



Google Apps in Classrooms and Schools

32 Ways to Use Google Apps in 50 Minutes

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Google Apps for Education Team
[@juliastiglitz](#)

Objective

- Be able to implement Google Apps in meaningful ways in your classrooms to **increase efficiency, collaboration and engagement**



Before Getting Started.....

- Access the presentation: <http://bit.ly/hby9jO>

Tools for Teachers and Students



GMail *Huge inbox with search: keep and find everything.*



Talk *IM and Video as easy as email.*



Groups *Let students easily create and work in teams.*



Calendar *Make sharing calendars and schedules easy.*



Docs *Makes collaborating as easy as creating.*



Sites *Allow students and teachers to manage their own sites.*



Video *Using the power of video to teach.*



Postini *Security and compliance solutions.*

Google Docs

Word Processing, Spreadsheets,
Presentations

#1: Collaborative Lesson Planning

Sherlock Holmes Loves Words

Subject: Reading

Topic: context clues

Grade Level: 3rd-5th

Duration of Lesson: 30-35 minutes

Description and Rationale of group:

Lesson Goal: standard language varies by state.

Objective: SWBAT compare and contrast their ability to determine the meaning of unknown words by using specific strategies vs. not using them.

Assessment: oral assessment, mini-quiz.

Materials:

Vocabulary: context clues, Latin and Greek roots, mystery

Instructional Plan

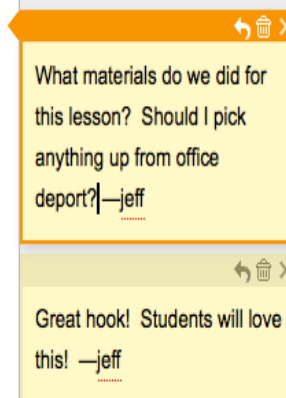
Motivation/hook: TW will put sealed envelope to his head and ask students if they can guess what the word is hiding inside the envelope. Students may guess but obviously will be way off. Before lesson TW will have put notecards on 5 students' desks face down (a number 1-5 will be face up). One by one students will read word or phrase that will help students guess the word in the envelope. When they do, TW point out that we used a strategy to determine something unknown.

New information: Then, Mr. DeSobe will teach students that we need to use

Work on the *same* lesson plan at the *same* time with a colleague using Google Docs.

Example:

<http://bit.ly/eI4rRa>



#2: Staff/Grade Level Meeting Notes

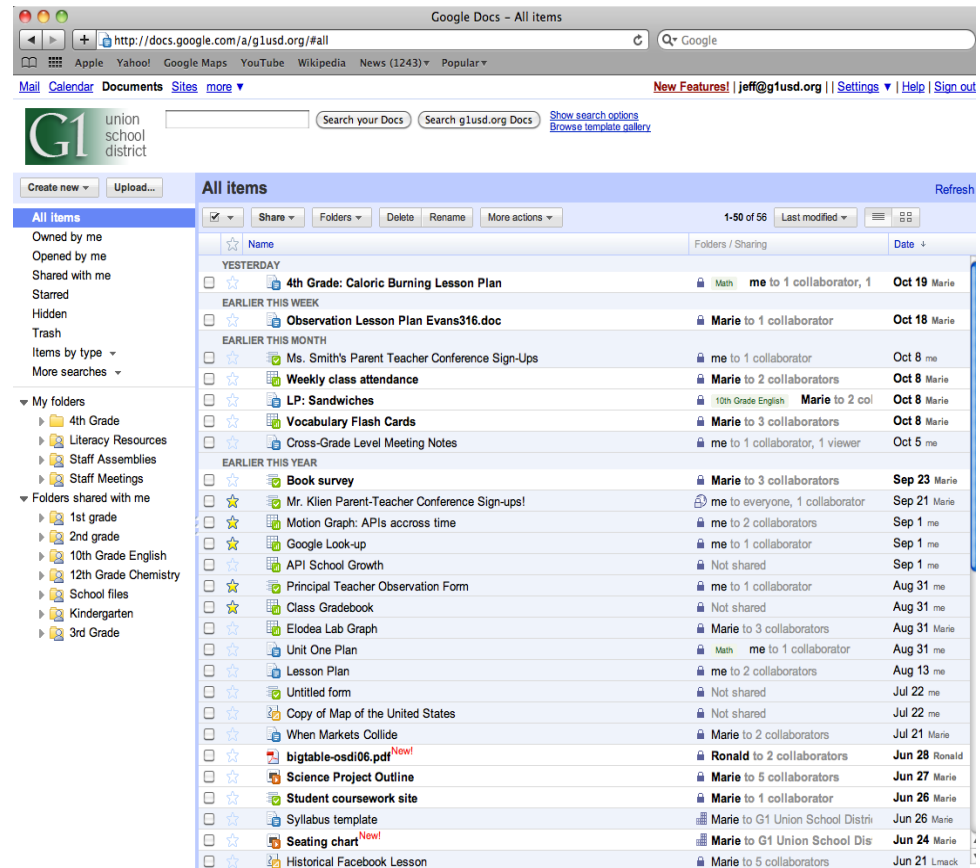
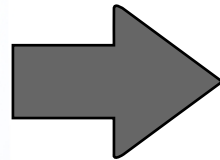


Picture by K.W. Barrett

Take your staff meeting notes in Google Docs. Share with the rest of the staff.



#3: Shared Lesson Repository



Store your lesson plans in your school's shared Doc list so that anyone at your school can find and access them. Create a folder for your grade level to share resources.



#4: Improve the Writing Process

Use Google Docs to:

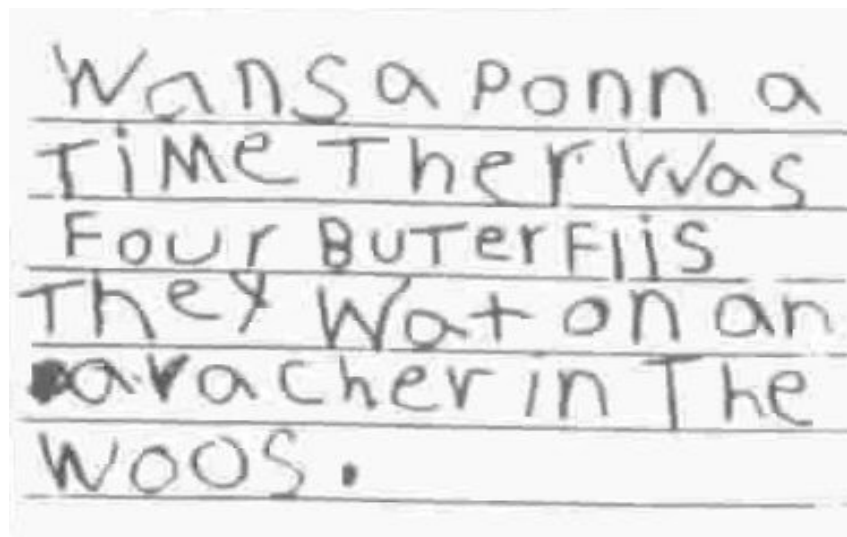
- Have students work collaboratively from anywhere
- Give students ongoing and simultaneous feedback
- Use revision history to hold students accountable for their work
- Publish student work

Example:

<http://bit.ly/hAGGqD>

Case Study:

<http://bit.ly/hrZVBk>



#5: Reading Response Journals

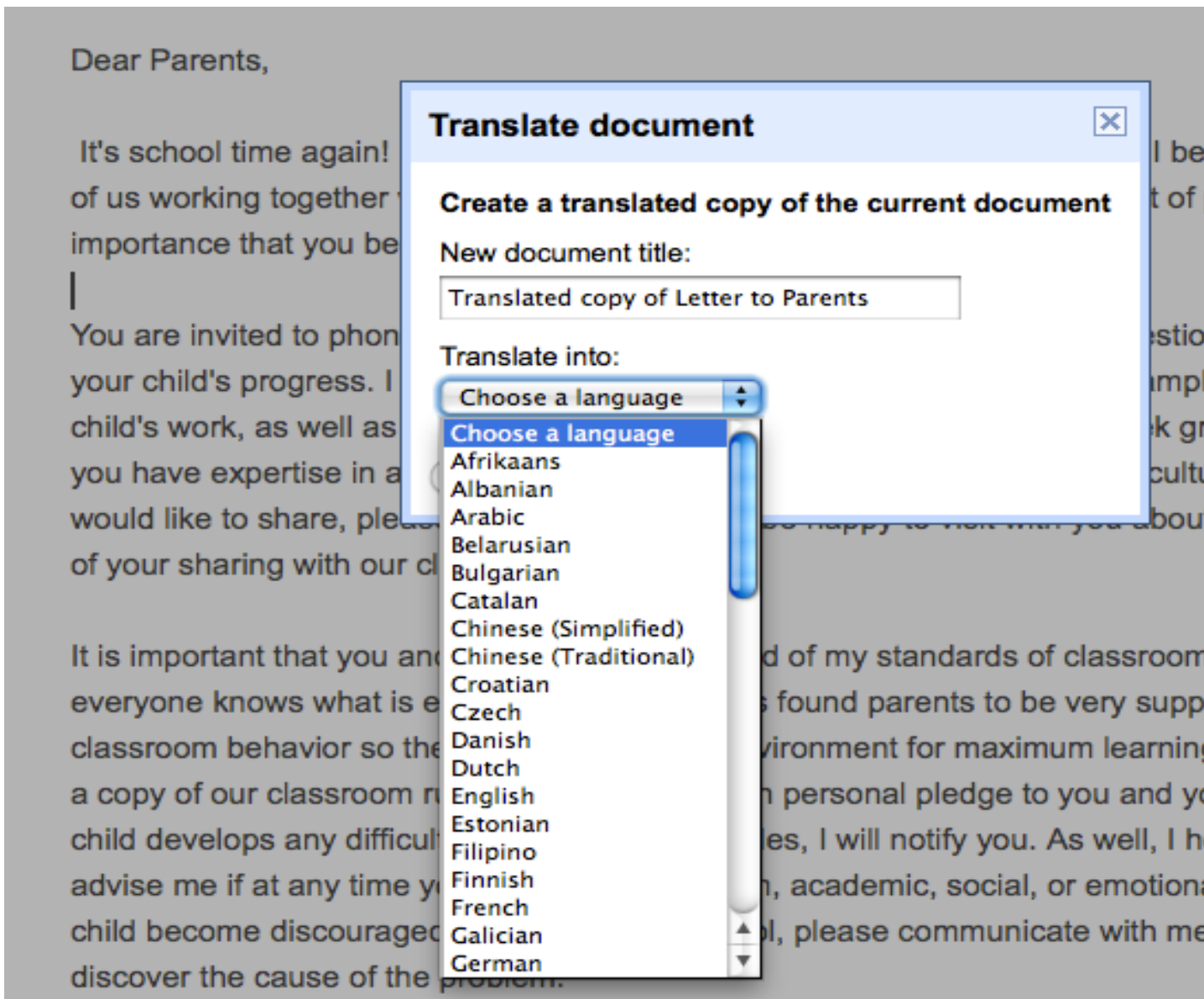


Instead of lugging home 30 reading response journals every week to comment on, have students keep their journals in a shared Google Doc. You can give your comments while students continue to write in their journals!



#6. Translate Letters Home for Parents

Translate letters home to parents by using the translate feature in Google Docs.



Example: <http://bit.ly/g2JI5G>



#7. Track Student Homework (and Share with Parents)



File Edit View Insert Format Form Tools Help

Formula:

	A	B	C	D	E
1	Student	Mon. Feb.1	Tues. Feb. 2	Wed., Feb. 3	Thursday, Feb. 4
2	1	3	3	3	3
3	2	3	2	3	3
4	3	1	2	2	3
5	4	3	3	3	1
6	5	1	1	1	2
7	6	3	3	3	3
8	7	3	3	3	3
9	8	3	3	3	3
10	9	3	3	3	3

Example: <http://bit.ly/geNsQx>

Use spreadsheets to track student homework. Give each student a anonymous number and share the sheet with parents



#8: Sign-up Sheets

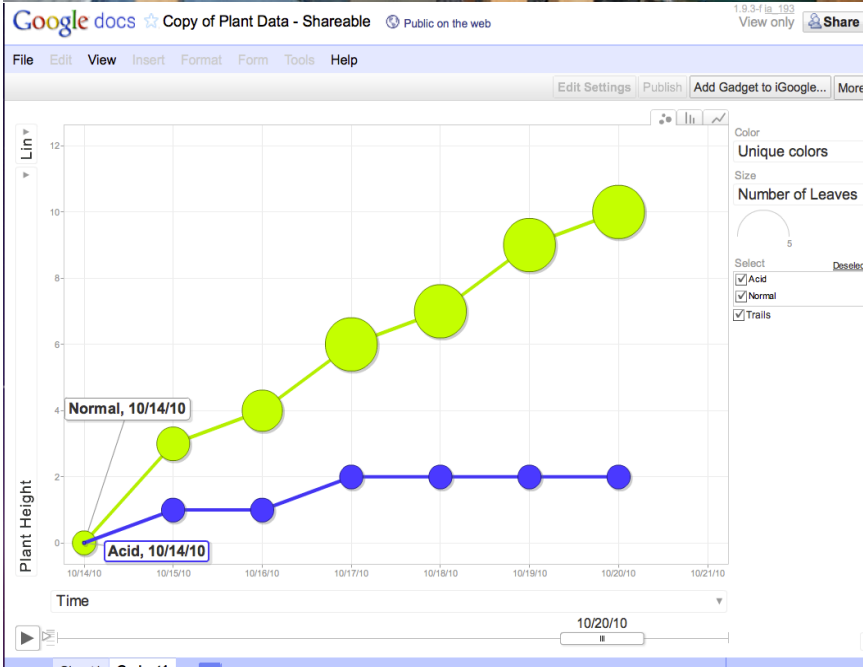
Please sign-up for one time slot. Thanks! -Mr K					
Date	Time	Parent's Name	Student's Name	Email Address	Phone
Tuesday, Oct. 2	1pm	Becky Coleman	Susie Coleman	Becky@gmail.com	202- 9
Tuesday, Oct. 2	2pm				
Tuesday, Oct. 2	3pm				
Tuesday, Oct. 2	4pm				
Tuesday, Oct. 2	5pm				
Tuesday, Oct. 2	6pm				
Tuesday, Oct. 2	7pm				
Wednesday, Oct. 3	1pm				

Example: <http://bit.ly/hvxANq>

Use spreadsheets to make scheduling parent-teacher conferences really easy.



#9: Science Experiments



Advanced Application

Geology Soils

Group Name

Date

Height (cm)

Number of Leaves

Color

pH

Crop

Soil Type

Submit

Powered by Google Docs

Example: <http://bit.ly/dQLtt6>

Google Confidential

Use Google forms and spreadsheet to:

- Collect data
- Share data
- Analyze data
- Graph data
- Graph data across 5 variables using the motion chart



#10: Flash Card Center

English	definition
sloth	disinclination to action or labor
swill	wash, drench
lasciviousness	lewd, lustful
mantlepiece	A shelf that is affixed to the wall above a fireplace
principle	a rule or code of conduct
garrison	a military post

Show All
Hide All
Undo
Words left: 6
Shuffle
Flip Cards
Reset

Language Arts Vocabulary Flashcards

sloth

swill

lasciviousness

mantlepiece

Answer
Delete

Answer
Delete

Answer
Delete

Answer
Delete

Example: <http://bit.ly/hsdpyj>

Use the flash card gadget in spreadsheets to set up a flash card center for your class.



Try it!

Beginner: Share a document with a colleague

Intermediate: Analyze the revision history of a document

Advanced: Create a motion chart

Demo Account Information:

URL: www.google.com/a/g1usd.org/

Name: demo1@g1usd.org

Password: googleapps



Want to learn more?

Google Apps for Education Online Training Center,
Module 4: Docs: <http://edutraining.googleapps.com/Training-Home/module-4-docs>



Forms

Go to: <http://bit.ly/baseballquiz>

#11: Formative and Summative Assessments

$\frac{\partial}{\partial \theta} \int_{\mathbb{R}^n} f(x)$

$\frac{\partial}{\partial a} \ln f_{a, \sigma^2}(\xi_1) = \frac{(\xi_1 - \sigma^2)}{\sigma^2}$

Math Pre-Assessment

Do the best you can!

$(2+3) * 4 =$

$2 + 3 * 4 =$

$2(2+4) =$

Powered by [Google Docs](#)

Use Google Forms to give your students a pre-assessment at the beginning of class. Modify your instruction based on the results. Then give students an "exit ticket" at the end of class to see what they learned.

Tip! Change the template to make the form more exciting

Example: <http://bit.ly/eV5K22>



#12: Survey Students: Collect Student Interest Information



Welcome to Mr. Brin's Class

Complete the survey by Friday. This is a fun way for us to learn more about each other!

Name

What did you do this summer?

- Summer School
- Camp
- Work
- Hung out with friends
- Other:

What are your three biggest strengths?

What are you most excited about learning this year?

Powered by [Google Docs](#)

[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)

Use Forms to collect survey students. Survey students at the beginning of the year to find out about their interests.



Google Confidential

#13: Teacher or Student Observations

Principal Teacher Observation Form

Teacher's Name

Teacher clearly communicates lesson objective and purpose

1 2 3 4 5

Novice Exemplary

The lesson objective is standards aligned and rigorous

1 2 3 4 5

Novice Exemplary

The lesson has an engaging hook/opening

1 2 3 4 5

Novice Exemplary

Use forms on your smart phone or tablet to do teacher or student observations. The data will be automatically populated into a spreadsheet.



#14: Online Reading Record

Ms. Stiglitz's Class Online Reading Record

Just like your online reading record but online! Remember to complete EVERY day!

Name
Your name

Book Title
What is the title of your book?

Author
Who is the Author?

Minutes Read
How many minutes did you read for?

Page Numbers
What page did you start and end?

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[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)

Have students complete their reading record online line through a Google Form.



#15: Tracking Discipline Referrals

Keep track of discipline referrals across a school using Google forms.

Discipline Referrals

Use this form to track discipline concerns. This form will generate reports so that we have an accurate picture of how our students are doing.

Teacher Name

Ms. Evans ▾

Class Period

Period 1 ▾

Student Name

Nature of the Incident

Uniform infraction

Late to class

Disrespecting teacher/students

Causing a class disturbance

Other:

Powered by [Google Docs](#)

[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)

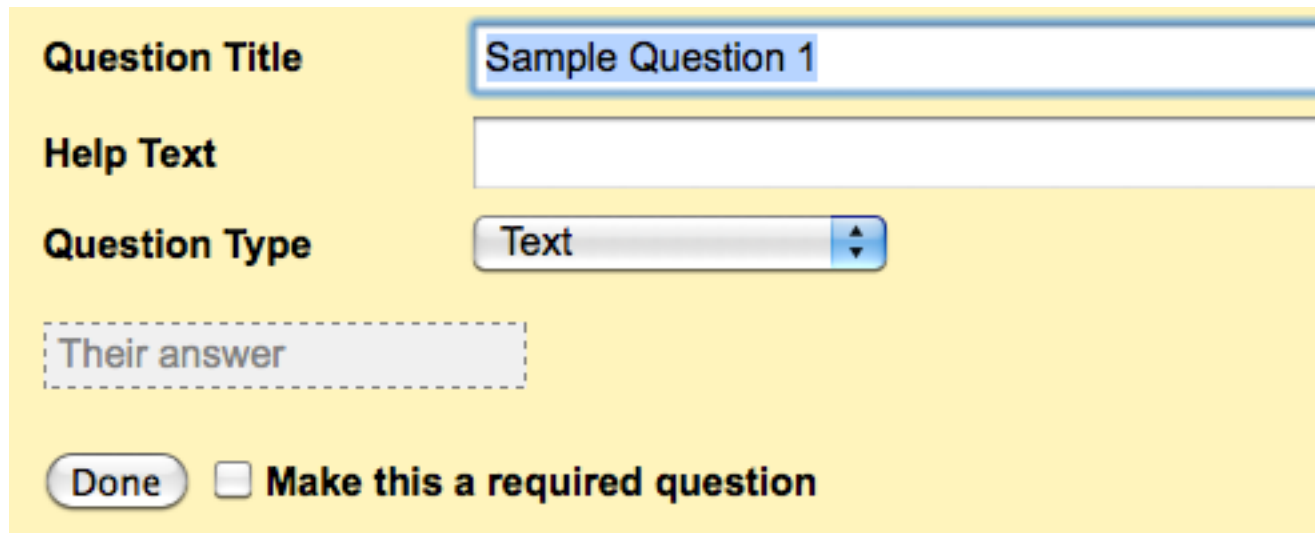


A Few More Ways to Use Forms...

#16: Collect Information from Parents or Teachers

#17: Spelling Tests/ Multiplication Tests (Bonus! Write a formula to grade the tests)

#18: Collecting Science Data



The screenshot shows a yellow-themed form editor interface. It includes the following elements:

- Question Title:** A text input field containing "Sample Question 1".
- Help Text:** An empty text input field.
- Question Type:** A dropdown menu currently set to "Text".
- Answer Field:** A dashed rectangular box containing the text "Their answer".
- Buttons:** A "Done" button and a checkbox labeled "Make this a required question".



Try it!



Beginner: Create a form and change the template

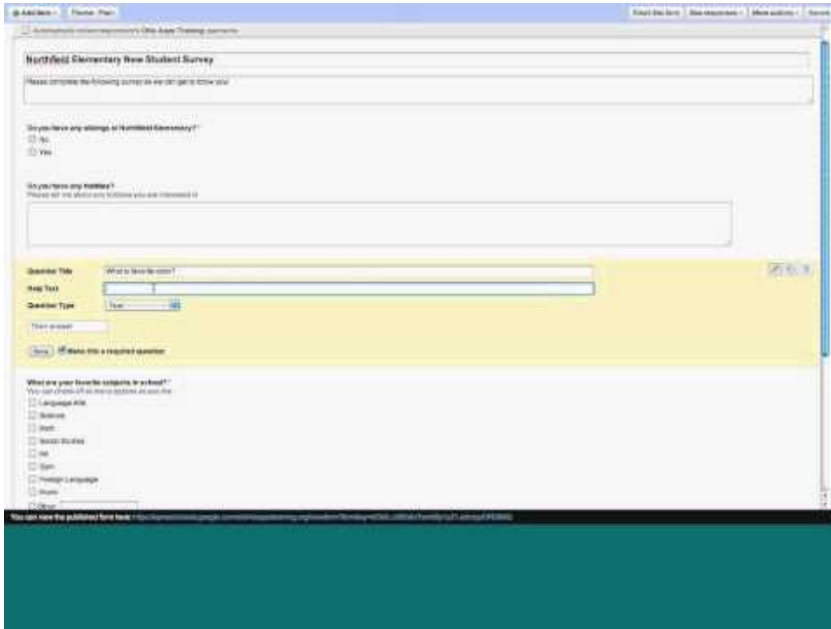
Intermediate: Graph the results of the form data

Advanced: Create a formula to grade your spelling test

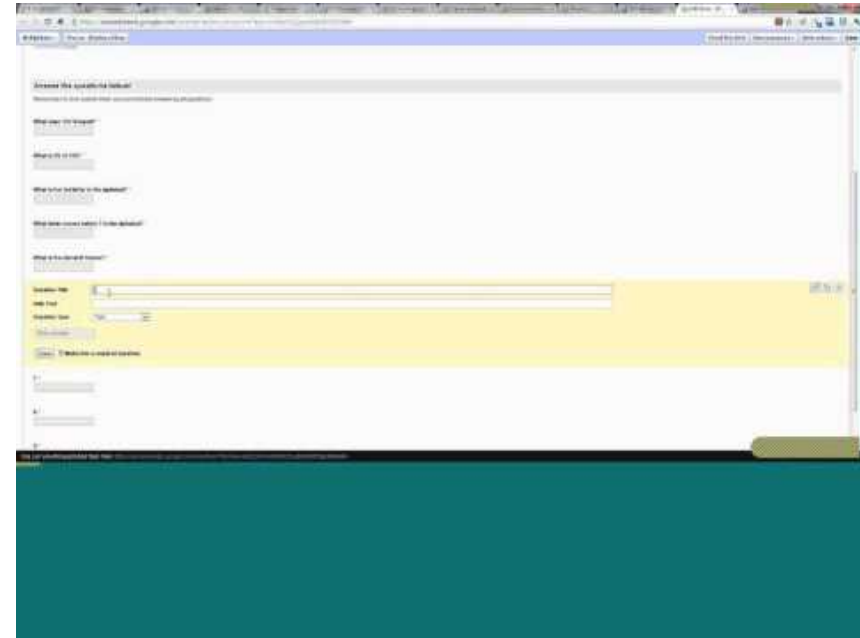
Have more ideas? Add them to the Moderator! <http://goo.gl/mod/oWUK>



Want to learn more?



Introduction to Google Forms Webinar



Advanced Forms Webinar

Google Apps for Education Training Center, Chapter 6:
Forms: <http://edutraining.googleapps.com/Training-Home/module-4-docs/chapter-6>

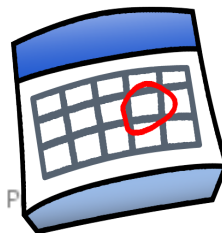


Google Calendar



A few ways to use calendar...

- #19: Shared Calendars (School, Grade Level, Team)
- #20: Checking-out Resources (Laptop Carts, Library)
- #21: Standards Mapping
- #22: Pacing Guides



Try it!

Beginner: Create a calendar event

Intermediate: Invite others to your event

Advanced: Create a grade level calendar. Send out a weekly meeting invite and grade level notes. OR Try out a lab feature.

Have more ideas? Add them to the Moderator! <http://goo.gl/mod/oWUK>



Want more?

Google Apps for Education Training Center, Module 3:
Calendar: <http://edutraining.googleapps.com/Training-Home/module-3-calendar>



Gmail

Google

#23: Communication with Parent including in Different Languages



Hoy Juan no puede ir Inbox | X

★ **Julia Stiglitz** to me, marie [show details](#)

Spanish ▼ > English ▼ [Translate message](#)

Hola,

Mi hijo no puede ir al viaje porque está enfermo.

Gracias,

Julia

Turn on the [translate](#) feature in Gmail [labs](#) to communicate with parents in different languages



#24: Global Pen Pals



Give students pen pals in another state or country. With Google translate it's OK if they don't speak the same language!



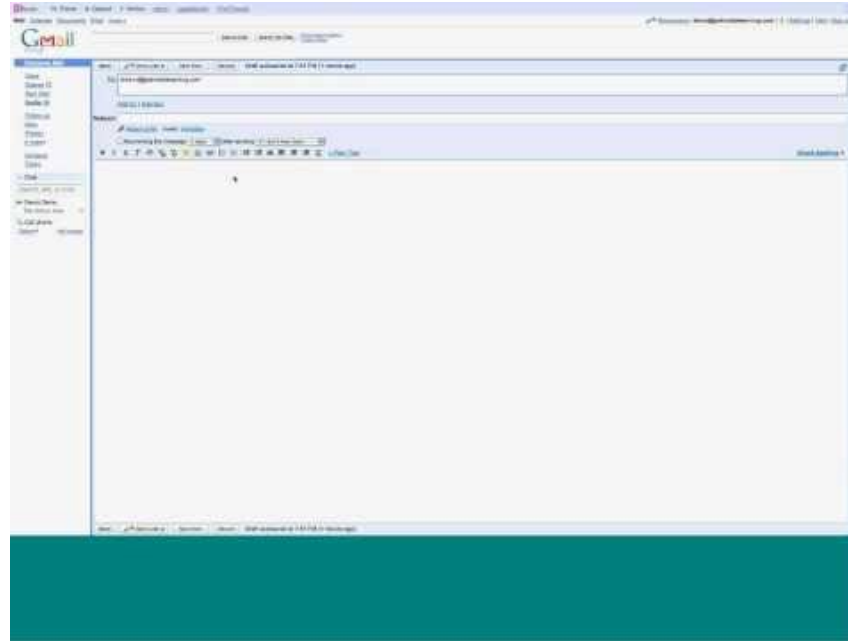
Try it!

Beginner, Intermediate and Advanced: Enable a new lab feature

Have more ideas? Add them to the Moderator! <http://goo.gl/mod/oWUK>



Want to learn more?



Google Apps for Education Training Center, Module 2:
Calendar: <http://edutrainings.googleapps.com/Training-Home/module-2-mail>



Talk

Google

#25: Invite a Guest Lecturer into Your Classroom

Invite a Googler into your class to do a guest lecture through Video Chat on the importance science. Or invite a grandparent who lives in a another state to read to the class during story time.



Intermediate Application

#26: Hold Office Hours over Chat...even on snow days!



Independent.ie **NATIONAL NEWS**

COMPANIES TO WATCH IN 2011 Irish firms face new challenges in year ahead SEE IRISH

China is being pressured... What's the impact on investment?

News Business Sport Entertainment Health Lifestyle Education Travel Jobs -

Breaking News v National News World News v Today's Paper Newspapers v Opinion v Farming v We

You are here: [Home](#) > [National News](#)

Teacher beats cold spell by taking classes online

SHARE | PRINT | EMAIL | TEXT SIZE

By John Walshe Education Editor
Tuesday December 07 2010

WHEN nine primary school pupils couldn't get to school because of snow and ice, their principal decided to take classes to them via their home computers.

"We've been closed since last Monday and I decided something had to be done," said Caithriona Carty from Glenmore national school in Mayo.

She sent text messages to parents about her plans and within a couple of hours was in email contact with all the pupils through Googletalk.

"We started doing revision, although one boy wrote back saying that he hoped there would be no homework as he had to build an igloo," she said.

The pupils read the revision notes, worked on assignments and sent them back to the principal, who added that "all the pupils are enjoying it".

In fact, some of them were getting fed up with the bad weather, which has confined many families in the tiny townland to their homes.

Elsewhere, more schools managed to re-open yesterday -- but with difficulty in some cases.

St Colmcille's national school in Knocklyon, Co Dublin, hired a JCB on Saturday and a mini-digger yesterday to clear huge accumulations of snow.

Dublin City VEC schools and colleges were all open for business but no classes were held in Marino College (Fairview Strand) due to burst pipes.

- John Walshe Education Editor

Irish Independent

Related Articles

- Road pile-ups spark call for 'nutter' drivers to slow down

Also in National News

- ▶ 'Courageous' garda laid to rest
- ▶ Hanafin and Andrews face each other in tight battle
- ▶ Dog owner faces quiz in fatal mauling probe
- ▶ Gilmore will take seats from FF in 'cockpit of government'
- ▶ Councillor denies Harney paint attack

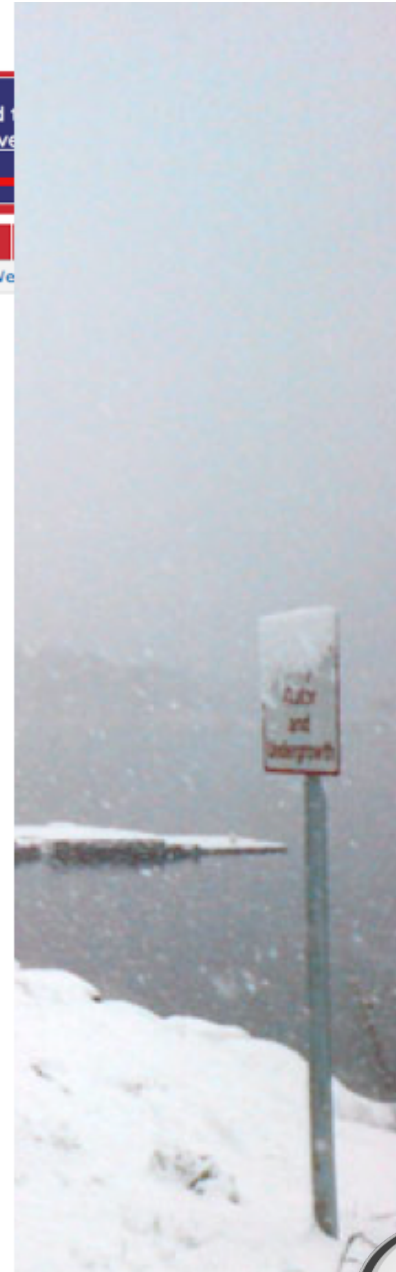
◀ National News Home

Ads by Google

Depression - Lean On Me
Know someone with depression? Find out how you can help.
www.LeanOnMe.net

Cold Calling Is Dead
Read the new report that explains why cold calling doesn't work!
www.NeverColdCall.com

Merge FG and FF
Merge Fine Gael and Fianna Fail Join the debate
www.jolitics.com



<http://www.independent.ie/national-news/teacher-beats-cold-spell-by-taking-classes-online-2450487.html>



Try it!

Beginner, Intermediate and Advanced: Video chat with someone in the classroom (<http://bit.ly/hxPvuj>)

Have more ideas? Add them to the Moderator! <http://goo.gl/mod/oWUK>



Want to learn more?

Google Apps for Education Training Center, Chapter 8: <http://edutraining.googleapps.com/Training-Home/module-2-mail/chapter-8>



Sites

Google

#27: Classroom and School Websites

Ms. Schroeder's Classroom

Navigation
[Welcome!](#)
[Newsletters](#)
[Photos](#)
[Student Links](#)
[Parent Links](#)
[Homework Updates](#)
[Student Work](#)
[Videos](#)
[Photo Story Projects](#)
[Creating a Google Account](#)
Sign Up Information
[November Conferences](#)
[Parent Information](#)

635
 days since
Last Day of School

Welcome!

[RSS for this site](#)

Welcome to Ms. Schroeder's 5th Grade Webpage!

Take some time to look around at the links on the left side of the site.

Homework Updates

February 3, 2009 Math: Test on Friday Social Studies: 50 notecards due for research paper Reading: Book Report due on February 12 Writing: Journal due on Feb. 7th
 Posted Feb 3, 2009 8:49 AM by Molly Schroeder

Tuesday, January 24, 2009 Math: Study Link 7.4 Reading: Read 20 minutes Social Studies: Journal of Christopher Columbus Due Wednesday
 Posted Jan 23, 2009 9:56 AM by Molly Schroeder

Monday January 23, 2009 Math: Study Link 7.3 Reading: Read 20 minutes Social Studies: Journal of Christopher Columbus due Wednesday Spelling Post test on Friday
 Posted Jan 23, 2009 9:01 AM by Molly Schroeder

Showing posts 1 - 3 of 3. [View more »](#)

Ms. Schroeder's Calendar

Ms. Schroeder's 5th Grade Calendar

Today ◀ ▶ March 2011 ▼

Sun	Mon	Tue	Wed
27	28	Mar 1	2
			12:30pm Boo
6	7	8	9
			12:30pm Boo
13	14	15	16
			12:30pm Boo
20	21	22	23
			12:30pm Boo

Create a site for your class. Embed a class calendar, videos, and presentations.

Examples:
[5th Grade Class Site](#)
[US History Class Site](#)
[School Website](#)



#28: Student ePortfolios

[Welcome](#) [iMovie](#) [Philosophy of Education](#) [About Jenna](#) [My Blog](#)
[Professional Experience](#) [Resume](#) [Personal Experiences](#)

Jenna White



Welcome to my ePortfolio!

As Eleanor Roosevelt once said, "One thing life has taught me, if you are interested, you never have to look for new interests. They come to you. If you are genuinely interested in one thing, it always leads to something else"

This ePortfolio is a small snapshot of where I've been, where I'm going, and what I have learned along the way.

Jenna M. White
 Clemson University 2010

Use sties to create student ePortfolios. S student work and pass it on from year to year.

Example:
[Clemson University ePortfolios](#)

#29: Student Projects and Reports



Google Science Fair 2011
Official Project Submission

- Summary
- Step 1
- Step 2
- Step 3
- Step 4
- Step 5
- Step 6
- Step 7
- Step 8
- Works Cited
- Submit your project

Project Summary

According to Veterans Affairs staff, up to 50% of a nurse's day is spent transporting patient care items. To aid nurses, fully autonomous robotic transporters driven by Artificial Intelligence (AI) could access the entire hospital and make simple deliveries for nurses, giving them more time to deliver patient care.

I researched current AI pathfinding methodologies and found that the leading pathfinding algorithm, A*, doesn't utilize re-alignment opportunities needed in a hospital setting where a robot is more likely to go off course. I wondered... can current AI pathfinding methodology that is used for autonomous robots be improved to increase the accuracy of the robot reaching its destination?

I developed a pathfinding algorithm to create paths that maneuver the transporter around known obstacles, while considering accuracy and efficiency. I then tested the accuracy of the resulting paths of A* and my algorithm by measuring the accumulated variance of the robot's ending position from its target destination in feet. I used the following experimental variables:

Independent Variables: Path plotted by the AI algorithms used
Control group: A-star algorithm
Experimental group: Accuracy/efficiency balancing algorithm

Dependent Variable: Accumulated variance of the robot's ending position from its target destination measured in feet.

I plotted and measured the results from my experiment and found that if the robot's algorithm is modified to incorporate aspects of its surrounding environment to correct its course, then the variance of the ending position of the robot from its target destination will be reduced by 36.5%.



Have students do projects or create reports using sites. You could also have them do their submission for the Global Google Science Fair! More info [on that here.](#)



#30: Curriculum Sharing

Create and share curriculum at your school or district.

The screenshot shows a web portal for 5th Grade ELA. The main content area displays a unit map for 2010-2011, created by Karen Alevy for Clarkstown Central School District. The unit is titled "Unit: Launch; Quick Write 2010 2011 (Week 1, 1 Week)". It lists essential questions under three categories: Overarching, Topical, and Content. The content section includes "Reader's Workshop" with a sub-point: "Learn and use routines of reader's workshop". The sidebar on the left contains navigation links for Content Area, Core Links, and ELA Units.

5th Grade Portal - ELA

Search this site

Content Area
Curriculum Updates
ELA
Math
Science
Social Studies

Core Links
ELA Standards
Framework for Teaching

ELA Units
ELA Overview
▼ ELA - Trimester 1
Launching
Historical Fiction:
Narrative
Informational
Nonfiction
ELA - Trimester 2
ELA - Trimester 3
TC Planning Records
Fresh Reads

[Click here to report something that needs to be fixed.](#)

* Teachers will choose one of these units for the first trimester and two for the second trimester

[Click here for a map you can print](#)

[Navigation to Resources Below: Units | Assessment | Planning Resources](#)

Unit Map 2010-2011
Clarkstown Central School District
Alevy, Karen / [ELA 5-Draft Curriculum 2009-2010 \(C\)](#) / Grade 5 (Clarkstown Central School District)

Unit: Launch; Quick Write 2010 2011 (Week 1, 1 Week)

Essential Questions

Overarching:
How do I think deeply and learn well?

Topical:
How do I use accountable talk as a reader and writer to help me think and understand?
How can I be an independent learner?
How am I part of my community of learners?

Content

Reader's Workshop

- Learn and use routines of reader's workshop

[Units](#)



Want more?



Google Apps for Education Training Center: <http://edutraining.googleapps.com/Training-Home/module-5-sites>



Beyond the Core Suite...

Blogger, Voice, and Reader

Google

#31: Run your Class Through Blogger



MONDAY, FEBRUARY 28, 2011

Day 16: The Lord-Vassal System in Medieval Japan (3/1/11)



Aim: The historians of 2016 will summarize and present the social class systems from four or more medieval empires, including the Empire of Japan.

Step one: [Submit your homework](#). Make a copy of the [March Task Tracker](#) and rename it with your first name and last initial in the parenthesis.

Step two: Fill out [this e-mail form](#) to help set us up for today's activity. Open your e-mail so you are 100% sure you're entering your e-mail address correctly. [Go here](#) when you are ready to get your teammates e-mail address to add for the project.

LINKS TO IMPORTANT SITES

- [Class Homepage](#)
- [7th Grade Homework Calendar](#)
- [2016 FSA Data](#)
- [Black History Month Jeopardy! Challenge](#)

PAST LESSONS

Past Lessons

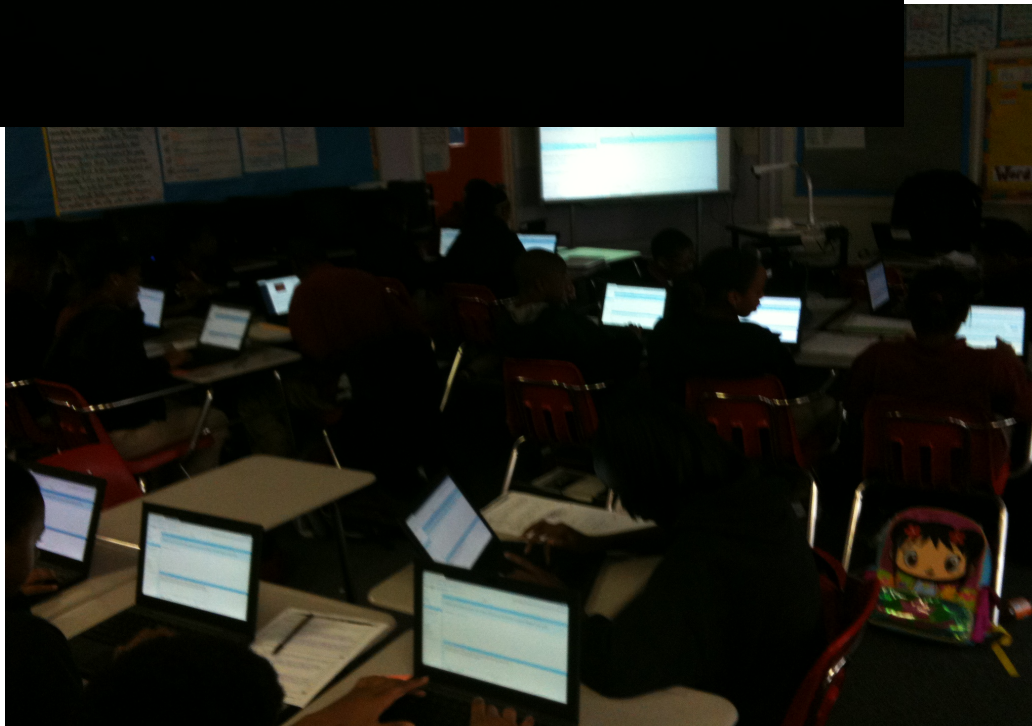
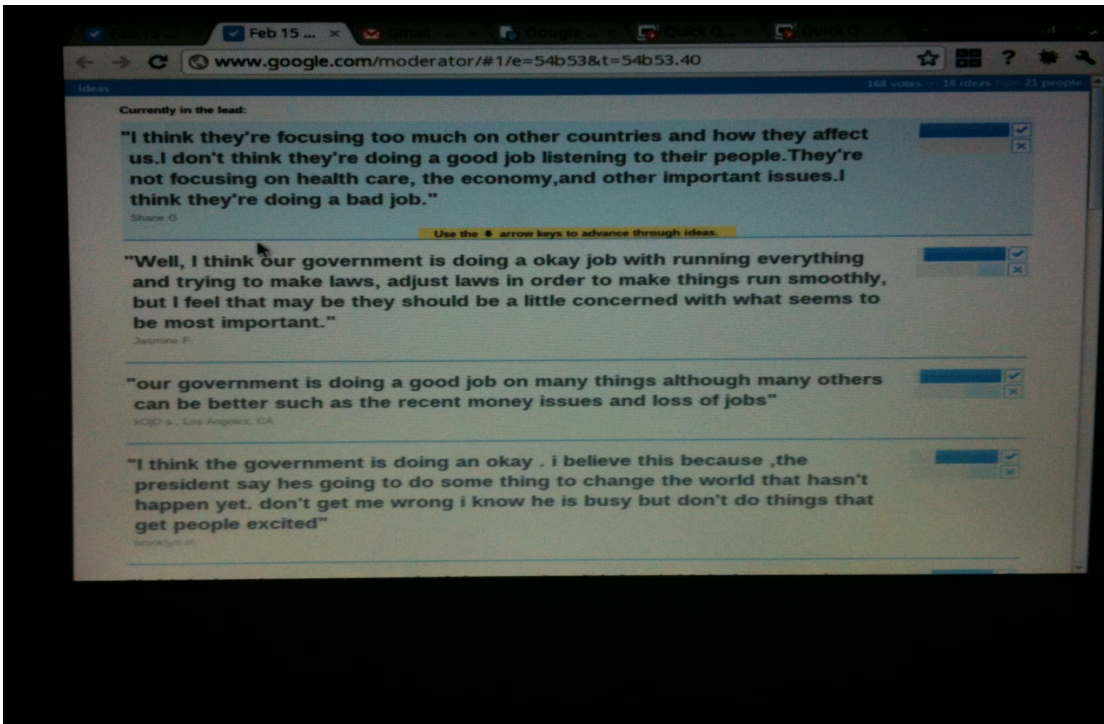
MEDIEVAL MAPS (MAP PROJECT DUE FRIDAY FEBRUARY 25)

- [The Tang Dynasty](#)
- [Feudal Europe Map](#)
- [The Byzantine Empire](#)
- [Roman Empire](#)
- [Spread of Islam](#)
- [Empire of Mali](#)
- [Empire of Ghana](#)

Use Blogger to structure and run your lessons. Students can access their "Do Now," independent practice, and exit slip through the blog entry. Works best with 1:1 programs.

[Example](#)

#32: Extend classroom discussions using Moderator



Have students reflect on their daily learning through Google Moderator. Students can read each other's reflections and vote up the responses that they like the best. Classroom discussion will be extended beyond the walls of the classroom!

Have more ideas? Add them to the Moderator! <http://bit.ly/beyond32> Google Confidential and Proprietary

Go Google!: <http://www.google.com/a/help/intl/en/edu/>

Questions

Have more ideas? Add them to the Moderator! <http://bit.ly/beyond32>