

# Cloud Computing & Google Docs



Lynn McCormick for  
Librarian to Librarian Networking Summit

Image credit: <http://www.gemma-robinson.co.uk/newwork.htm>

# Today's Agenda

- A little perspective
- What is cloud computing?
- Impact on education
- Hands - on activities

# A little perspective



In September 1956 IBM launched the 305 RAMAC, the first computer with a hard disk drive (HDD). The HDD weighed over a ton and stored 5MB of data....

# 1960's



IBM 1311 disk storage drive

# 1970's



IBM 3310 direct access storage (64 MB per unit)

# 1980's



Things in 1985 looked a little better.

Image credit: <http://www.darkroastedblend.com/2006/12/compare-these-hard-drives.html>

# 1990's +



Flash



Floppy Disk



Zip Disk



CD + RW



CD + R



DVD + RW



DVD + R



Storage Tape



Smart Media



Removable  
Hard - Drive



Micro Drive



Memory Stick



Smart Cards



Online Storage Site



PC Card

# Present Time



image credit: [http://www.sis.pitt.edu/~gray/LIS2600/references/MS\\_cloudComputing.htm](http://www.sis.pitt.edu/~gray/LIS2600/references/MS_cloudComputing.htm)



# What is Cloud Computing?

- Cloud computing is still an evolving paradigm.
- Its definitions, use cases, underlying technologies, issues, risks, and benefits will be refined in a spirited debate by the public and private sectors.

Credit: <http://csrc.nist.gov/groups/SNS/cloud-computing/>

# Cloud Computing: a definition

Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. (National Institute for Standards & Technology)

Credit: <http://csrc.nist.gov/groups/SNS/cloud-computing/>

# Service Layers of Cloud Computing

- **Top Layer:** Software as a Service (SaaS) - Google Apps
- **Middle Layer:** Platform as a Service (PaaS) – Web Server and the programming environment.
- **Lowest Layer:** Infrastructure as a Service (IaaS) – Means of delivering basic storage and computing capabilities as standardized services. The pooling of servers, storage systems, switches, and routers.

# Inside a Cloud

## Software as a Service (SaaS)

- Corporate Email
- CRM, ERP, HR
- Business Processes



## Platform as a Service (PaaS)

- Java Runtime
- Web 2.0 Runtime
- LAMP / WAMP

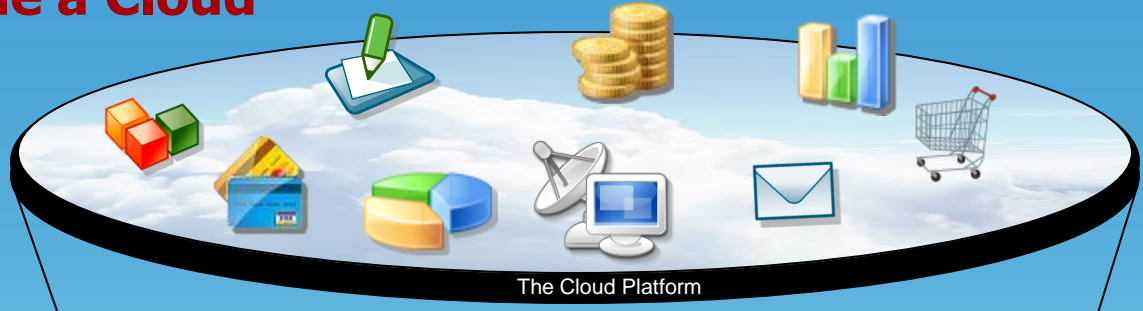


## Infrastructure as a Service (IaaS)

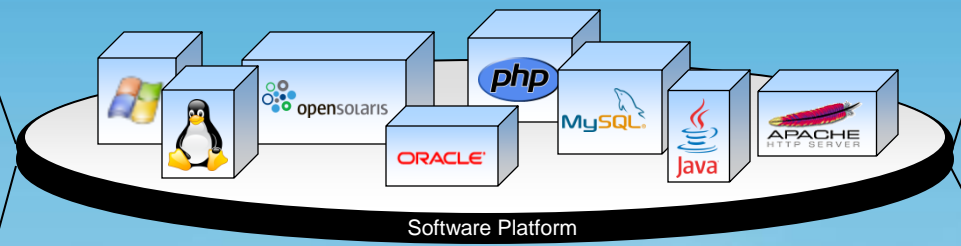
- Virtual Servers
- Virtual Storage
- Network Routers



## Physical Servers



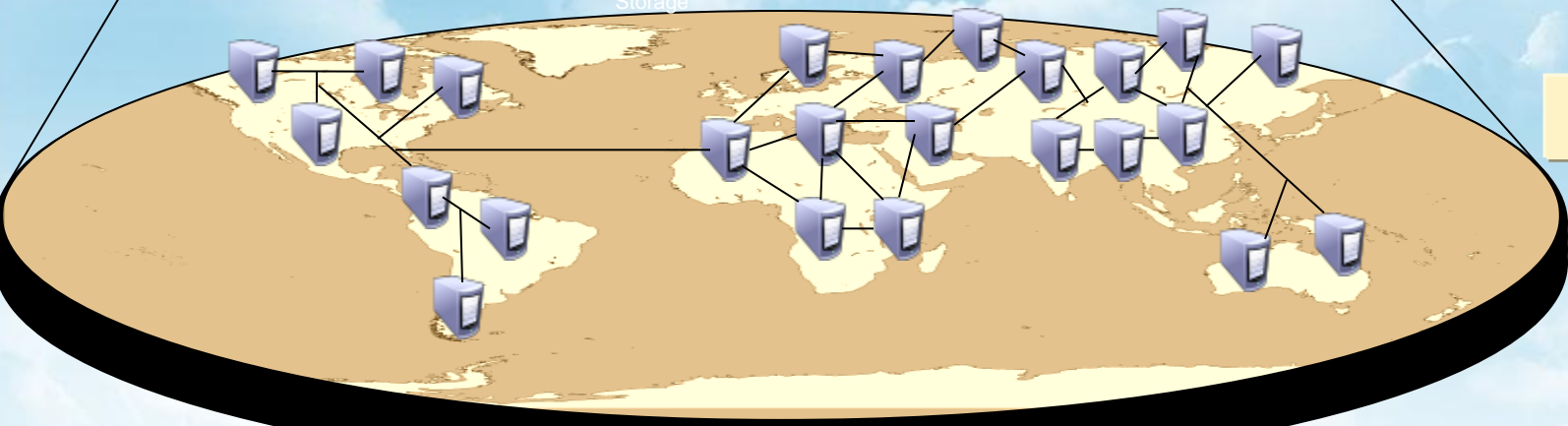
The Cloud Platform



Software Platform



Virtualized CPUs and Storage



Physical Servers across the Globe

# Google Docs

- Allows access anywhere there is an Internet connectivity
- Eliminates the need to carry a flashdrive
- Allows the ability to post to the web instantly
- Allows the ability to collaborate with others – while maintaining only one copy of the document
- Downloads to MS Word.

# Using Forms in Google Docs

- Use as a survey instrument
- Use as an assessment instrument
- Downloads into an Excel spreadsheet

# Google Presentations

- Compatible anywhere there is web access  
This eliminates software compatibility issues
- No need to carry around a thumb drive
- Will download to MS PowerPoint

# iGoogle

**Home**

**News**

BBC News | News F...  
Top Stories - Googl...  
NYT > Home Page  
Reuters: Top News  
CNN.com - World  
NPR Topics: News  
USATODAY.com Ne...  
FOXNews.com  
msnbc.com: Top m...  
Wash Post World

**Humor**

**Technology**

**Favorite ...**

Google Reader  
Gmail  
Google Hot Trends (...  
<http://googleblog.blogspot.com/>

**Facebook**

Welcome, **Lynn McCormick** [logout](#)

**What's on your mind?**

**Jackie Frye** hoping for more rain; if it is cloudy it may as well rain. Do not put away the summer short; it will be back to almost 90 by Sat.  
7 hours ago · no comments

**Jackie Frye** is having a lazy Monday.  
1 day ago · 1 comment

**Jackie Frye** dollar store had nice looking mum at 3 for \$10  
2 days ago · no comments

**Delicious**

**Ads by Google** [Spy Toys](#) [Spy Products](#)

**Gmail**

**Inbox - Compose Mail** [Actions...](#)

- Alan - Adobe Mondays URL - Some people are reporting 2:12pm
- Alan - Starting soon: Adobe First Mondays: Free Seminar 1:34pm
- lynda.com Customer - Welcome to lynda.com - If you 9:50am
- Customer - lynda.com Online Training Library password info. 9:48am
- Adobe Systems - Thanks for registering-claim your benefit Sep 7

**LabPixies Calculator**

**Google Hot Trends (USA)**

**Google Reader (67)**

All items (67) [refresh all as read](#)

- ★ [PostRank™ > Online Content Ranking](#) from [Scholarship 2.0: An Idea Whose Time](#)
- ★ [New Journal Models And Publishing](#) from [Scholarship 2.0: An Idea Whose Time](#)
- ★ [Podcast > Open Access And The Future Of](#) from [Scholarship 2.0: An Idea Whose Time](#)
- ★ [Hood to Coast 2009](#) from [The Official Google Blog](#)
- ★ [Helping create responsible digital citizens](#) from [The Official Google Blog](#)

**Google Bookmarks**

[Add bookmark - Edit bookmarks](#)

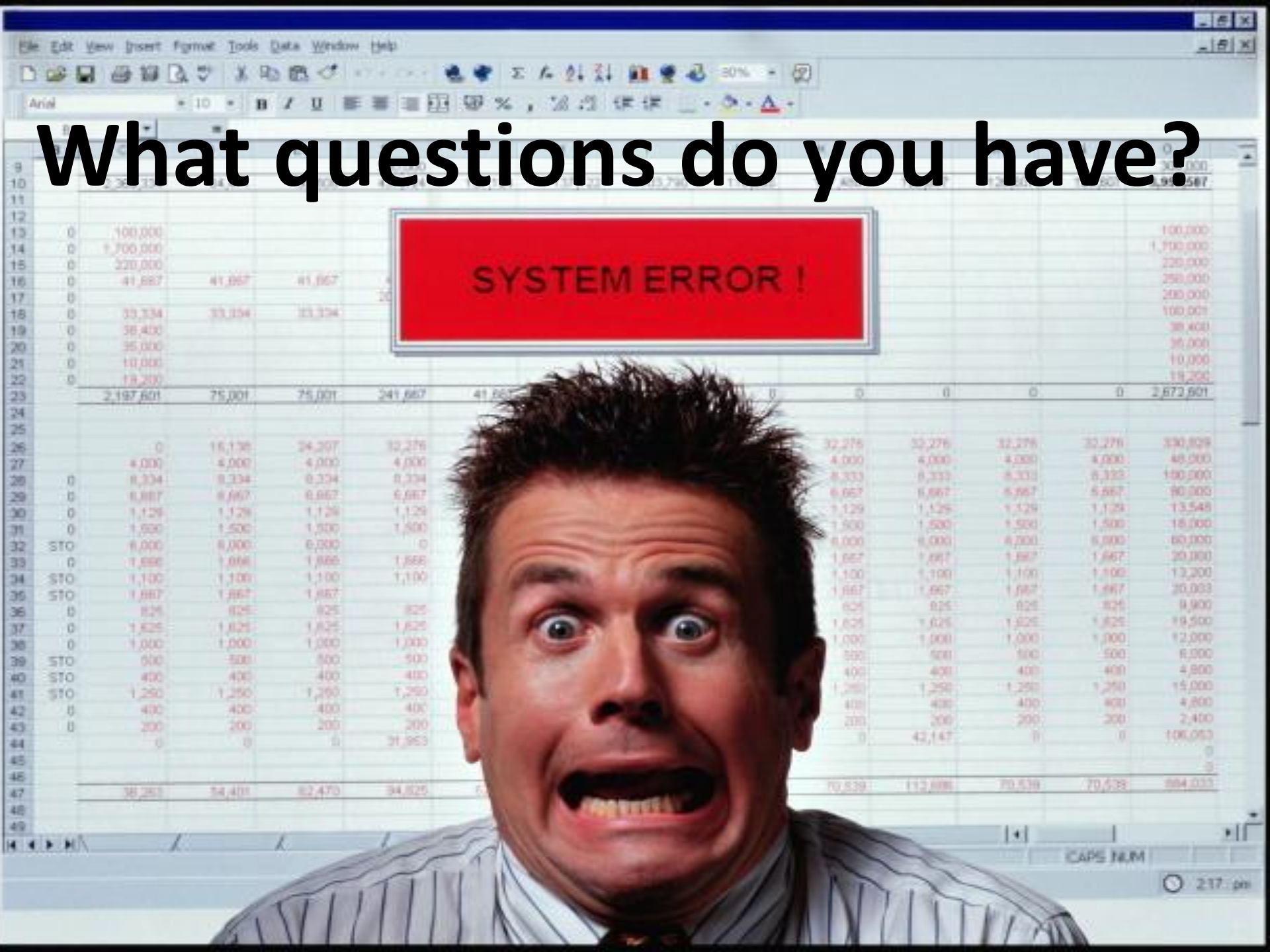
Show label:

start | 2 Novell GroupWise ... | 2 Google Chrome | 2:24 PM



# What questions do you have?

**SYSTEM ERROR !**



# Your traveling companion



Help to propel each other along the way.

# The Google account: Your keys to the cloud kingdom

Go to: [www.gmail.com](http://www.gmail.com)  
and create your account

# Check availability of your login name

## Write down your username & password



Create a Google Account - Gmail

Change Language: English

### Create an Account

Your Google Account gives you access to Gmail and [other Google services](#). If you already have a Google Account, you can [sign in here](#).

#### Get started with Gmail

First name:

Last name:

Desired Login Name:  @gmail.com

Examples: JSmith, John.Smith

Choose a password:  [Password strength:](#)

# Show me my account

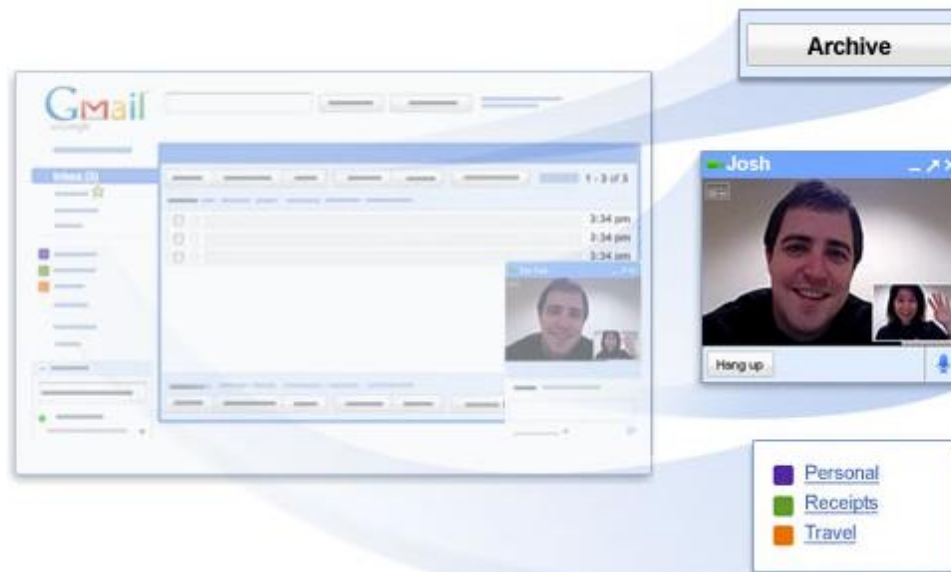


## Introduction to Gmail

### Congratulations!

You've successfully signed up for Gmail! Here's a quick run through to help you get comfortable.

[Show me my account »](#)



### Archive instead of delete

Tidy up your inbox without deleting anything. You can always search to find what you need or look in "All Mail."

### Chat and video chat

Chat with your contacts directly within Gmail. You can even talk face-to-face with built-in video chat.

### Labels instead of folders

Labels do the work of folders with an extra bonus: you can add more than one to an email.

# Click on Documents

Gmail Calendar Documents Reader Web more ▾ lynniemac.mac1@gmail.com | Settings | Help | Sign out

**Gmail**  
by Google

[Compose Mail](#)

**Inbox (3)**

- [Starred](#) ☆
- [Sent Mail](#)
- [Drafts](#)

[Personal](#)

[Travel](#)

[6 more ▾](#)



[Contacts](#)

[Tasks](#)

**- Chat**

Search, add, or invite

● lynn timer mac  
Set status here ▾

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[Show search options](#)  
[Create a filter](#)

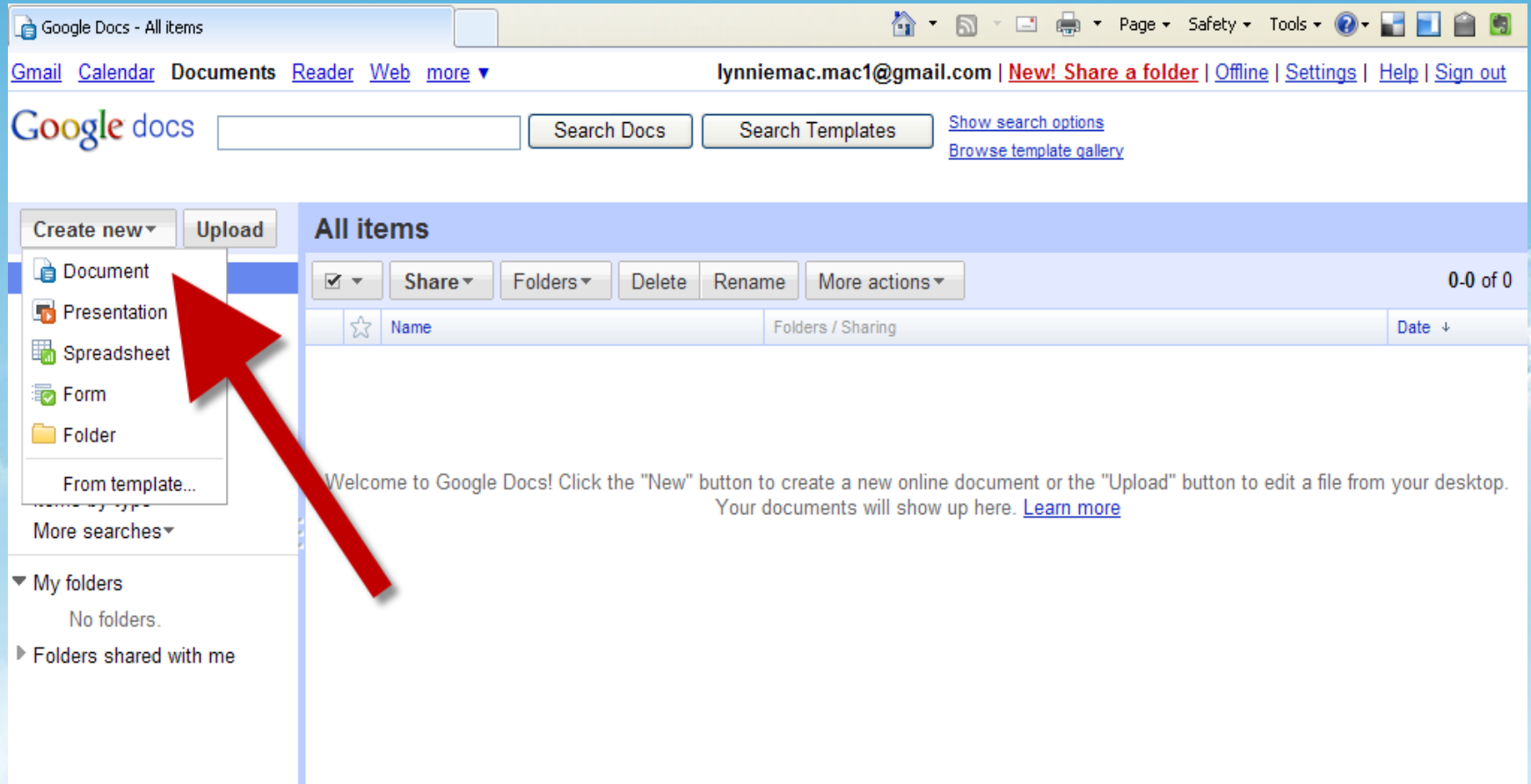
Interested in an OUTLOOK? - www.Chevrolet.com/Traverse - View Traverse Features & Specs. Plus Find Pricing & Cu Sponsored Link < >

Archived Report spam Delete Move to ▾ Labels ▾ More actions ▾ Refresh 1 - 3 of 3

Select: All None, Read, Unread, Starred, Unstarred

<input type="checkbox"/>	☆ Gmail Team	Get started with Gmail - Gmail is built on the idea that email can be intuitive, €	5:28 pm
<input type="checkbox"/>	☆ Gmail Team	Access Gmail on your mobile phone - The days of needing your computer to	5:28 pm
<input type="checkbox"/>	☆ Gmail Team	Import your contacts and old email - You can import your contacts and mail	5:28 pm

# Click on “Create new” then “Document”



The screenshot shows the Google Docs web interface. At the top, there is a navigation bar with links for Gmail, Calendar, Documents, Reader, Web, and more. The user's email address, lynnimac.mac1@gmail.com, is displayed along with links for New! Share a folder, Offline, Settings, Help, and Sign out. Below this is the Google Docs logo and search bars for Docs and Templates. The main interface is divided into two sections: 'Create new' and 'Upload'. The 'Create new' dropdown menu is open, showing options for Document, Presentation, Spreadsheet, Form, and Folder. A large red arrow points to the 'Document' option. Below the menu, there are sections for 'My folders' and 'Folders shared with me'. The 'All items' section is visible, showing a table with columns for Name, Folders / Sharing, and Date. A welcome message is displayed in the main content area.

Google Docs - All items

Gmail Calendar Documents Reader Web more ▾

lynnimac.mac1@gmail.com | [New! Share a folder](#) | [Offline](#) | [Settings](#) | [Help](#) | [Sign out](#)

Google docs

Search Docs Search Templates [Show search options](#) [Browse template gallery](#)

Create new ▾ Upload

- Document
- Presentation
- Spreadsheet
- Form
- Folder

From template...

More searches ▾

▼ My folders  
No folders.

▶ Folders shared with me

All items

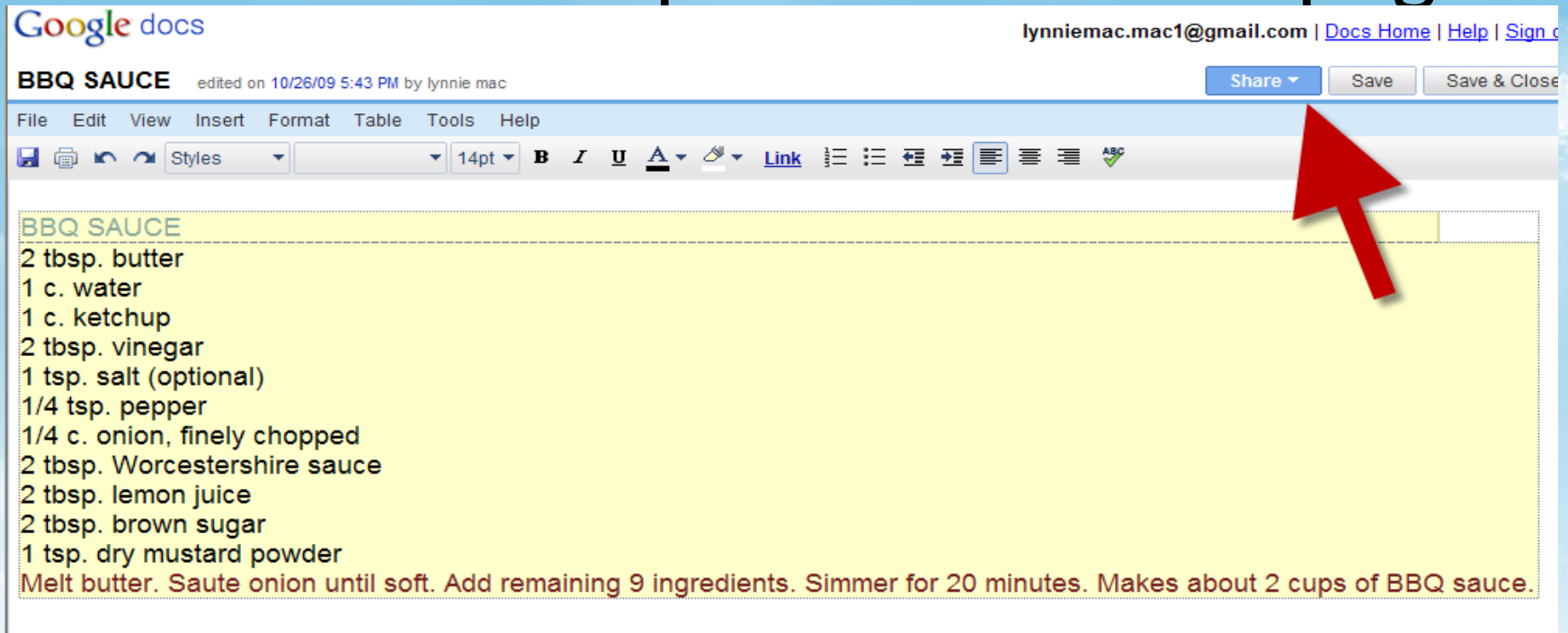
☑ ▾ Share ▾ Folders ▾ Delete Rename More actions ▾ 0-0 of 0

☆ Name Folders / Sharing Date ↓

Welcome to Google Docs! Click the "New" button to create a new online document or the "Upload" button to edit a file from your desktop. Your documents will show up here. [Learn more](#)

# Create and share a document

1. Find a recipe (chili?)
2. Cut and paste it into your document.
3. Save
4. Select Share – publish as a webpage.



Google docs

lynniemac.mac1@gmail.com | Docs Home | Help | Sign out

**BBQ SAUCE** edited on 10/26/09 5:43 PM by lynnie mac

Share Save Save & Close

File Edit View Insert Format Table Tools Help

Styles 14pt B I U A Link

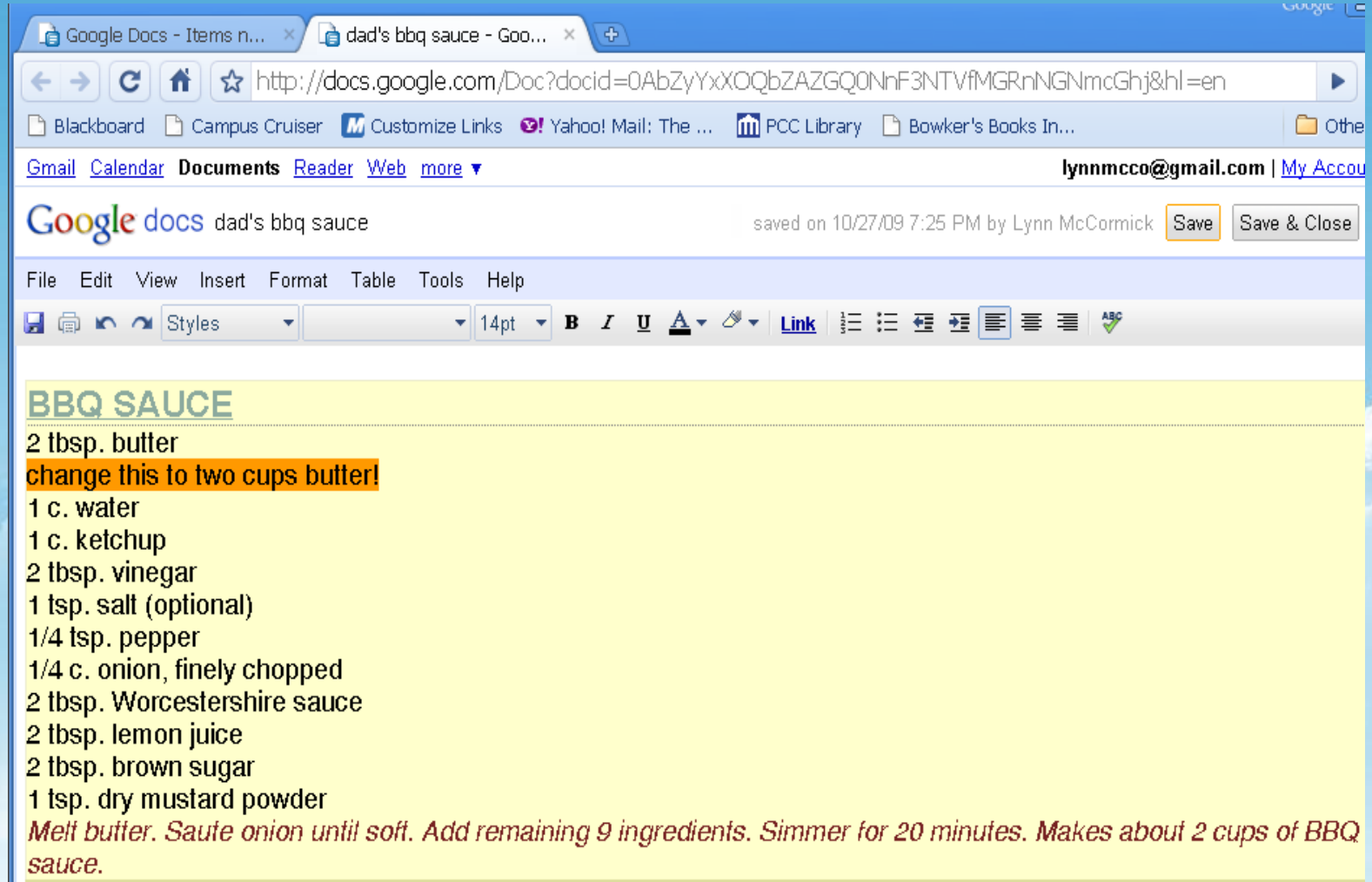
**BBQ SAUCE**

- 2 tbsp. butter
- 1 c. water
- 1 c. ketchup
- 2 tbsp. vinegar
- 1 tsp. salt (optional)
- 1/4 tsp. pepper
- 1/4 c. onion, finely chopped
- 2 tbsp. Worcestershire sauce
- 2 tbsp. lemon juice
- 2 tbsp. brown sugar
- 1 tsp. dry mustard powder

Melt butter. Saute onion until soft. Add remaining 9 ingredients. Simmer for 20 minutes. Makes about 2 cups of BBQ sauce.



# View as webpage



Google Docs - Items n... x dad's bbq sauce - Goo... x

http://docs.google.com/Doc?docid=0AbZyYxXOQbZAZGQ0NnF3NTVfMGRnNGNmcGhj&hl=en

Blackboard Campus Cruiser Customize Links Yahoo! Mail: The ... PCC Library Bowker's Books In... Other

Gmail Calendar Documents Reader Web more v lynnmc@gmail.com | My Account

Google docs dad's bbq sauce saved on 10/27/09 7:25 PM by Lynn McCormick Save Save & Close

File Edit View Insert Format Table Tools Help

Styles 14pt B I U A Link

**BBQ SAUCE**

2 tbsp. butter  
**change this to two cups butter!**  
1 c. water  
1 c. ketchup  
2 tbsp. vinegar  
1 tsp. salt (optional)  
1/4 tsp. pepper  
1/4 c. onion, finely chopped  
2 tbsp. Worcestershire sauce  
2 tbsp. lemon juice  
2 tbsp. brown sugar  
1 tsp. dry mustard powder

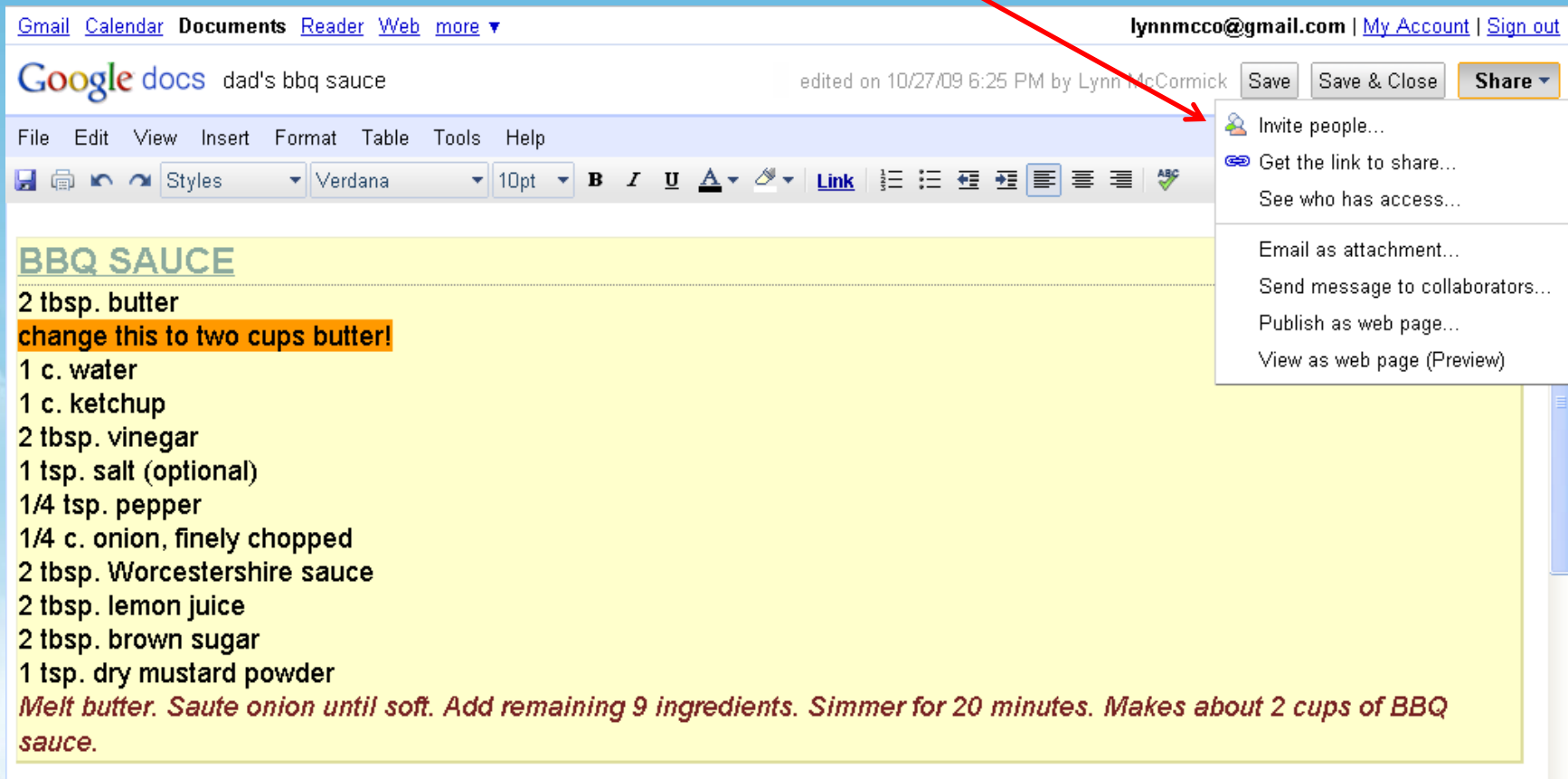
*Melt butter. Saute onion until soft. Add remaining 9 ingredients. Simmer for 20 minutes. Makes about 2 cups of BBQ sauce.*

# Exploring Further

1. Go back into your original document.
2. Use the toolbar to change font size, italicize, and highlight text selections.
3. Look under File – Revision history.
4. Rename your file: File – Rename.
5. Save your file.
6. Download into MSWord: File – Download – Word.

# Collaboration

## 1. Select Share- Invite people



The screenshot shows a Google Docs interface for a document titled "dad's bbq sauce". The document is edited on 10/27/09 at 6:25 PM by Lynn McCormick. The "Share" button in the top right corner is highlighted, and its dropdown menu is open, showing options like "Invite people...", "Get the link to share...", and "Email as attachment...". A red arrow points from the "Share" button to the "Invite people..." option.

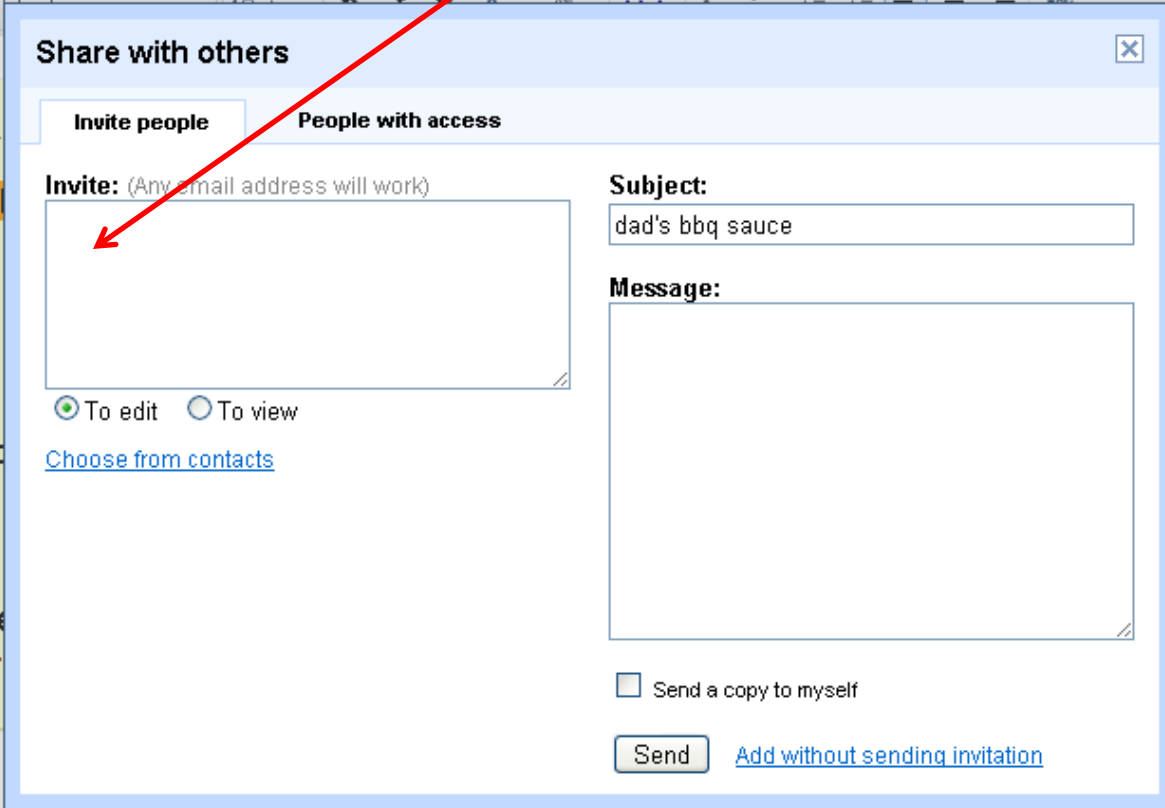
**BBQ SAUCE**

2 tbsp. butter  
**change this to two cups butter!**  
1 c. water  
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2 tbsp. vinegar  
1 tsp. salt (optional)  
1/4 tsp. pepper  
1/4 c. onion, finely chopped  
2 tbsp. Worcestershire sauce  
2 tbsp. lemon juice  
2 tbsp. brown sugar  
1 tsp. dry mustard powder

*Melt butter. Saute onion until soft. Add remaining 9 ingredients. Simmer for 20 minutes. Makes about 2 cups of BBQ sauce.*

# Collaboration

1. Type in email address of your partner and my email address : [lynnmcco@gmail.com](mailto:lynnmcco@gmail.com)
2. Select Send
3. Open your email and open your partner's file.



The screenshot shows a 'Share with others' dialog box overlaid on a web editor interface. The dialog has two tabs: 'Invite people' (selected) and 'People with access'. The 'Invite people' tab contains a text area for entering email addresses, with a red arrow pointing to it. Below the text area are radio buttons for 'To edit' (selected) and 'To view'. A link 'Choose from contacts' is also present. To the right of the text area are fields for 'Subject' (containing 'dad's bbq sauce') and 'Message'. At the bottom right, there is a checkbox for 'Send a copy to myself', a 'Send' button, and a link 'Add without sending invitation'. The background shows a recipe list for 'SAUCE' with ingredients like butter, vinegar, salt, pepper, onion, Worcestershire sauce, lemon juice, brown sugar, and dry mustard powder.

# Collaboration

- 1. Make changes in your partner's document and select save and close.**
- 2. Go back to your original doc to see what changes have been made.**

**What benefits does this feature offer?**

# Create and test a form/ spreadsheet

1. Create – New - Form.
2. Select and apply theme.
3. Add items.
4. Email to your partner.
5. Open your partner's form in your email & complete.
6. Go back to your Gdocs and look at your responses.

# Create a presentation

1. Create New – Presentation
2. Format – Presentation Settings –  
Change Theme
3. Download as powerpoint

# Create your I-Google page

1. From Gdocs page select – web
2. Select Igoogle
3. Change theme
4. Add stuff (gadgets)



How many ways can we  
apply Google Docs to the  
educational  
environment?

# Bon Voyage on your journey into the clouds

Contact me for Google apps support:  
Lynn McCormick  
Email [lynnmcco@gmail.com](mailto:lynnmcco@gmail.com)

[http://farm3.static.flickr.com/2570/3907902690\\_a91d59deed.jpg](http://farm3.static.flickr.com/2570/3907902690_a91d59deed.jpg)