive Design

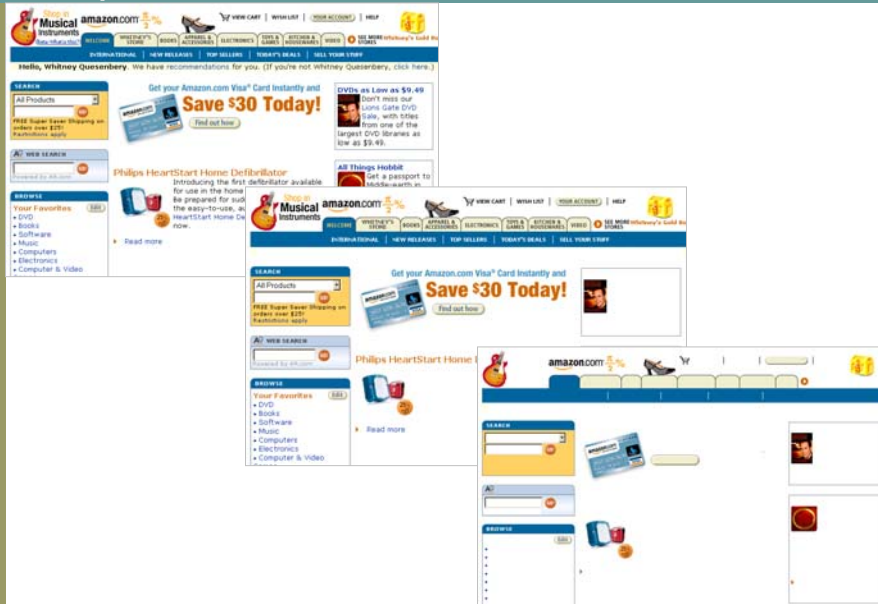
www.WQusability.com

908-638-5467

whitneyq@wqusability.com

© 2004, Whitney Quesenberg

## How important are words?



## Definitions overlap

### Usability

The extent to which a product can be used by specified users to achieve specified goals with **effectiveness**, **efficiency**, and **satisfaction** in a specified context of use

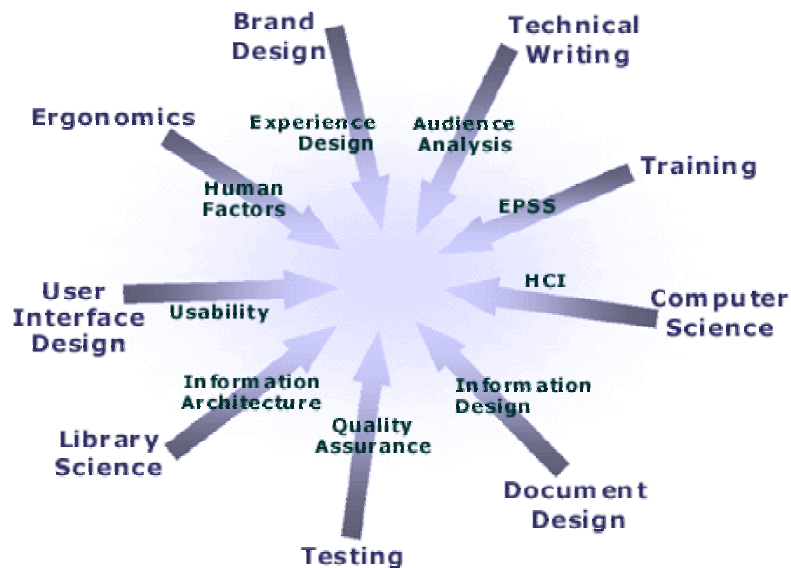
ISO 9241-11

### Document Design

The field concerned with creating texts (broadly defined) that integrate words and pictures in ways that help people to **achieve their specific goals** for using texts at home, school or work

Karen Schriver, Dynamics in Document Design

## Disciplines converging



## Topics for today

- The role of language
- The importance of context
- Rules to live by

## 1. The role of language

How are words used as part of the user interface?

## Is this...


### Online Registration Renewal

A simple 4-step process!

1. ENTER VEHICLE INFORMATION
2. ENTER OWNER INFORMATION
3. PAY FEES
4. PROVIDE FEEDBACK (optional)

Make sure you have the following ready:

- Your **registration renewal form**
- Your **Social Security Number (SSN)**
- Your **Insurance Identification Card**
- A valid **credit card**:



User interface?

Instructions?

Help?

Training?

## Even simple pages have many words

Step **1** 2 3

### Sign up for TypePad

Follow the steps below to register for TypePad.

**Select your user name and password**

Your user name is the name that you will use to log in to TypePad.

**Member Name:**  Your member name can not be longer than 25 characters and should not contain any spaces.

**Password:**  Your password should be between 6 and 15 characters and should not contain spaces.

**Password (again):**

**Password Recovery:**  In the event that you lose or forget your password, the system will mail you your recovered password. To authorize this mailing, you will be asked for the answer to the question you specify here.

Headings

Instructions

Field labels

Explanations

# Words affect usability

Strattera.com

Healthcare Professionals Area



Does this mean:

“Take this medication three times a day, with food”

or

“When and why to take this medication”



# Many forms are filled with conversation

**Search Forms and Publications for:** [input field]

Tips for successful searching

**information for:**

- Individuals
- Businesses
- Charities & Non-Profits
- Government Entities
- Tax Professionals
- Retirement Plans

**resources**

- e-File
- Forms and Publications
- Where to File
- Contact My Local Office
- Frequently Asked Questions
- Taxpayer Advocate

**Guide Me To A Service**

You may want to use this tool as an alternative if you are having trouble choosing a company from the list. To obtain a list showing only the services for which you may qualify, complete all the statements below, then click the submit button.

Below is a short list of questions. If you are uncertain about your answers to the questions contained in Guide Me To A Service, you may want to view the complete list of companies and their services. The accuracy of the results is dependent on the accuracy of the answers you provide to the Guide Me To A Service tool.

For more information on each of the criteria below, click on the blue highlighted links.

**Important Note:** This information is being used for purposes of determining the services for which you may qualify. The information is strictly anonymous and will not be retained or used for any determination of tax liability. IRS policy prohibits the use of permanent internet cookies.

**Please complete all of the following statements:**

I am  years of age. If filing a joint return, my spouse is  years of age.

My estimated 2003 Adjusted Gross Income is

My state of residence is

How many 2003 IRS Form W-2(s), Wage and Tax Statement did you receive including those for your spouse?

I plan on using the IRS Form 1040EZ, Income Tax Return for Single and Joint Filers with No Dependents?  Yes  No

I may be eligible for Earned Income Tax Credit.  Yes  No

Did my spouse or I receive Military pay in 2003?  Yes  No

Introductions

Instructions

Warnings

Questions

## Conversation

In the three-layer model of forms...



Appearance

Conversation

Relationship

...conversation is the jam in the middle of the sandwich

Caroline Jarrett: Forms That Work

## 2. Context of use

“Know thy users (for you are not them)”

# Identifying the participants

1. Are the applicant, spouse or any of their dependents, regardless if applying for coverage, currently...

What are you asking me??!



## Qualifying eligibility questions

1. Does the applicant, co-applicant or any named dependent currently have any of the following: hospital, major medical or medical insurance coverage?  Yes  No
2. Are the applicant, co-applicant and every named dependent a citizen of the United States?  Yes  No
3. Do the applicant and co-applicant reside in Wisconsin at least 6 months a year?  Yes  No
4. Are the applicant, co-applicant and every named dependent under age 65?  Yes  No

## Qualifying health questions

Note: Coverage cannot be issued to any individual who answers 'Yes' to one of these 5 questions.

1. Are the applicant, spouse or any of their dependents, regardless if applying for coverage, currently pregnant or an expectant parent?  Yes  No
2. Has the applicant, co-applicant or any dependent to be insured, ever had an organ transplant?  Yes  No
3. Has the applicant, co-applicant or any dependent to be insured been diagnosed as having, or been treated by a member of the medical profession for Acquired Immune Deficiency Syndrome (AIDS), AIDS Related Complex (ARC) or Human Immunodeficiency Virus (HIV)?  
NOTE: HIV or AIDS tests are limited to FDA-licensed blood tests. You do not have to disclose whether you have obtained a genetic test, the results of a genetic test, or a positive AIDS test result obtained at an anonymous counseling or testing site.  Yes  No
4. Has the applicant, co-applicant or any dependent to be insured ever tested positive for the antibody to AIDS or HIV?  
NOTE: HIV or AIDS tests are limited to FDA-licensed blood tests. You do not have to disclose whether you have obtained a genetic test, the results of a genetic test, or a positive AIDS test result obtained at an anonymous counseling or testing site.  Yes  No
5. Has the applicant, co-applicant or any dependent to be insured ever been diagnosed with, treated for, seen or consulted with a physician or licensed practitioner for:
  - a) Angina, Angioplasty, Heart Attack, Coronary Bypass, Atrial or Ventricular Septal Defects, Heart Valve Replacement?  Yes  No
  - b) Stroke, Cirrhosis, Polycystic Kidney Disease, or Addison's Disease?  Yes  No
  - c) Down's Syndrome, Cerebral Palsy, Muscular Dystrophy, or Cystic Fibrosis?  Yes  No

# Identifying the participants



## Qualifying eligibility questions

1. Does the applicant, co-applicant or any named dependent currently have any of the following: hospital, major medical or medical insurance coverage?  Yes  No
2. Are the applicant, co-applicant and every named dependent a citizen of the United States?  Yes  No
3. Do the applicant and co-applicant reside in Wisconsin at least 6 months a year?  Yes  No
4. Are the applicant, co-applicant and every named dependent under age 65?  Yes  No

## Qualifying health questions

Note: Coverage cannot be issued to any individual who answers 'Yes' to one of these 5 questions.

1. Are the applicant, spouse or any of their dependents, regardless if applying for coverage, currently pregnant or an expectant parent?  Yes  No
2. Has the applicant, co-applicant or any dependent to be insured, ever had an organ transplant?  Yes  No
3. Has the applicant, co-applicant or any dependent to be insured been diagnosed as having, or been treated by a member of the medical profession for Acquired Immune Deficiency Syndrome (AIDS), AIDS Related Complex (ARC) or Human Immunodeficiency Virus (HIV)?  
NOTE: HIV or AIDS tests are limited to FDA-licensed blood tests. You do not have to disclose whether you have obtained a genetic test, the results of a genetic test, or a positive AIDS test result obtained at an anonymous counseling or testing site.  Yes  No
4. Has the applicant, co-applicant or any dependent to be insured ever tested positive for the antibody to AIDS or HIV?  
NOTE: HIV or AIDS tests are limited to FDA-licensed blood tests. You do not have to disclose whether you have obtained a genetic test, the results of a genetic test, or a positive AIDS test result obtained at an anonymous counseling or testing site.  Yes  No
5. Has the applicant, co-applicant or any dependent to be insured ever been diagnosed with, treated for, seen or consulted with a physician or licensed practitioner for:
  - a) Angina, Angioplasty, Heart Attack, Coronary Bypass, Atrial or Ventricular Septal Defects, Heart Valve Replacement?  Yes  No
  - b) Stroke, Cirrhosis, Polycystic Kidney Disease, or Addison's Disease?  Yes  No
  - c) Down's Syndrome, Cerebral Palsy, Muscular Dystrophy, or Cystic Fibrosis?  Yes  No



## Jerilynn



Daughter  
Kimberly



Grandkids Tom  
and Jerome

- Worked in her office for 20 years
- Age: mid-50s
- Some post-high school education
- Family life very important

### Likes

- Helping people
- Knowing how to get things done in the bureaucracy
- A job that doesn't compete too much with her life

### Dislikes

- New computer systems
- Constant change and pressure

## Toni



Husband, Jason



Son, Marcus



At the office

- Age: late-20s
- Married, with husband and two-year old
- Works full time in a local shop

### Daily life

- Work and household chores
- Time for family
- Handles family finances and medical appointments, and plans vacations

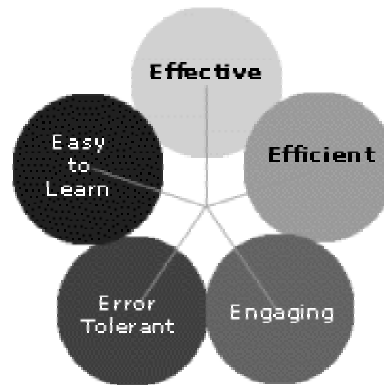
### Frustrations

- Never enough time to get everything done
- Living up to expectations



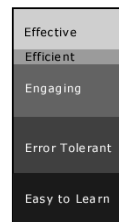
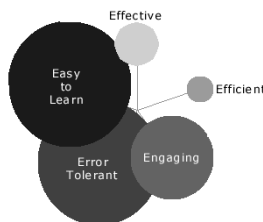
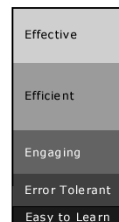
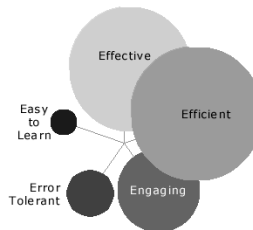
## Dimensions of usability

- **Effective**  
Users can accomplish their goals...
- **Efficient**  
...in a reasonable time...
- **Engaging**  
...in a pleasant and satisfying way
- **Error Tolerant**  
...in a product that helps them prevent mistakes...
- **Easy to Learn**  
...and that is easy to learn to use.



What Does Usability Mean: Looking Beyond 'Ease of Use'  
Whitney Quesenbery, Proceedings of the STC, 2001

## Jerilynn & Toni have different requirements



# Design based on context of use



Understanding of users and their scenarios for meeting their goals...

...leads to design that helps them succeed



## 3. Rules to live by

(And why this is part of a writer's job)

## Usability heuristics\*

1. Matches user tasks and mental model
2. Speaks in user's language
3. Appropriate, minimal visual design
4. Visibility
5. Consistency
6. Support for standards
7. Supports user actions
8. Prevents errors
9. Provides shortcuts
10. Supports learning

\* Heuristics

Principles or rules of thumb

Jakob Nielsen (and many others)

## Usability heuristics\*

1. Matches user tasks and mental model
2. Speaks in user's language
3. Appropriate, minimal visual design
4. Visibility of current status
5. Consistency
6. Support for standards
7. Supports user actions
8. Prevents errors
9. Provides shortcuts
10. Supports learning

\* Heuristics

Principles or rules of thumb

Jakob Nielsen (and many others)

## Be informative

- Don't make users guess at what the application will do, and how it will do it

What can I do here?  
Will this let me accomplish my task?



A simple 4-step process!

1. ENTER VEHICLE INFORMATION
2. ENTER OWNER INFORMATION
3. PAY FEES
4. PROVIDE FEEDBACK (optional)

Make sure you have the following ready:

- Your **registration renewal form**
- Your **Social Security Number (SSN)**
- Your **Insurance Identification Card**
- A valid **credit card**:



## Be informative

What's an HREF?

Is this the ALT tag?

- Use words that are meaningful to the audience (they may be technical, but only when appropriate)

# Be helpful

- Provide instructions throughout the process, not just at the beginning
- Answer questions before they even ask

## Sign up for TypePad

Follow the steps below to register for TypePad.



### Select your user name and password

Your user name is the name that you will use to log in to TypePad.

Member Name:  Your member name can not be longer than 25 characters and should not contain any spaces.

Password:  Your password should be between 6 and 15 characters and should not contain spaces.

Password (again):

Password Recovery:  What is your mother's maiden name?

In the event that you lose or forget your password, the system will mail you your recovered password. To authorize this mailing, you will be asked for the answer to the question you specify here.

How many steps?

Can I use my usual password?

Why do you want to know my mother's maiden name?



# Be helpful

- Use the web's "information nature" to make questions easier to answer.

**Step 2 of 3. Customize test-wq**

Do you want to approve messages before they are delivered?

No, messages are delivered immediately. Default

Yes, messages require my approval.

Only messages from new members require my approval. [Learn More](#)

Message replies should go to:

All group members. [Learn More](#) Default

Only to message sender. [Learn More](#)

Do you want to use group's web features, such as photos, files, calendar, polls, and chat?

Yes, I want to use the group's web features. Default

No web features; this is a mailing list only. [Learn More](#)

**Customize Group**

Message approval:  ▼

Reply to:  ▼

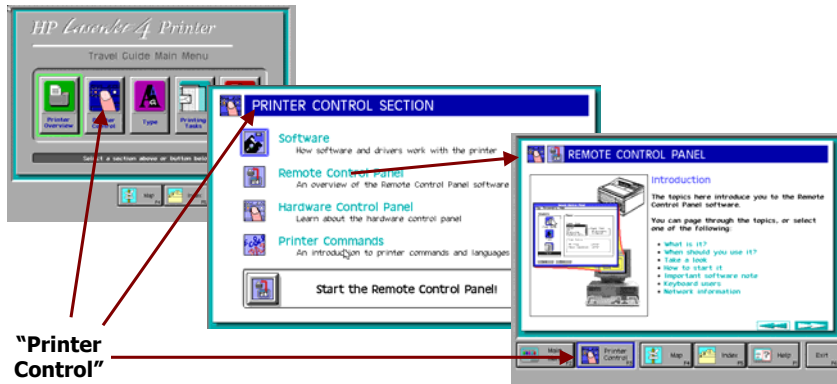
Group type:  ▼

They won't read it anyway, will they?

## Be consistent

Same word = same meaning

Different word = different meaning



"Printer Control"

## Be tolerant

- Don't make the user do work the computer can do
  - Accept any valid format for codes, card numbers, dates and other data fields

### Payment Method

Credit Card Type:  American Express  
 Discover  
 MasterCard  
 Visa

Credit Card Number:

Expiration:   (mm/yyyy)

Other Payment  Please send me a bill.

1234-107517-43006



Why can't I enter the rest of my credit card number?

## Test the product to design the documentation

**Edit Member Information for: whitney**

Enter or edit your member information in the spaces provided. Be sure to click **Finished** when you're done. Finished Cancel

---

**Member Details**

Birthdate: *Not displayed for security reasons* **Why?**  
 Your member details are used to better personalize Yahoo!'s services.

Gender:

Industry:

Title:

Specialization:

---

**General Preferences**

Language & Content: [English - United States](#) **Why?**  
 These general settings control how Yahoo! displays your personalized information.

Time Zone:

Prompt for Password:

Enter or edit your member information in the spaces provided. Be sure to click **Finished** when you're done. Finished Cancel

- What instruction will help users get started
- What terminology or options need more explanation?
- What tips, hints or reminders will help prevent errors or avoid confusion?

## Test the product to design the documentation

The screenshot shows a web browser window titled "Change your address online - Microsoft Internet Explorer". The page is from the United States Postal Service and is titled "CHANGE YOUR ADDRESS ONLINE". It has a "Choose move type" section with radio buttons for "Individual" (selected), "Family", and "Business". Below that are fields for "Date to Begin Forwarding Mail" (set to April 12, 2004) and "Date to Stop Forwarding Mail" (with month and year dropdowns). A "Help: Date to Stop Forwarding" popup window is open, containing the following text:

**Date to Stop Forwarding Mail**

For a **temporary move**, please indicate the date when you want us to **stop forwarding** mail to the temporary **NEW ADDRESS**. Your Move Return Date must be at least two weeks later than and within twelve months of the Start Date that you previously entered.

If you are not sure when you will return, please indicate your best estimate. In any case, if this date should change, be sure to notify the post office at your **OLD ADDRESS** of the new date to stop forwarding your mail.

Close Window

- Where should the help go...
  - Prompt
  - On-screen tips
  - Popup help window
  - Documentation
- And...how can the UI be improved to eliminate the need for some help....

## Why is this part of a tech writer's job?

### Why not?

- Documentation as the first “usability test”
- Improve the “learnability” of the product
- Start something new



(You might not even need a passport)

## Contact Information



Whitney Quesenbery  
Whitney Interactive Design  
p: 908-638-5467  
e: [whitneyq@WQusability.com](mailto:whitneyq@WQusability.com)  
w: [www.WQusability.com](http://www.WQusability.com)

Whitney Quesenbery is a user interface designer and usability specialist with a passion for clear communication.

She is an expert in developing new concepts for product designs and has produced award winning multimedia products, web sites, and web & software applications.

Whitney is the President of the Usability Professionals' Association (UPA) and past-Manager for the STC Usability SIG, where she runs its popular web site.

Before she was seduced by a little beige computer into the world of usability, Whitney was a theatrical lighting designer on and off Broadway. The lessons and stories from the theatre stay with her in creating user experiences.