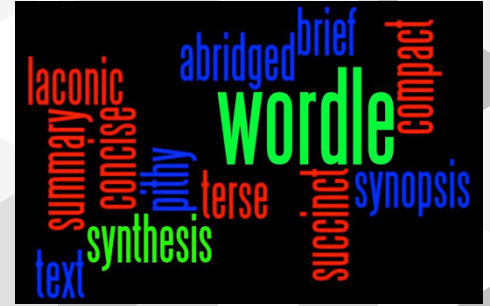


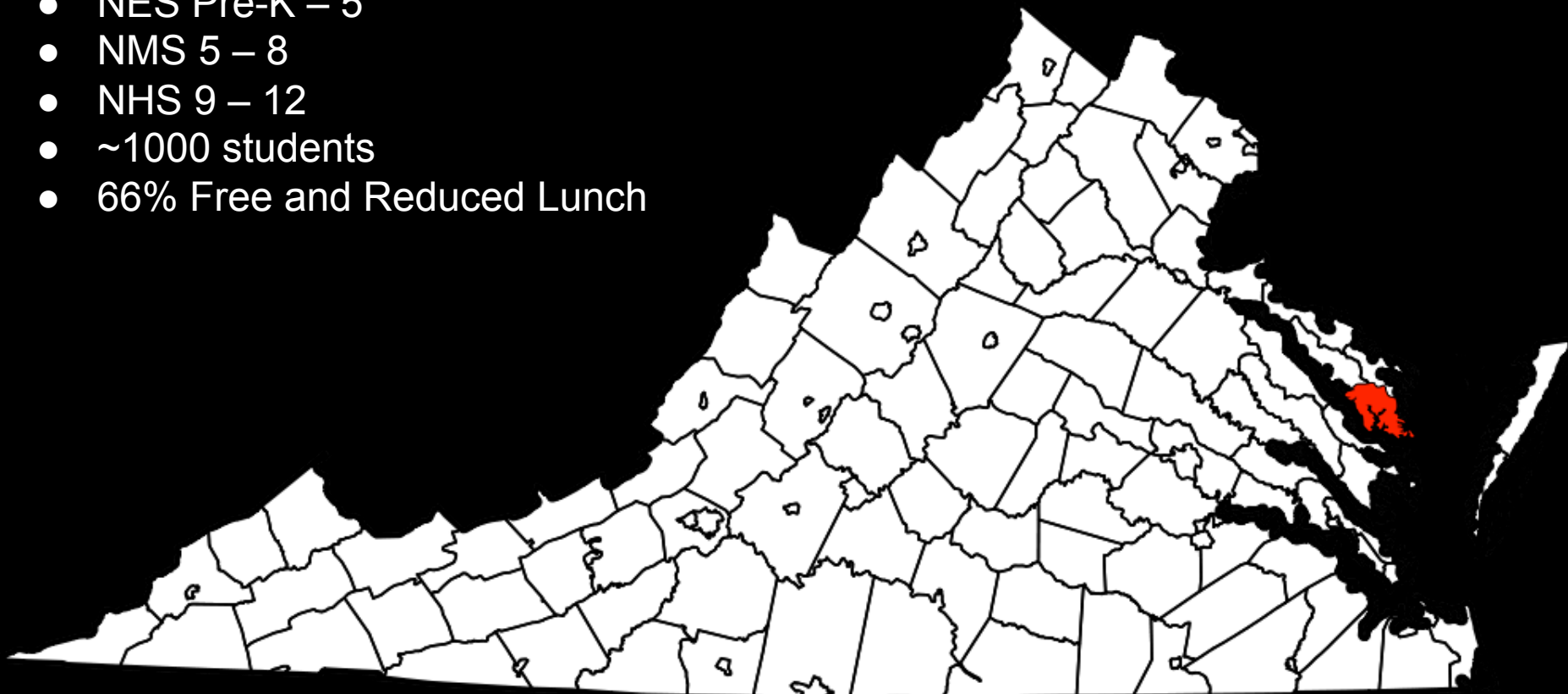
# Digitize It



Liz Hood  
Library Media Specialist  
Northumberland Middle/High School



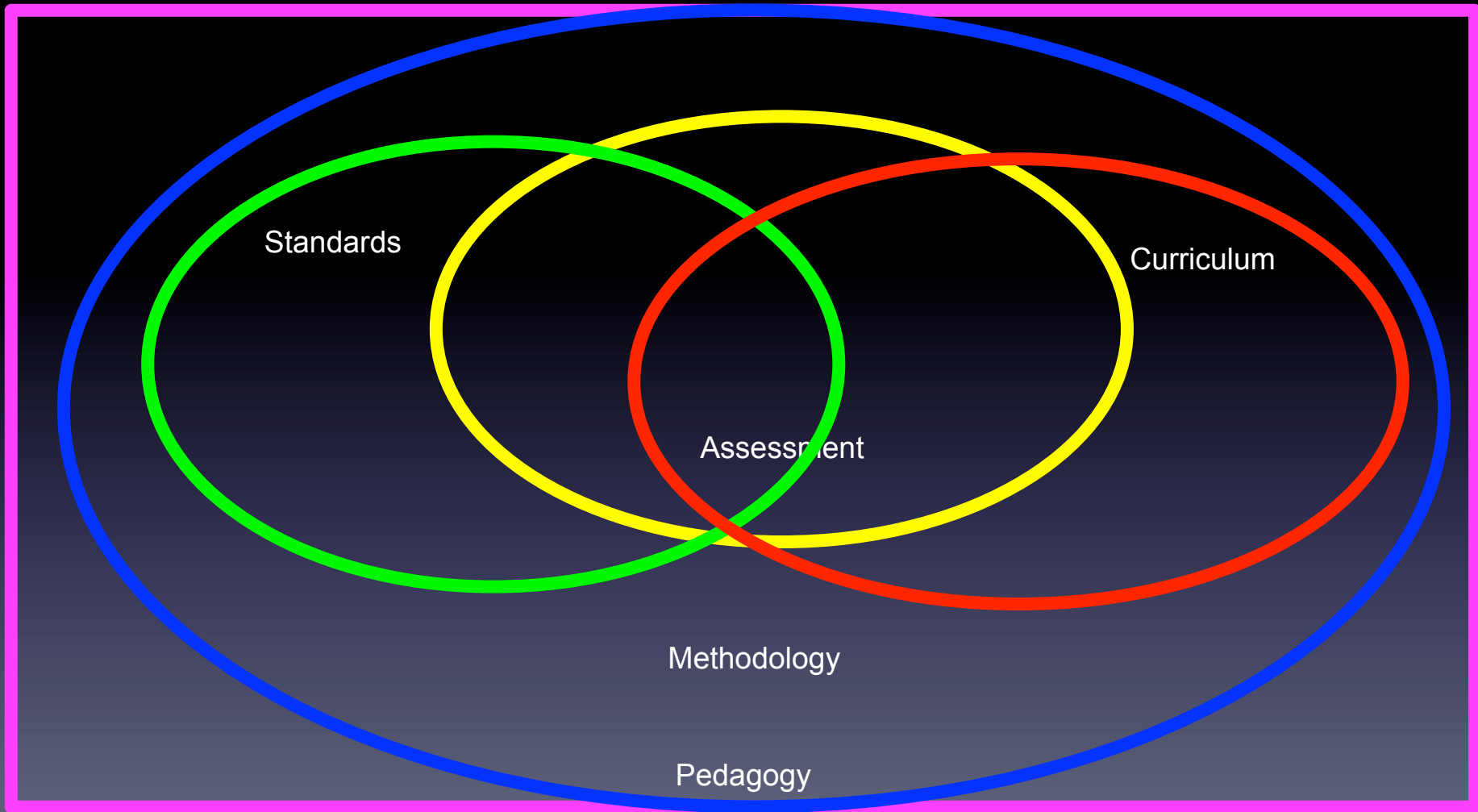
- Small rural district
- Three schools
- NES Pre-K – 5
- NMS 5 – 8
- NHS 9 – 12
- ~1000 students
- 66% Free and Reduced Lunch



# Intro Liz



- 28 years in education
- 16 years in school library media centers
- STEM/STEAM school (5 years)
- 1:1 iPads (3 years)
- 1:1 Chromebooks (1 year)





# Core Beliefs

constructivism

communities of practice

students rise to the level of  
expectation

every student is capable of  
mastery

content is consistent, time is variable

prepare students for the future

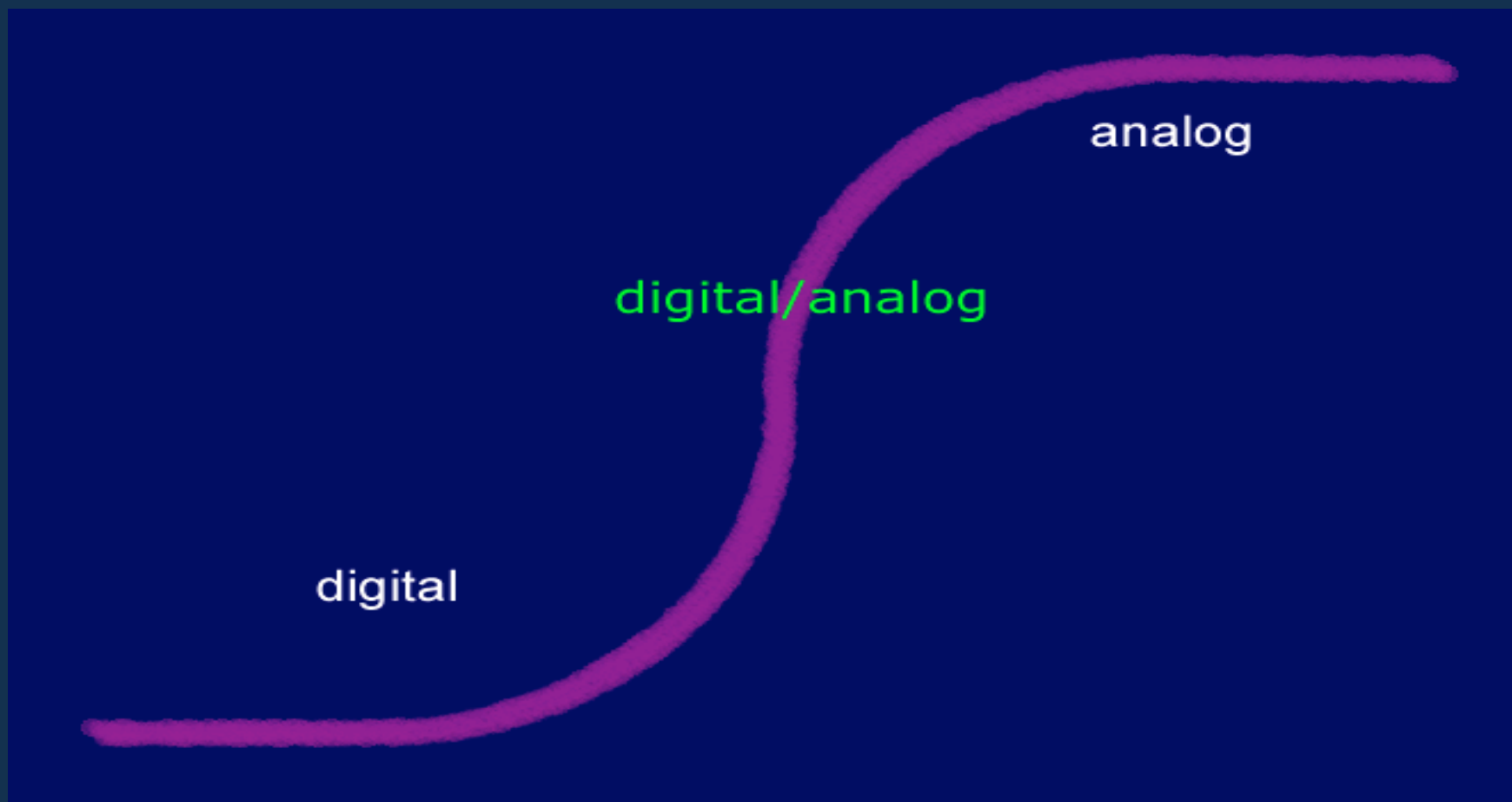
transferable skills

rights of the whole > rights of one

digital

digital/analog

analog





UPDATED AND EXPANDED



# The World Is Flat

A BRIEF HISTORY OF  
THE TWENTY-FIRST CENTURY

Thomas L. Friedman



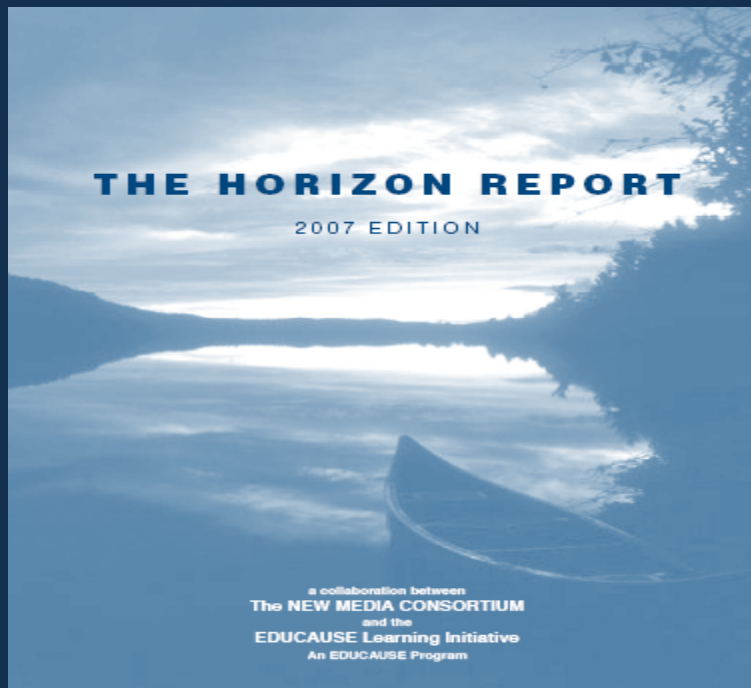
**Big Ideas**

**4 Education**

**Where do we go  
from here?  
“Contribute”**

# Horizon Report

social  
networking



user-created  
content

<http://www.educause.edu/ir/library/pdf/CSD4781.pdf>



Visionary  
Consultant  
Author  
Speaker  
Inventor  
Game designer  
Learning designer  
Futurist

Marc Prensky  
www.marcprensky.com



NEC MultiSync BFGp

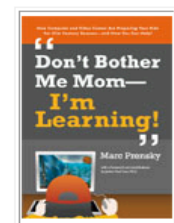
Photo by Jim Allen

- HOME
- WEBLOG
- BIO/CV/RESUME
- WRITING
- SPEAKING
- PRODUCTS
- SERVICES
- COMPANY
- BOOKS
- DIGITAL GAME-BASED LEARNING
- CLIENTS AND COLLABORATIONS
- REVIEWS AND PRESS
- CONTACT MARC

## Marc Prensky - Home

*Marc Prensky is an internationally acclaimed speaker, writer, consultant, and designer in the critical areas of education and learning. He is the author of **Digital Game-Based Learning** (McGraw-Hill, 2001), and **Don't Bother Me Mom -- I'm Learning** (Paragon House 2005), the founder and CEO of **Games2train** (whose clients include IBM, Nokia, Pfizer, the US Department of Defense and the LA and Florida Virtual Schools) and creator of the sites [www.dodgamecommunity.com](http://www.dodgamecommunity.com) and [www.socialimpactgames.com](http://www.socialimpactgames.com).*

*Marc has created over 50 software games for learning, including the world's first fast-action videogame-based training tools and world-wide, multi-player, multi-team on-line competitions. He has also taught at all levels. Marc has been featured in articles in The New York Times and The Wall Street Journal, has appeared on CNN, MSNBC, PBS, and the BBC, and was named as one of training's top 10 "visionaries" by Training magazine. He holds graduate degrees from Yale (Teaching) and Harvard (MBA).*



*To order Marc's book, "**DON'T BOTHER ME, MOM -- I'M LEARNING**",*  
*click [HERE](#).*



*To order Marc's book, "**DIGITAL GAME-BASED LEARNING**",*  
*click [HERE](#).*



## The Net Generation

- [The Buzz](#)
- [School/College](#)
- [Work](#)
- [Brand](#)
- [Family](#)
- [Government](#)
- [World](#)

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As Seen On



**Tell us how you  
would change the  
education system**

## Don Tapscott's Grown Up Digital contest



0:00 / 1:07

## Enter the Net Gen Education Challenge

You could win a scholarship and a private Webinar with Don Tapscott:

[Click here!](#)

## "In Quotes"

"Grown Up Digital is a must read for baby boomers and virtually anyone else born before 1977. As Mr. Tapscott observes, 'The bottom line is this: if you understand the Net Generation, you will understand the future.' And as my son often reminds me, the future is now."

The New York Times, Book Review, Sunday, December 21, 2008

[Submit a Quote](#)

## Recent Blog Posts



## Short video from Us Now premiere

Posted by: [Bill Gillies - Editor](#) on **10Mar 2009**



# Doug Johnson

WRITING, SPEAKING AND CONSULTING ON SCHOOL TECHNOLOGY AND LIBRARY ISSUES



## Johnson's Observation on the School of Hard

**Knocks:** I don't mind learning from my mistakes. I just don't want to earn a PhD. ([More rules](#))

**WELCOME** to my "personal" homepage. This is a way of separating my efforts as the Director of Media and Technology in the Mankato Schools and my professional efforts as a writer and speaker.

I am great believer in the "stone soup mentality." Like the soldiers in the old French fable, I know that when each person in a profession, organization, or community brings his or her individual talents and efforts to the table, everyone benefits. This page holds my offerings to the profession of library media and technology. I have certainly borrowed lots of wonderful ideas from many of you. I am obligated. (See "[Why I Write For Publication](#)," KQWeb, May/June 2001.)

If there are things of interest and value to you on this site, please use them as you can. Like most folks, I like to be credited for my work and you need to remember these writings and tools are only for nonprofit use within your organization.

I welcome your feedback on any of the writings you find here or on any of my presentations you may have attended.

Thanks for visiting.

SEARCH

My book *Machines are the easy part; people are the hard part* is now available as a **free** download at Lulu.

## Home

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Google

RuneScape - the m...

my.UBC.ca - My Pl...

Blackboard Learnin...


Norman Doidge...

Page Tools ?

THE PHENOMENAL  
INTERNATIONAL BESTSELLER


NORMAN DOIDGE

The Brain That  
Changes Itself



Stories of Personal Triumph from  
the Frontiers of Brain Science

'The power of positive thinking finally gains  
scientific credibility. Mind-bending, miracle-making,  
reality-busting stuff' *THE NEW YORK TIMES*



THE NEW YORK TIMES AND INTERNATIONAL  
BESTSELLER AVAILABLE IN OVER 70 COUNTRIES

The discovery of neuroplasticity, that our thoughts can

THE NEW YORK TIMES:

"The power of  
positive thinking  
finally gains scientific  
credibility. Mind-  
bending, miracle-  
making, reality-  
busting stuff...with  
implications for all  
human beings, not to  
mention human  
culture, human  
learning and human  
history."

OLIVER SACKS, MD:

"Fascinating. Doidge's book is a  
remarkable and hopeful portrait of  
the endless adaptability of the  
human brain."

THE LONDON TIMES:

"Brilliant."

V.S. RAMACHANDRAN, MD, PHD:

"Superb. Brilliant. I devoured it."

THE GLOBE AND MAIL:

Done

Internet | Protected Mode: On

100%

# BLOOM'S REVISED TAXONOMY

Higher-order thinking

## **Creating**

Generating new ideas, products, or ways of viewing things  
Designing, constructing, planning, producing, inventing.

## **Evaluating**

Justifying a decision or course of action  
Checking, hypothesising, critiquing, experimenting, judging

## **Analysing**

Breaking information into parts to explore understandings and relationships  
Comparing, organising, deconstructing, interrogating, finding

## **Applying**

Using information in another familiar situation  
Implementing, carrying out, using, executing

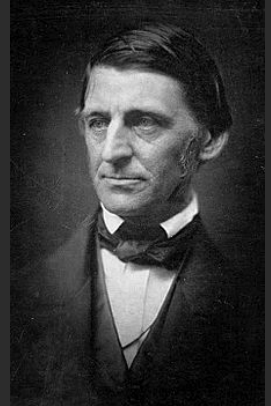
## **Understanding**

Explaining ideas or concepts  
Interpreting, summarising, paraphrasing, classifying, explaining

## **Remembering**

Recalling information  
Recognising, listing, describing, retrieving, naming, finding

We are students of words: we are shut up in schools, and  
colleges, and recitation-rooms,  
for ten or fifteen years, and come out at last with a bag of  
wind, a memory of words,  
and do not know a thing...  
(Emerson, 1844).



# Business Viewpoint

The **number one issue** for companies looking to expand or locate in Virginia is a sustainable, educated and highly qualified workforce that can constantly raise its skills in a globally competitive economy.

The Profile of a Virginia Graduate describes the knowledge, skills, experiences and attributes that students must attain to be successful in college and/or the work force and to be “life ready.”

In developing the profile, the Board of Education determined that a life-ready Virginia graduate must:

- Achieve and apply appropriate academic and technical knowledge (content knowledge);
- Demonstrate productive workplace skills, qualities, and behaviors (workplace skills);
- Build connections and value interactions with others as a responsible and responsive citizen (community engagement and civic responsibility);
- Align knowledge, skills and personal interests with career opportunities (career exploration).

The Profile of a Virginia Graduate provides the framework for the requirements students must meet to earn a [Standard Diploma or Advanced Studies Diploma](#).

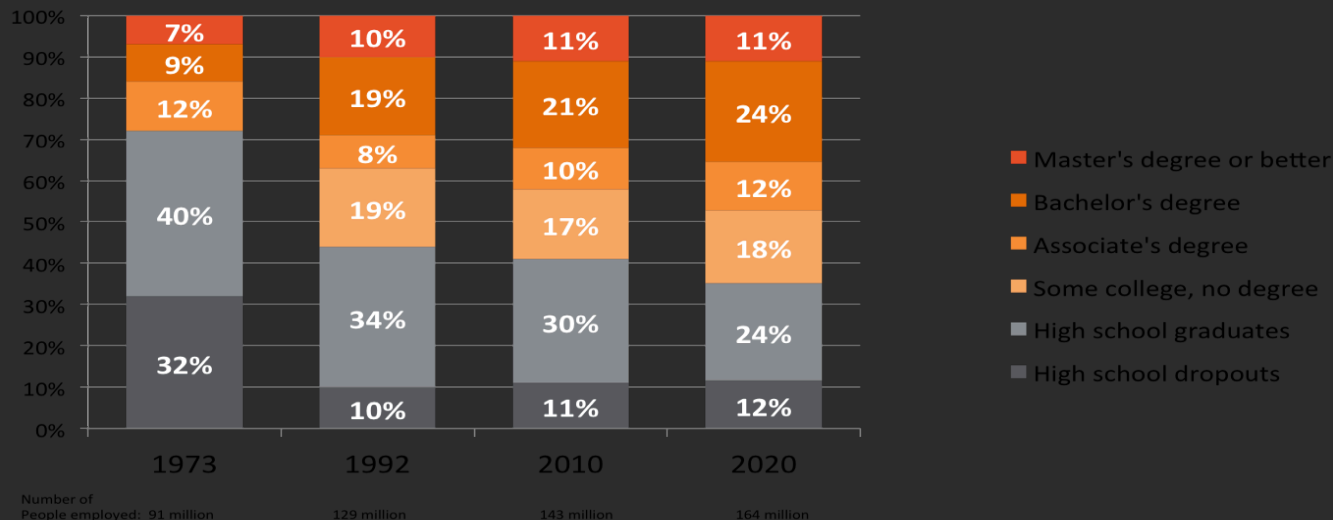
The 2016 General Assembly subsequently approved [House Bill 895 and Senate Bill 336, which directed the Board of Education to:](#)  
Develop and implement a Profile of a Virginia Graduate identifying the knowledge and skills that students should attain during high school in order to be successful;

- In developing the profile, give due consideration to the “5 C’s”:  
critical thinking,  
creative thinking,  
collaboration,  
communication and  
citizenship;
- Emphasize the development of core skill sets in the early years of high school; and
- Establish multiple paths toward college and career readiness for students to follow in the later years of high school, which could include opportunities for internships, externships, and credentialing.



# 2020 Educational Requirements

By 2020, 65% of all jobs will require post-secondary education, training and/or certification.





# World Class Knowledge

- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering mathematics, arts and social sciences

# World Class Skills

- Creativity and innovation
- Critical thinking and problem solving
- collaboration and teamwork
- communication, information, media and technology
- Knowing how to learn

# Life and Career Characteristics

- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills

## The Virginia College and Career Readiness Initiative is designed to:

- Ensure that college and career-ready learning standards in reading, writing and mathematics are taught in every Virginia high school classroom.
- Strengthen students' preparation for college and the work force before leaving high school.



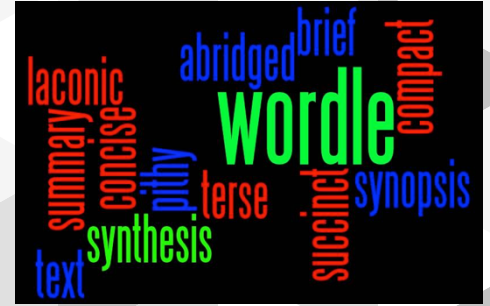


# Web Browser

Google



# Digitize It



[World Readiness Standards](#)

[Authentic Assessment](#)



MAKEBELIEFS COMIX





# Bloom's Digital Taxonomy

Key Terms

Creating

Verbs

**Designing, constructing, planning, producing, inventing, devising, making,** programming, filming, animating, blogging video blogging, mixing, re-mixing, wiki-ing, publishing, videocasting, podcasting, directing, broadcasting

Evaluating

Verbs

**Checking, hypothesising, critiquing, Experimenting, judging, testing, Detecting, Monitoring,** blog commenting, reviewing, posting, moderating, collaborating, networking, refactoring, testing.

Analysing

Verbs

**Comparing, organising, deconstructing Attributing, outlining, finding, structuring, integrating,** mashing, linking, validating, reverse engineering, cracking, media clipping

Applying

Verbs

**Implementing, carrying out, using, executing,** running, loading, playing operating, hacking, uploading, sharing, editing

Understanding

Verbs

**Interpreting, Summarising, inferring, paraphrasing, classifying, comparing, explaining, exemplifying,** advanced searches, Boolean searches, blog journaling, twittering, categorising, tagging, commenting, annotating subscribing.

Remembering

Verbs

**Recognising, Listing, Describing, Identifying, Retrieving, Naming, Locating, Finding,** bullet pointing, highlighting bookmarking, social networking, social bookmarking, favouriting/local bookmarking, searching, googling.

## HOTS Higher Order Thinking Skills

## LOTS Lower Order Thinking Skills

### COMMUNICATION SPECTRUM

*Collaborating*

*Moderating*

*Negotiating*

*Debating*

*Commenting*

*Net meeting*

*Skyping*  
*video conferencing*

*Reviewing*

*Questioning*

*Replying*

*Posting & Blogging*

*Networking*

*Contributing*

*Chatting*

*e-mailing*

*Twittering/Microblogging*

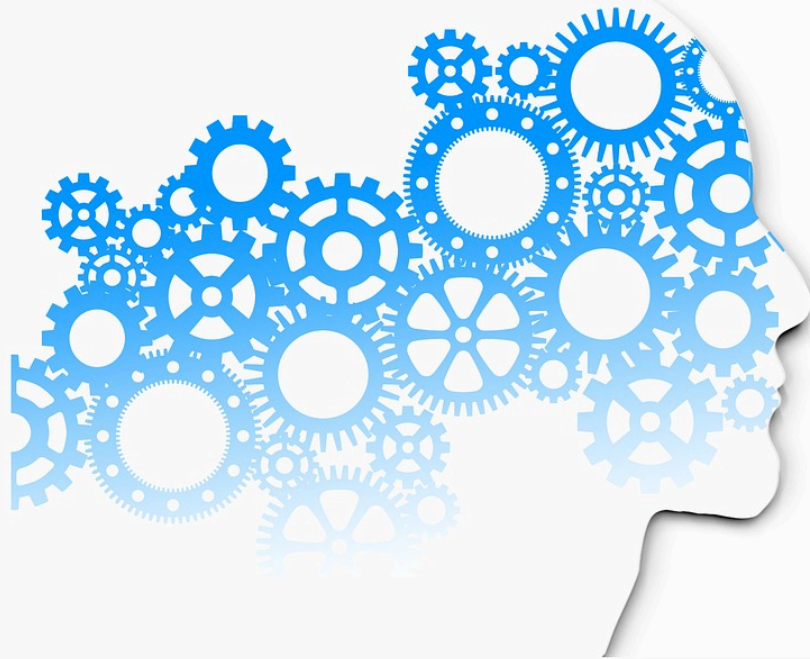
*Instant messaging*

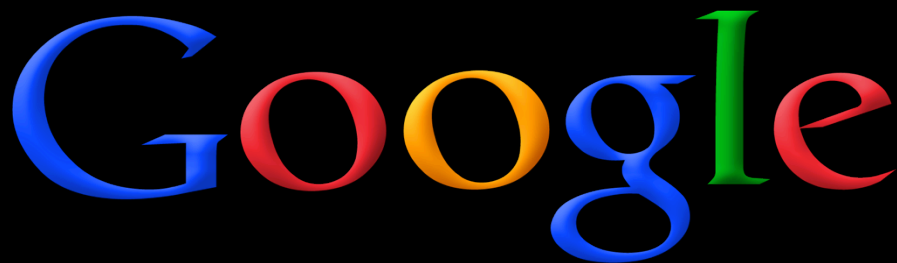
*Texting*



# Technology

useful  
relevant  
engaging  
productive





Drive



- Create a gmail account (if you don't already have one)
  - go to [www.gmail.com](https://www.gmail.com) to sign up
- Go to Google Drive ([drive.google.com](https://drive.google.com))
  - use your gmail info to log in

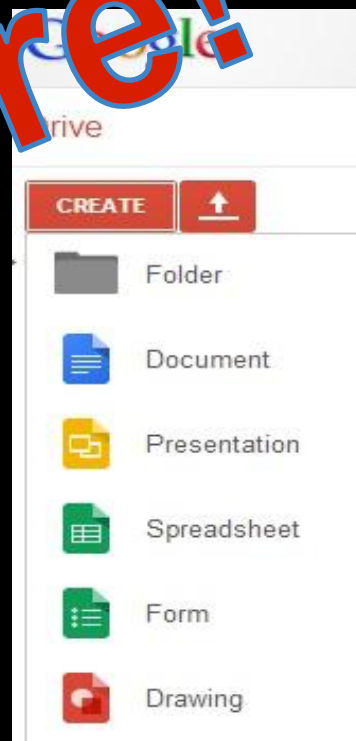


# Google

- documents
- slides
- forms
- sheets
- drawing
- add-ons

# What does Google Drive Offer?

- Docs
  - Create and format text documents
- Slides
  - Online presentation editor
- Spreadsheet
  - Create and format spreadsheets, charts, and gadgets
- Forms
  - Design a survey or quiz, or quickly create a roster
- Drawing
  - Design anything from a scribble to a flow chart



And Much More!

# Google Docs

An online word processor that allows you to share your work and collaborate with others in real time.



- Publish your document to the web
- Make a copy of your work for revision
- See [revision history](#)
- Download the document as a .doc, .pdf, html, etc.
- Adjust layout, color, margins, etc.
- Hyperlink to online resources
- Upload images from computer, Google, Stock photos, and Life.



# Google Docs

- Comment on work
- Insert drawings into the document
- Use a built in Dictionary
- Translate to another language
- Research within the document
- Share document with others by using an email
- Collaborate in real time with others by allowing them to edit






# How Do I Share?



- Send link by gmail, Google+, Facebook, or Twitter
- Click “Change” to make the document public

## Link sharing

- ☐  **On - Public on the web**  
Anyone on the Internet can find and access. No sign-in required.
- ☒  **On - Anyone with the link**  
Anyone who has the link can access. No sign-in required.
- ☐  **Off - Specific people**  
Shared with specific people.

Access: Anyone (no sign-in required)

[Can edit](#) ▾

Note: Items with any link sharing option can still be published to the web. [Learn more](#)

Save

Cancel

[Learn more about link sharing](#)

## Sharing settings


Link to share (only accessible by collaborators)

[document/d1f2YdPILo840VQiu-Jl6wbhHQT5H-oE1d6CPeHHR5n6Medit?usp=sharing](#)

Share link via:



Who has access

 Private - Only you can access

[Change...](#)



Liz Hood (you) cybrarianliz@gmail.com

Is owner

- Determine if you want it shared on the web or anyone with the link and save

# Why Should Students Use Google Docs?



Students can:

- use this online word processor from any device
- collaborate with others and get lots of feedback from different editors
- do their research while on the document
- share their work via the web for other people such as friends as family to view

# Why Should Teachers Use Google Docs?



Teachers can:

- do lesson planning and data collaboration
- preview and edit student work from their own device
- publish student work on their website or online for others to view

# Google Slides

An online presentation application that allows you to create, edit, and deliver presentations and collaborate with others in real time.

- Choose a variety themes, layouts, transitions, and backgrounds for your presentation
- Upload videos and photos (from computer, Google Search, Stock Photos, and Life)
- Add text, animations, word art, and tables
- Make comments on each slide
- Share presentation with others
- Research while working on presentation
- Create [units of study](#)



# Why Should Students Use Google Slides?

Students can:



- create collaborative presentations
- share (just like Docs)
- create a presentation that demonstrates something students have learned
- publish their work online to share with teachers, parents and friends

# Google Sheets

An online, collaborative spreadsheet.



Great for:

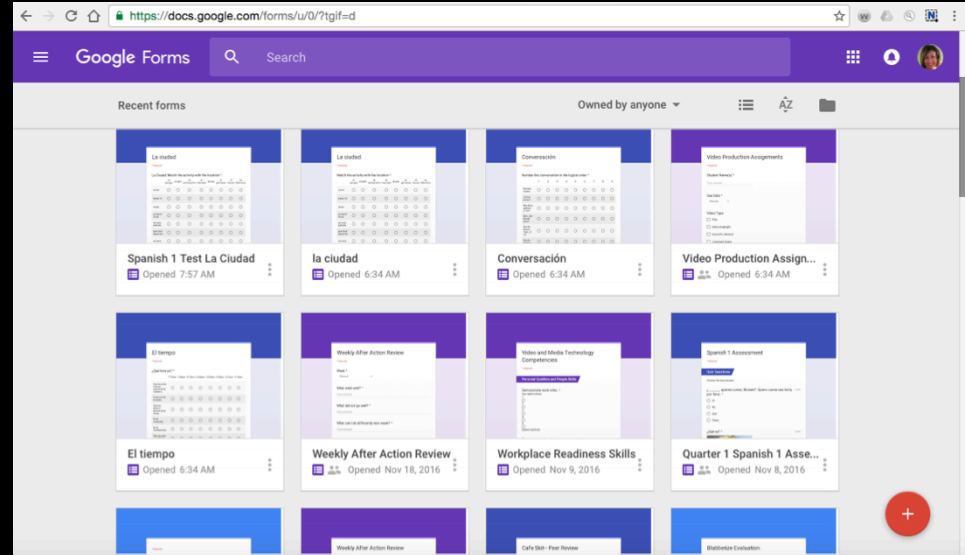
- sign-ups
- scheduling (an alternate to Google Calendars)
- creating groups
- [collecting data from Google Forms](#)

# Google Forms



An online, collaborative application for obtaining and organizing information from others.

- Assign quizzes\*
- Take surveys
- Quick polls
- Gather information
- Responses collected in a Sheet (graded with Flubaroo)
- Form summaries offered in graph formats



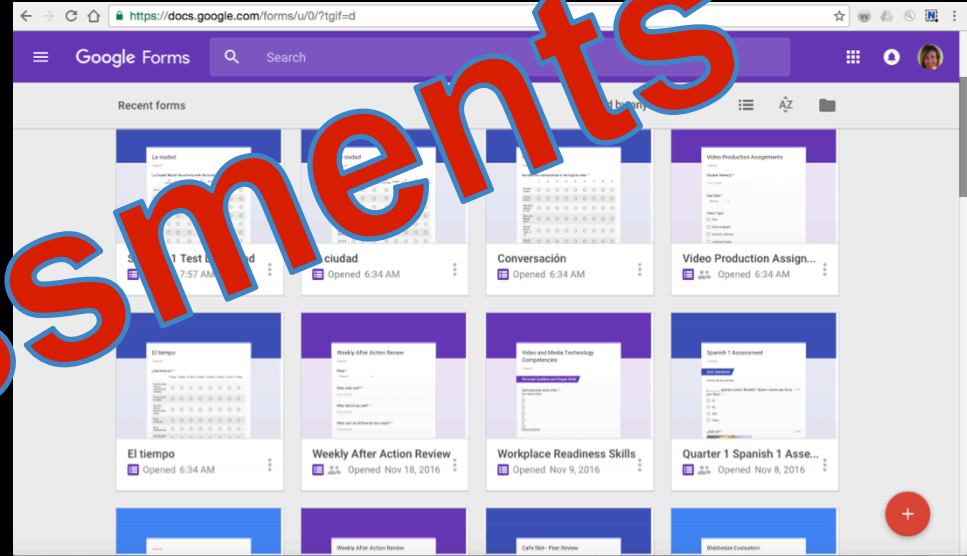
\*Flubaroo add-on will grade for you.

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\*Flubaroo add-on will grade for you.






# Google

← Spanish 1 Test La Ciudad





SEND



QUESTIONS

RESPONSES 22

22 responses



SUMMARY

INDIVIDUAL

Accepting responses ☒

Insights

Average

0 / 0 points

Median

0 / 0 points

Range

0 - 0 points

Total points distribution

# of respondents


25


20

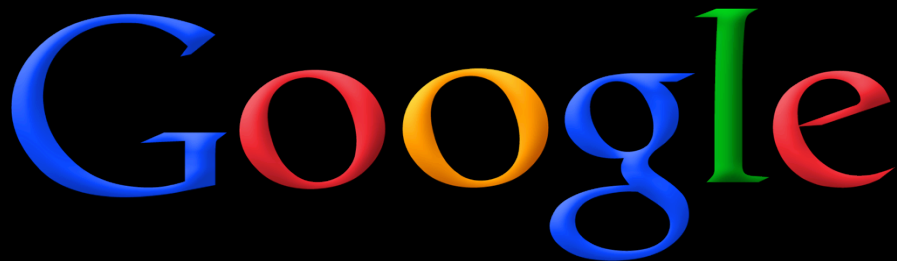
15

10

5



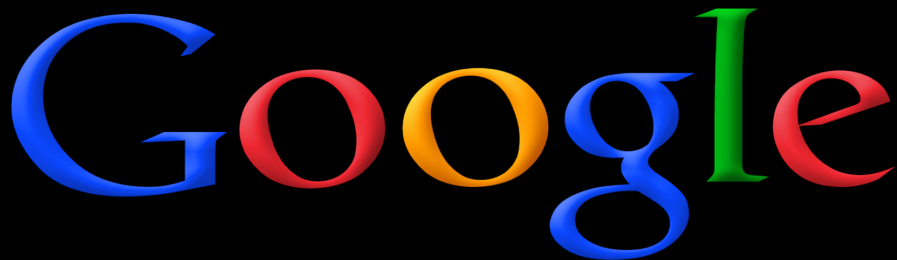




1. create key
2. grade assignment
3. analyze results
4. share results

Screenshot of a Google Docs spreadsheet titled "Spanish 1 Test La Ciudad (Responses)". The spreadsheet displays student submissions for a test. The columns are labeled A, B, and G. The rows show student names, email addresses, and scores. The spreadsheet is viewed in a web browser, and the Google Docs menu is open, showing options like "Regrade Assignment", "Share Grades", "View Grade Report", "Edit Help Tips", "Edit Student Feedback", "Advanced", "About Flubaroo", and "Help".

Timestamp	Email Address	Score
12/2/2016 14:09:04	kneal1@students.lcs.k12.va.us	
12/2/2016 14:09:40	pbhandari1@students.lcs.k12.va.us	
12/2/2016 14:11:58	sthompson@students.lcs.k12.va.us	
12/2/2016 14:12:21	dwood@students.lcs.k12.va.us	
12/2/2016 14:13:15	rwoolard@students.lcs.k12.va.us	
12/2/2016 14:13:20	edixon@students.lcs.k12.va.us	
12/2/2016 14:13:57	kwiggins@students.lcs.k12.va.us	
12/2/2016 14:14:14	abryant@students.lcs.k12.va.us	
12/2/2016 14:14:51	csmith2@students.lcs.k12.va.us	
12/2/2016 14:15:40	creid@students.lcs.k12.va.us	
12/2/2016 14:15:52	ahenderson@students.lcs.k12.va.us	
12/2/2016 14:17:12	hfauntler@students.lcs.k12.va.us	
12/2/2016 14:17:18	rreed@students.lcs.k12.va.us	
12/2/2016 14:19:25	kveney@students.lcs.k12.va.us	
12/2/2016 14:19:41	asmith@students.lcs.k12.va.us	
12/2/2016 14:22:36	wbeane@students.lcs.k12.va.us	
12/2/2016 14:23:04	cbrice@students.lcs.k12.va.us	
12/2/2016 14:24:32	thenderson1@students.lcs.k12.va.us	
12/2/2016 14:26:27	orich@students.lcs.k12.va.us	
12/2/2016 14:29:52	jmcclain@students.lcs.k12.va.us	
12/2/2016 14:32:19	mdavis@students.lcs.k12.va.us	



← → ↻ 🏠 [https://docs.google.com/spreadsheets/d/1HRqCl6Z\\_XXzcsa6BpHL1bDANB-IS71hig-I20NhersA/edit#gid=1384951062](https://docs.google.com/spreadsheets/d/1HRqCl6Z_XXzcsa6BpHL1bDANB-IS71hig-I20NhersA/edit#gid=1384951062) ☆ 🌐 📧 📅 ⋮

**Spanish 1 Test La Ciudad (Responses)** ☆ 📁 lhood@ics.k12.va.us

File Edit View Insert Format Data Tools Form Add-ons Help Last edit was made seconds ago by Liz Hood

Comments Share

fx Summary:

	A	B	C	D	E	F	G	J	K	L	M
2	Summary:				TO ENSURE FLUBAROO FUNCTIONS PROPERLY, DO NOT DELETE ROWS OR COLUMNS IN THIS SHEET						
3	Points Possible	50									
4	Average Points	39.38									
5	Counted Submissions	21									
6	Number of Low Scoring Questions	6									
7											
8	Submission Time	Email Address	Score	Total Points	Percent	Times Submitted	Emailed Grade?	La Ciudad: Match the activity with the I ...	La Ciudad: Match the activity with the I ...	La Ciudad: Match the activity with the I ...	La Ciudad: Match the activity with the I ...
9	12/2/2016 14:09:	kneal1@student:	0	36	72.00%	1 x		0	1	0	0
10	12/2/2016 14:09:	pbhandar1@stu	0	41	82.00%	1 x		1	1	0	1
11	12/2/2016 14:11:	sthompson@stu	0	28	56.00%	1 x		0	1	0	0
12	12/2/2016 14:12:	dwood@student:	0	46	92.00%	1 x		1	1	1	1
13	12/2/2016 14:13:	rwoolard@stude	0	42	84.00%	1 x		0	1	1	1
14	12/2/2016 14:13:	edixon@student:	0	37	74.00%	1 x		1	0	0	0
15	12/2/2016 14:13:	kwiggins@stude	0	40	80.00%	1 x		1	1	1	1
16	12/2/2016 14:14:	abryant@studen	0	27	54.00%	1 x		0	0	0	1
17	12/2/2016 14:14:	csmith2@studen	0	49	98.00%	1 x		1	1	1	1
18	12/2/2016 14:15:	creid@students.i	0	35	70.00%	1 x		0	1	1	0

+ ☰ Student Submissions Grades

# Google Drawing



An online, collaborative application for designing and producing graphics.

- Edit drawings online in real time with anyone you choose, and invite others to view your edits in real time.
- Insert text, shapes, arrows, scribbles, and images from your hard drive or from the Web to enhance a diagram or painting.
- Lay out drawings precisely with alignment guides, snap to grid, and auto distribution.
- Insert drawings into other Google Docs, Sheets, or Slides using the [web clipboard](#), then tweak them inline.

# Add-ons for Docs



- EasyBib
  - generates citations & bibliography
- Thesaurus
  - explore synonyms & antonyms
- Texthelp Study Skills
  - highlight selections to be 'collected' later
    - great for studying
- Kaizena
  - attach audio feedback or resources

[http://www.coolcatteacher.com/  
best-google-drive-add-ons/](http://www.coolcatteacher.com/best-google-drive-add-ons/)

# Add-ons for Sheets



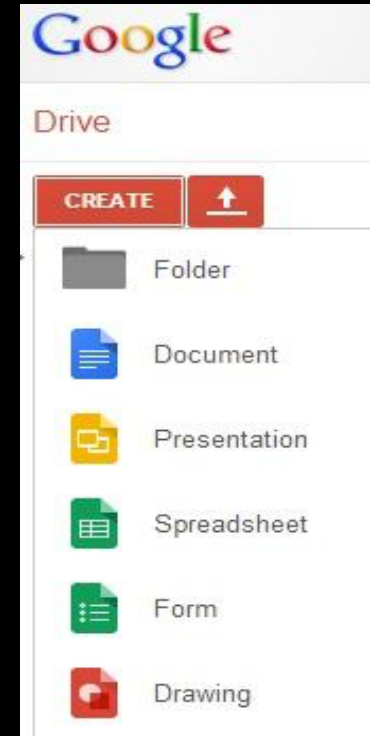
- Doctopus
  - mass copy, share, and manage grading/feedback for student projects
- Flubaroo
  - grades assignments and offers data assessment tools
- AutoCrat
  - personalizes mass messages
- Twitter Curator
  - curate and organize tweets

<https://www.synergysse.com/blog/top-10-google-docs-sheets-add-ons-for-education/>

# Google Drive



- Docs
  - Create and format text documents
- Slides
  - Online presentation editor
- Spreadsheet
  - Create and format spreadsheets, charts, and gadgets
- Forms
  - Design a survey or quiz, or quickly create a roster



<b>Text</b>	<b>Audio</b>	<b>Multimedia</b>
bubblus	blabberize	animoto
word clouds	voki	voicethread
comics	powtoon	
	audacity	





Brainstorming made simple

Liz

Mind Maps

★ Upgrade

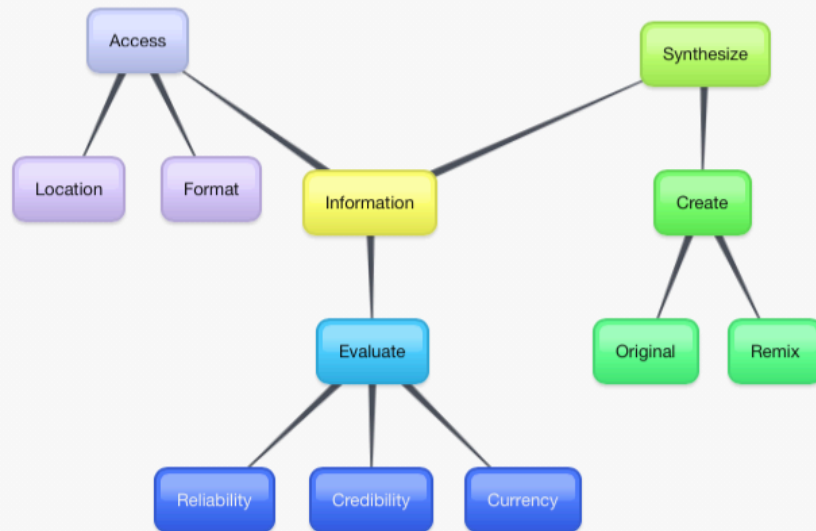
? Help



100%



Selection



Contact Us

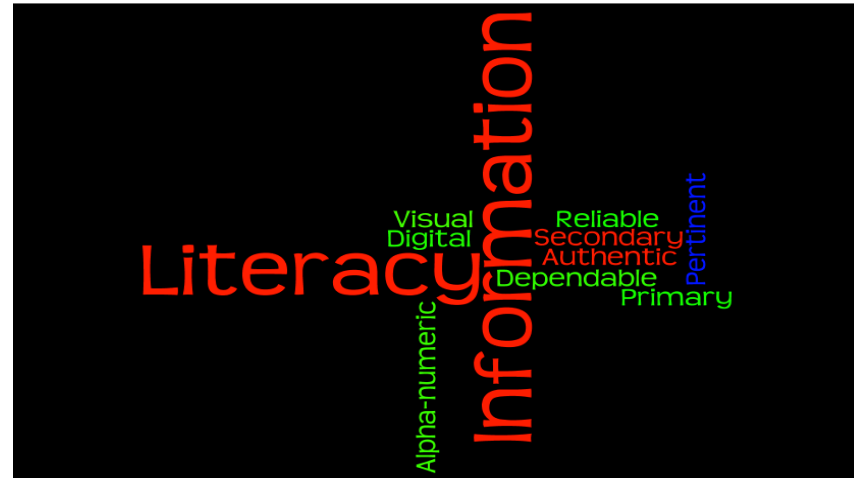
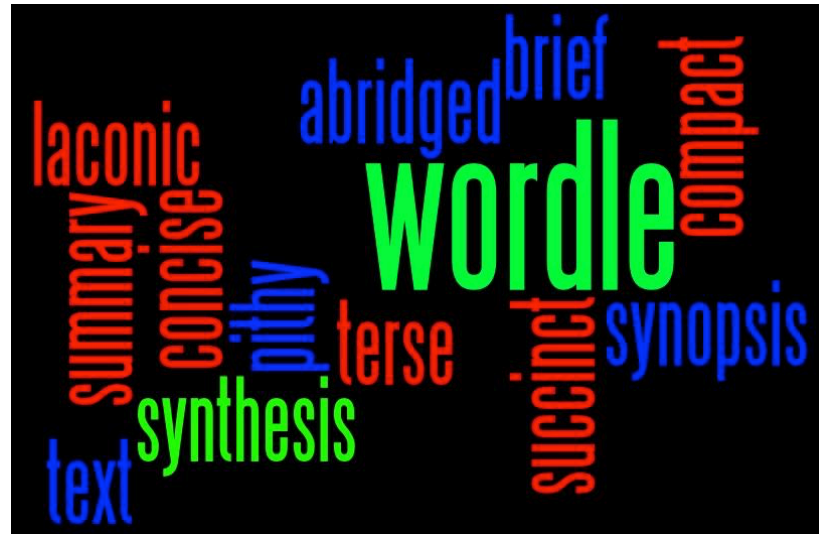


# Wordle/Word Clouds

text

concepts

[Tagul](#)





# MakeBeliefsComix

comic strip

text

conversations/dialogues

The logo for MakeBeliefsComix features the text "MAKEBELIEFS COMIX" in a bold, red, stylized font with a black outline. The letters are slightly irregular and hand-drawn in appearance. A blue, curved swoosh or underline is positioned above the "COMIX" portion of the text.

TO SAVE A COPY, PRINT THIS COMIX STRIP WITH THE PRINT BUTTON AT BOTTOM;  
OR, CLICK ON LINK BELOW TO CREATE YOUR OWN MAKE BELIEFS COMIX!  
IF THE LINK DOES NOT WORK, TYPE THE WEB ADDRESS INTO YOUR BROWSER.

[WWW.MAKEBELIEFSCOMIX.COM](http://WWW.MAKEBELIEFSCOMIX.COM)

A new friend

John McClain



This comic strip was created at [MakeBeliefsComix.com](http://MakeBeliefsComix.com). Go there to make one yourself!

PRINT

SAVE IMAGE TO DISK

CREATE YOUR OWN COMIX

# ToonDoo

- comic strip
- text
- dialogue





SEARCH FOR

BOOK



☐ EXACT MATCH



2/3

BOOK



WELCOME TO TOONDOO!  
CREATE YOUR STORY HERE.



# Blabberize

Image

Verbal Production





# Voki

Personalized Avatar

Verbal Production



# Powtoon

cartoon strip animation

images

text

actions

voiceover



# Audacity

voice recording

listening comprehension

combine tracks



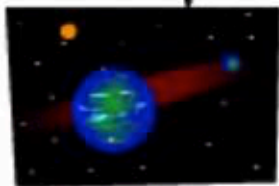
# Animoto

images

text



voicethread



# VoiceThread

vocabulary

descriptions

conversations

discussions



# Quizlet

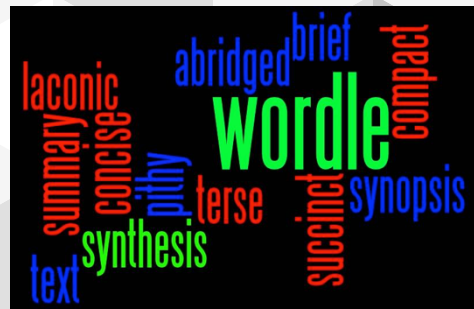
images

text

audio

The Quizlet logo, featuring the word "Quizlet" in a blue, serif font, centered within a light gray rounded rectangle.

# Digitize It



Liz Hood  
Library Media Specialist  
Northumberland Middle/High School



[www.cybrarianliz.com](http://www.cybrarianliz.com)

