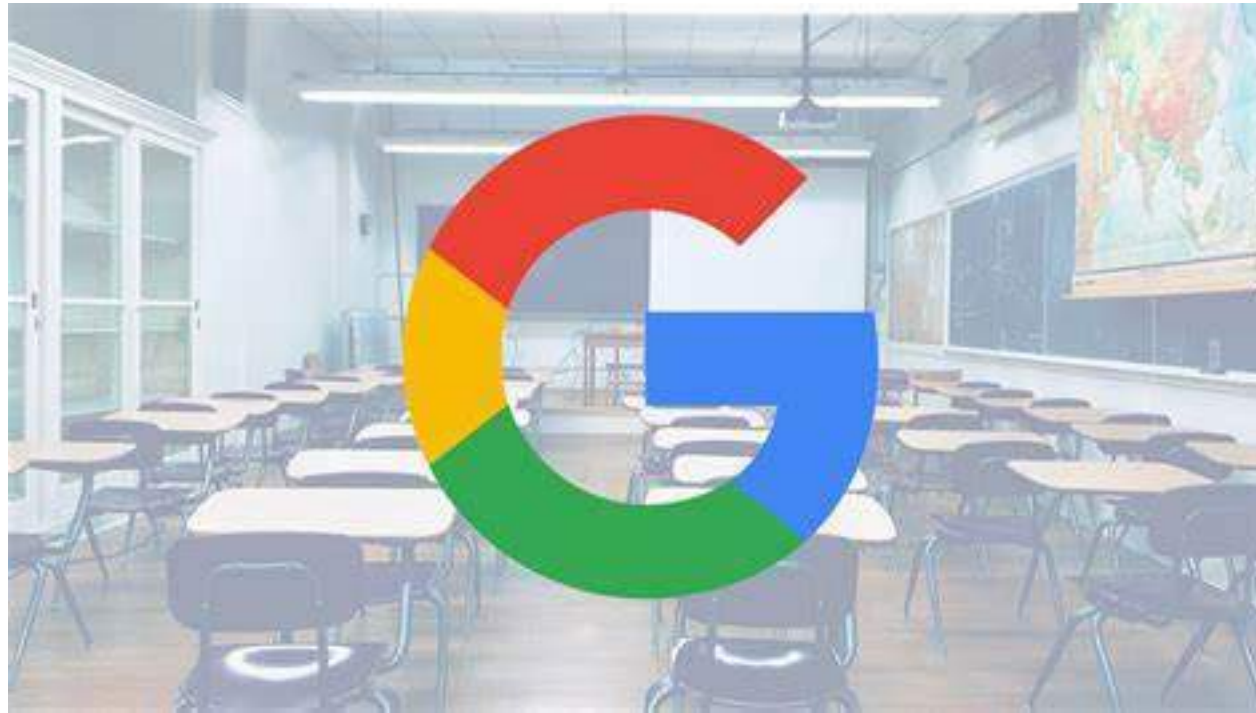


# Google Classroom: Assistive Technology that Supports Students with Specific Learning Disorders

Gabrielle Young, Ph.D., and Steve Sharpe, M.Ed.,



# NLESD Inclusion Goal:



- Promote the right for students to attend school and receive the *same* programming as their peers
- Respect every student while providing supports to assist
- Provide a welcoming, safe and caring environment that celebrates diversity among students

(Newfoundland and Labrador Department of Education, 2017).

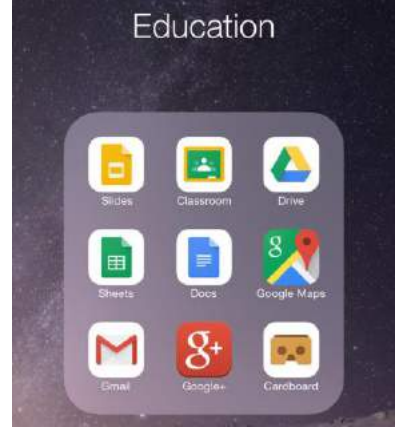


# Google Classroom as an AT in the Inclusive Classroom



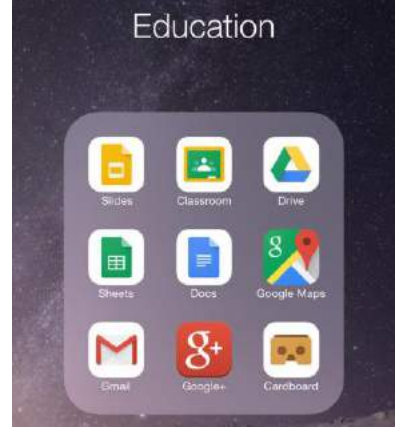
Educators who familiarize themselves with Google Classroom and its functions, and use it as a form of assistive technology, are stepping away from the one size fits all approach of the past and are setting their classrooms up to meet UDL standards by providing the ability to create and manipulate course materials and objectives to meet the needs of every student.

# Recapping what the literature says...



- Google Suite's software Google Classroom *"is a cloud-based system offering online productivity tools for classroom collaboration"*  
(Government of Australia, 2015, p.4)
- These tools include Google Docs as a word processor, Google Slides as a presentation tool, along with translation software.
- Google Classroom is designed to support communication between student and teacher and help students stay on task with course work by *"assisting students in researching, organizing and collaborating for assignment, as well as turning in work through the apps' built-in sharing features"*  
(Sweeney, 2013, p. 34)
- Parents can also join the Google Classroom subjects.

# Recapping what the literature says...



- Google Classroom provides teachers with an organized platform for creating, organizing, and having students submit work and allows teachers to post “class resources, assignments, announcements and due dates”
- Google Classroom stores all the teacher’s class resources in *Google Drive*, which allows teachers to, “automatically create and manage folders for each of their classes” and allows students to access assignments anywhere with an Internet connection



# Google Classroom

- Through Google Classroom, teachers can post announcements, assignments, resources, and due dates for students to access to stay connected with their course material (Government of Australia, 2015)
- Students can stay organized with their coursework as each course is divided into folders, and whenever there is activity in a certain class, students receive an email with a notification saying so



# Google Classroom

- Students using Google Docs can avail of the different inputs such as speech-to-text or spell check or word-prediction when organizing ideas in a word document.
- As Google Classroom is cloud-based and completed work saves automatically, students are less prone to misplacing completed work or having to restart an assignment because of a broken computer. Students simply need an Internet connection and browser

(Government of Australia, 2015).



# Google Classroom



- Struggling writers can use Google docs to quickly access content and use that information to complete a task, as well as respond to any constructive criticism in their writing and make the appropriate changes
- Google Classroom allows students to share their content with teachers and peers, and the students who are less interested in curriculum may find collaborating, sharing, and publishing for an audience motivating

(Martin & Lambert, 2015)

(MacArthur, 2009)



# Google Classroom

- Google Classroom provides a platform to read, write, present with visuals, submit work, keep track of assignments, and communicate back and forth with the instructor and peers. Spoken language can populate in the document.
- Students can highlight the text and have the computer read it back.
- If there is a spelling mistake Google Docs will correct it or underline it to let the writer know something needs to be addressed.



# Google Classroom as Assistive Technology

- Google Classroom can be used as AT to help students, whether they require an accommodation or not, as it provides an organized platform where students can access, work on and submit assignments, and “enables real-time learning all on the web. Teachers can view a student’s work live and students can receive feedback as they go, even before they’ve submitted”

(Government of Australia,



# Google Classroom as Assistive Technology

The applications within the software provide students with writing difficulties:

- the opportunity to speak their thoughts and have it written down on paper
- the ability for text to be read to a student who has difficulty reading
- the ability for students to collaborate while using this software alongside other applications



# TIPS

TO USE GOOGLE

CLASSROOM

# EFFECTIVELY

# AND

EFFICIENTLY





# Google Classroom

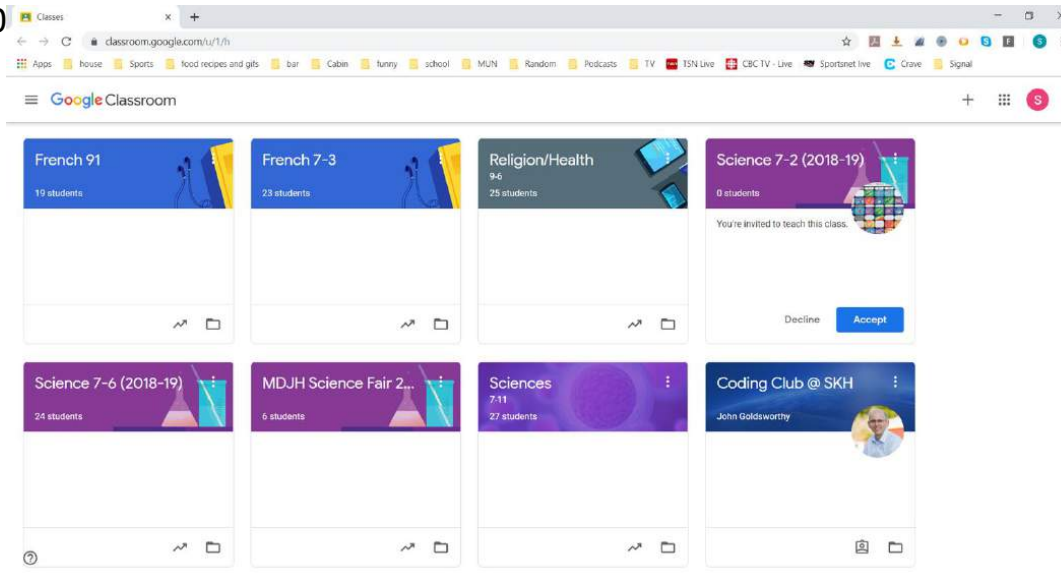
Classroom “is a cloud-based system offering online productivity tools for classroom collaboration” (Government of Australia, 2015, p.4)

# Google Classroom

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(Government of

Australia, 20

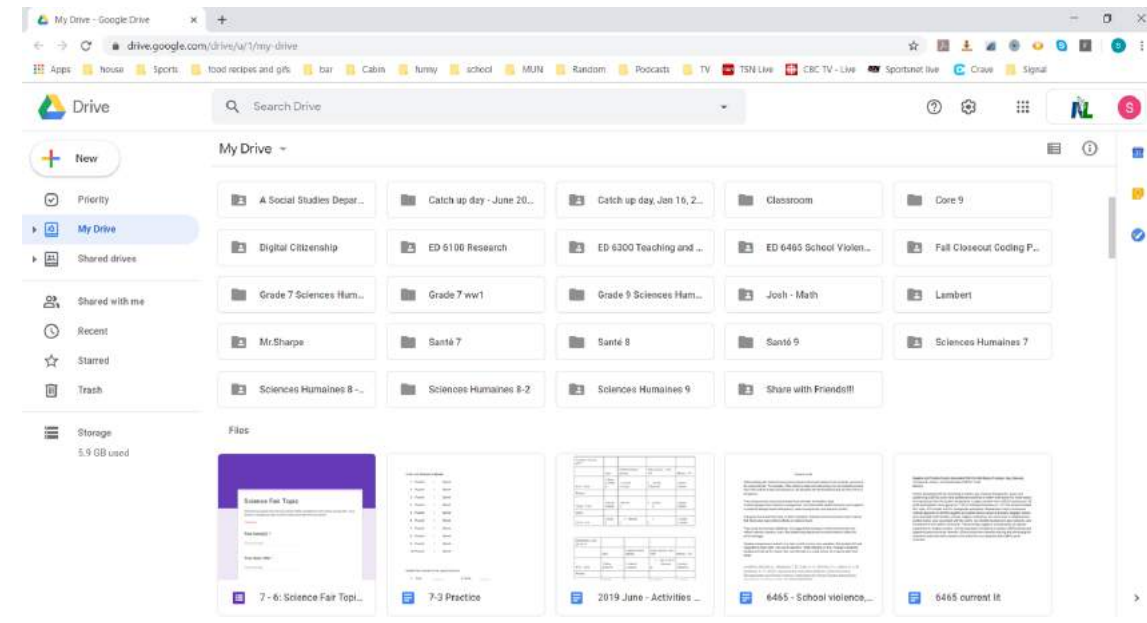




# Google Classroom – ‘Drive’

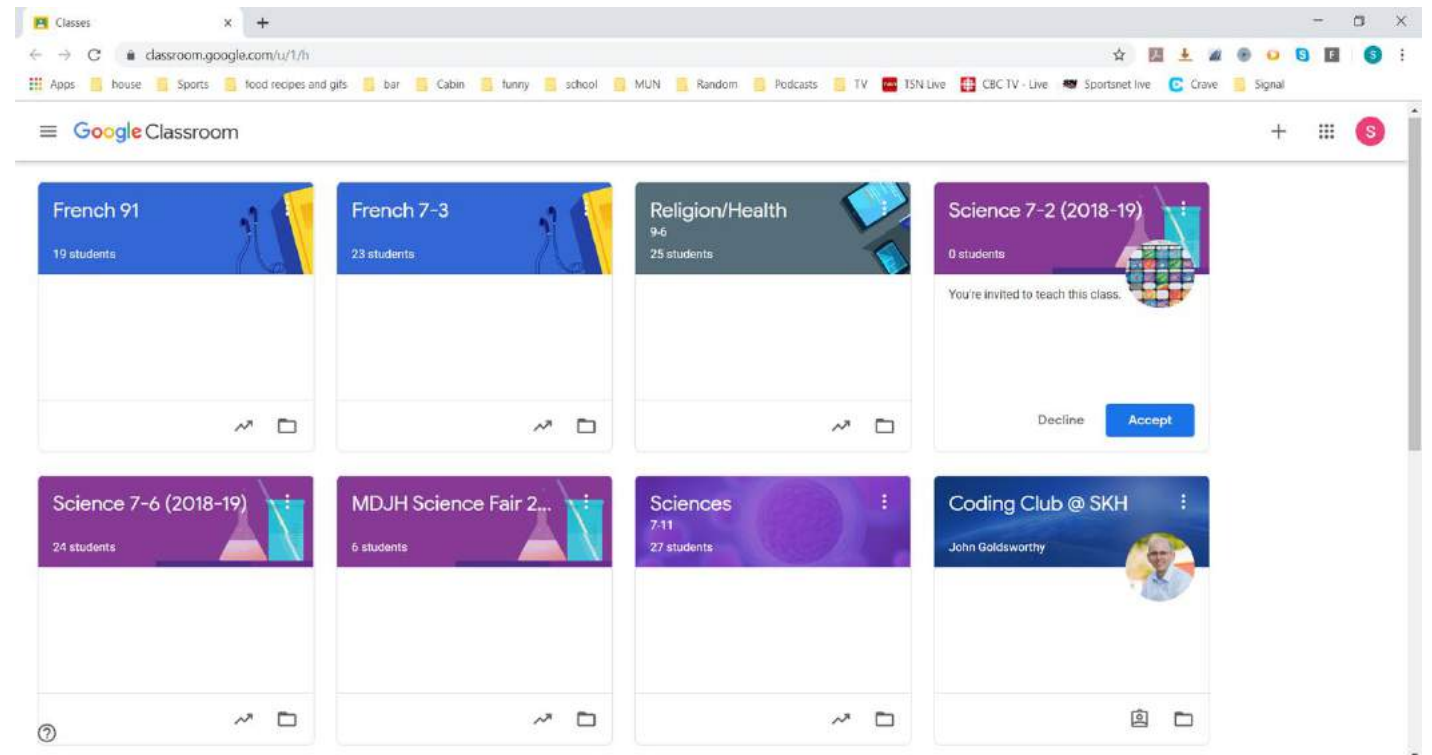


- Additionally, Google Classroom stores all the teacher's class resources in Google Drive, which allows teachers to, “automatically create and manage folders for each of their classes” (Government of Australia, 2015, p.5), and allows students to access assignments anywhere with an internet connection.



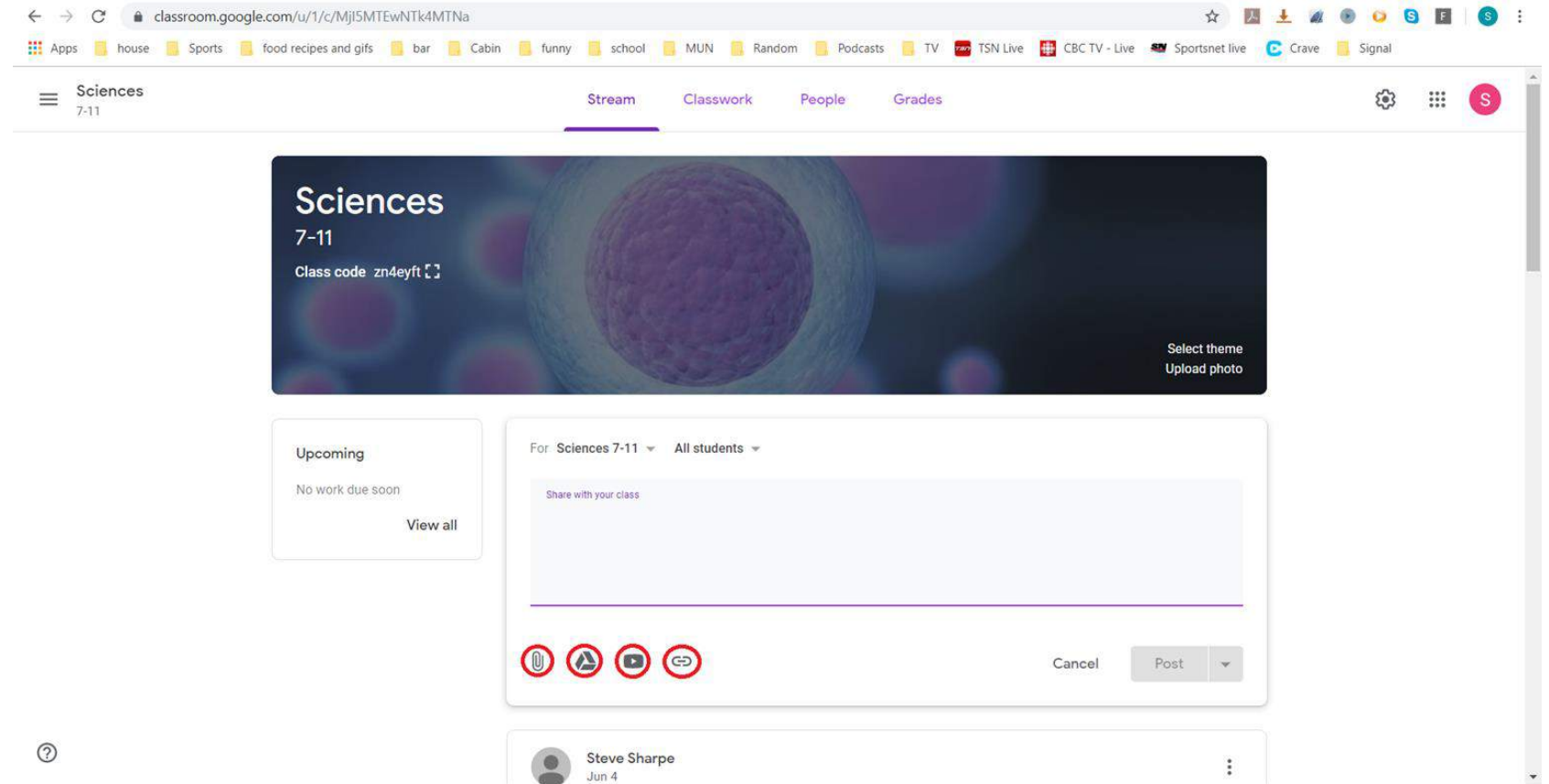
# Google Classroom

- Provides a platform to read, write, present with visuals, submit work, keep track of assignments, and communicate back and forth with the instructor and peers.



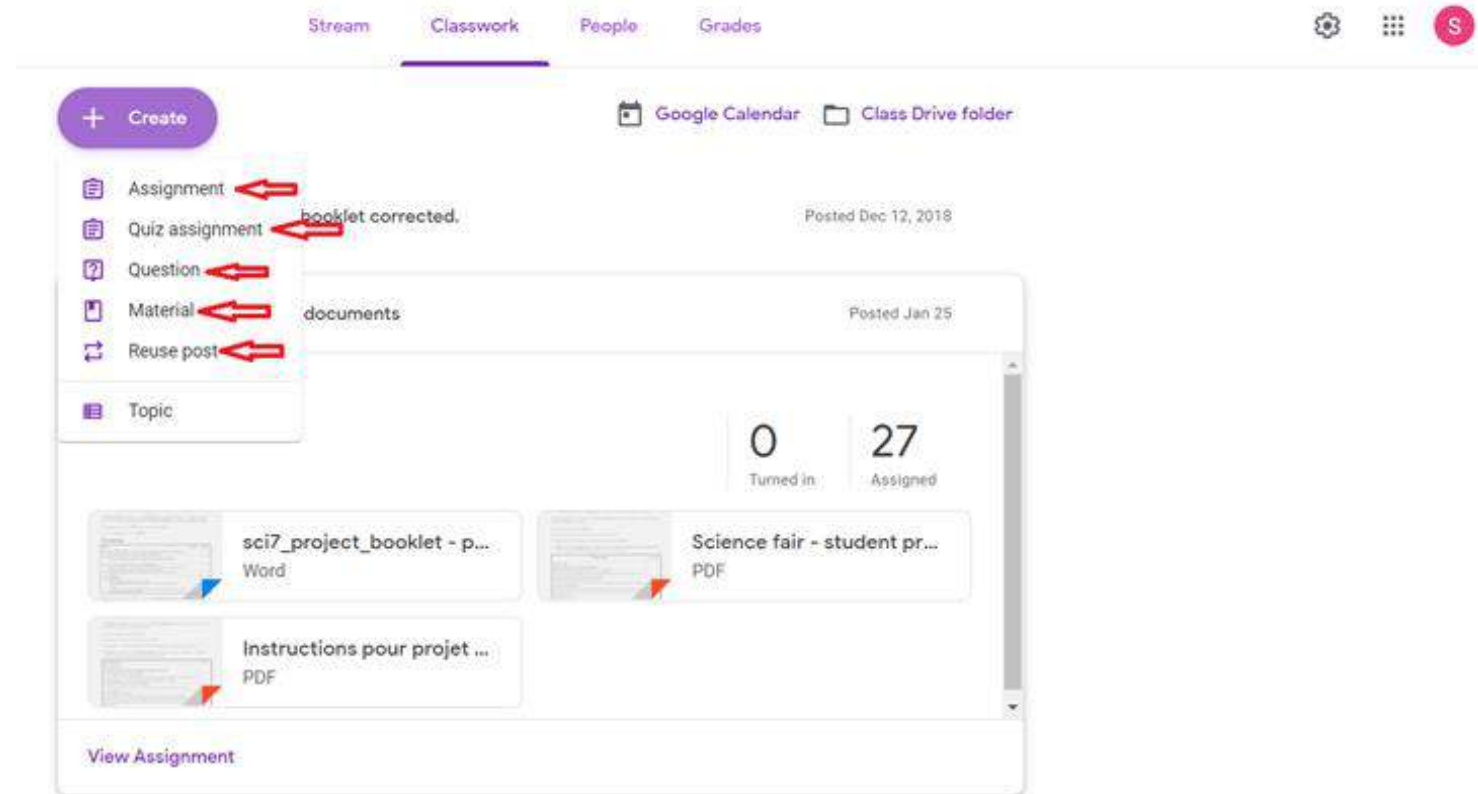
# Google Classroom

- Google Classroom allows teachers to communicate class information, provide assignments, attach links to video, or any content related to school.



# Google Classroom

- Just click on “Classroom” in the top
- Click on “+ Create” and you can provide students with assignments, questions, or materials



# Creating an assignment

- Once you are in to create an assignment, you have several different options
- Give it a title, provide instructions, or you can attach the instructions in the bottom left corner
- Additionally, you can also attach video clips or website links to your assignment

Assignment





For Sciences 9-9 All students


Title

Instructions (optional)

Points 100 Due No due date Topic No topic ☐ Originality reports

+ Create rubric

 Assign

# Google Classroom


- Once created, students will be notified by email that they have an assignment due, and the teacher can monitor their progress, give pointers, see who is still working on their assignment and who has turned their assignment in for evaluation.

The screenshot displays the Google Classroom interface. At the top, there are four tabs: 'Stream', 'Classwork' (which is selected and underlined), 'People', and 'Grades'. Below the tabs, there is a blue button with a plus icon and the text 'Create'. To the right of this button are two links: 'Google Calendar' with a calendar icon and 'Class Drive folder' with a folder icon. The main content area shows an assignment card for 'Faith and Contemporary Issues', posted on Jan 24. The card has a blue icon with a document and list symbol. It states 'No due date'. The assignment description reads: 'In groups of two, through a Google Slides presentation, answer one of the following questions below:'. There are three bullet points: '- Explain influences that religion and political decision making have on each other', '- Explore how religion has responded to humanitarian needs', and '- Explain how we attempt to distinguish between religion and cult'. To the right of the description, there are two statistics: '11 Turned in' and '14 Assigned'. Below the description, it says 'Your presentation must include:' followed by five bullet points: '- A title slide', '- Religions perspective', '- Political/Humanitarian/Cult perspective', '- How they are linked', and '- A conclusion'. At the bottom of the card is a blue link that says 'View Assignment'.

Stream Classwork People Grades

+ Create

Google Calendar Class Drive folder

 Faith and Contemporary Issues Posted Jan 24

No due date

In groups of two, through a Google Slides presentation, answer one of the following questions below:

- Explain influences that religion and political decision making have on each other
- Explore how religion has responded to humanitarian needs
- Explain how we attempt to distinguish between religion and cult

11 Turned in 14 Assigned

Your presentation must include:

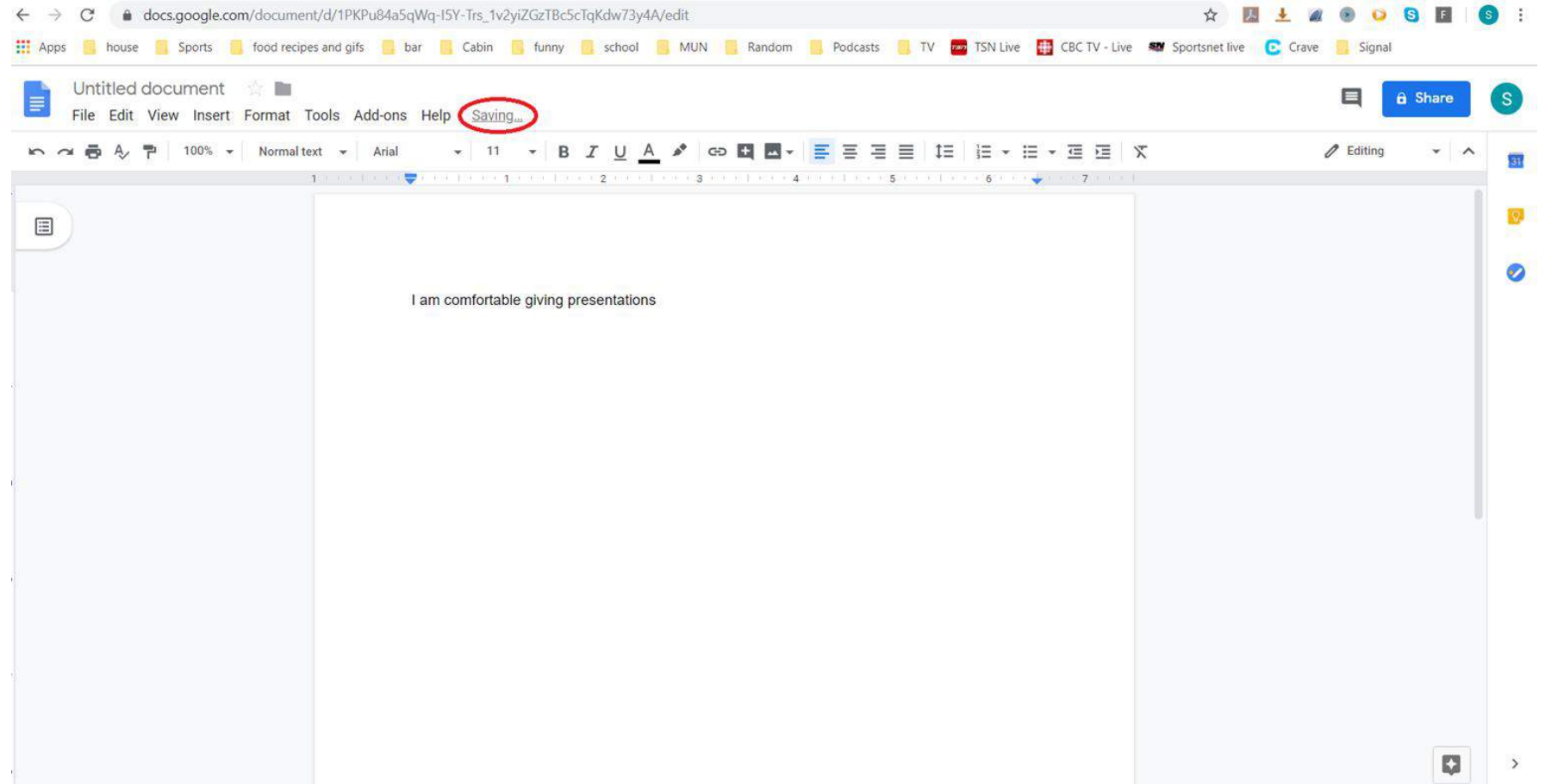
- A title slide
- Religions perspective
- Political/Humanitarian/Cult perspective
- How they are linked
- A conclusion

[View Assignment](#)



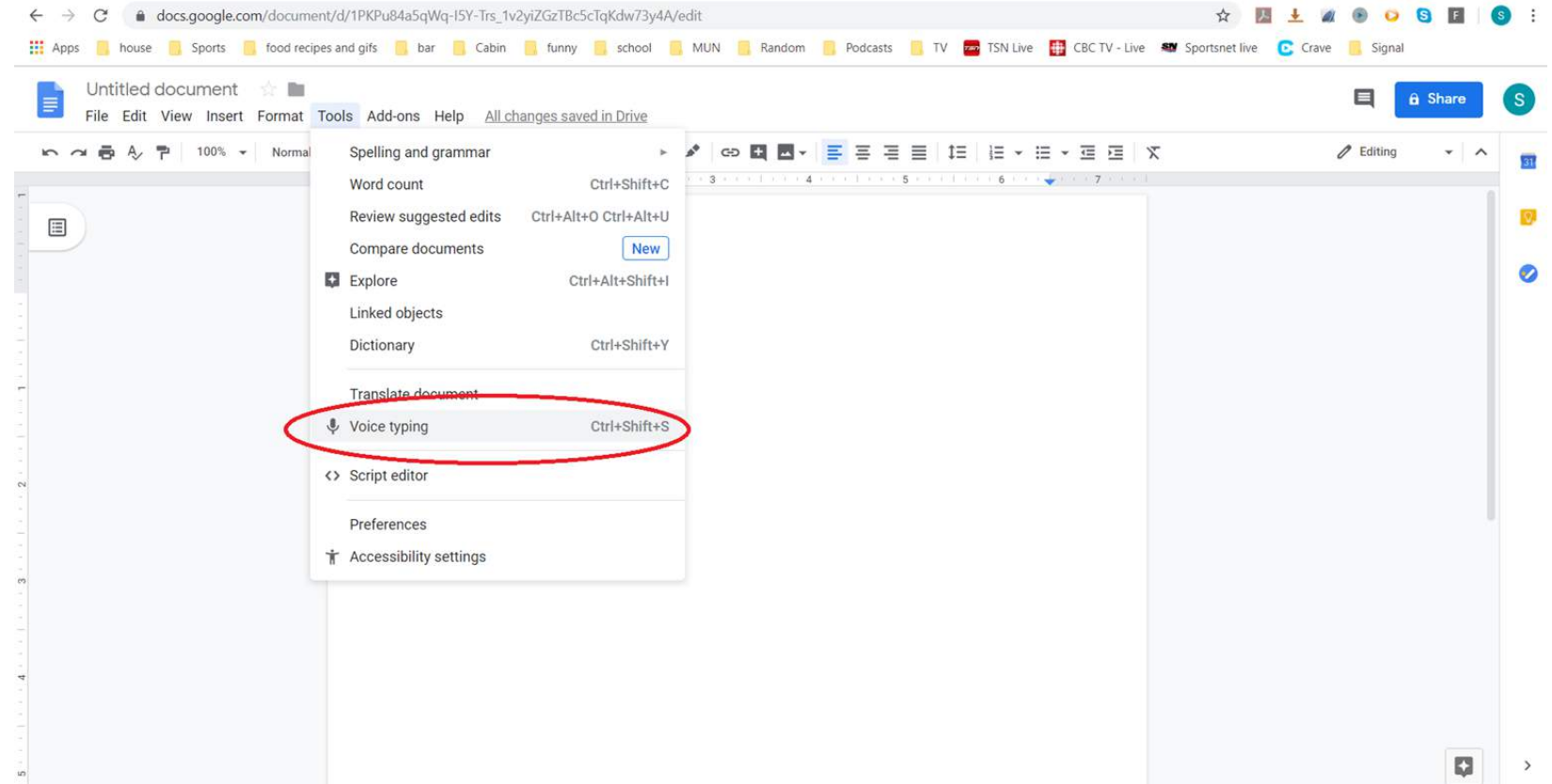
# Automatically Saves Documents

- If students are typing in Google Docs, they need not worry about losing a document, or saving a document and finding out where the file is located.



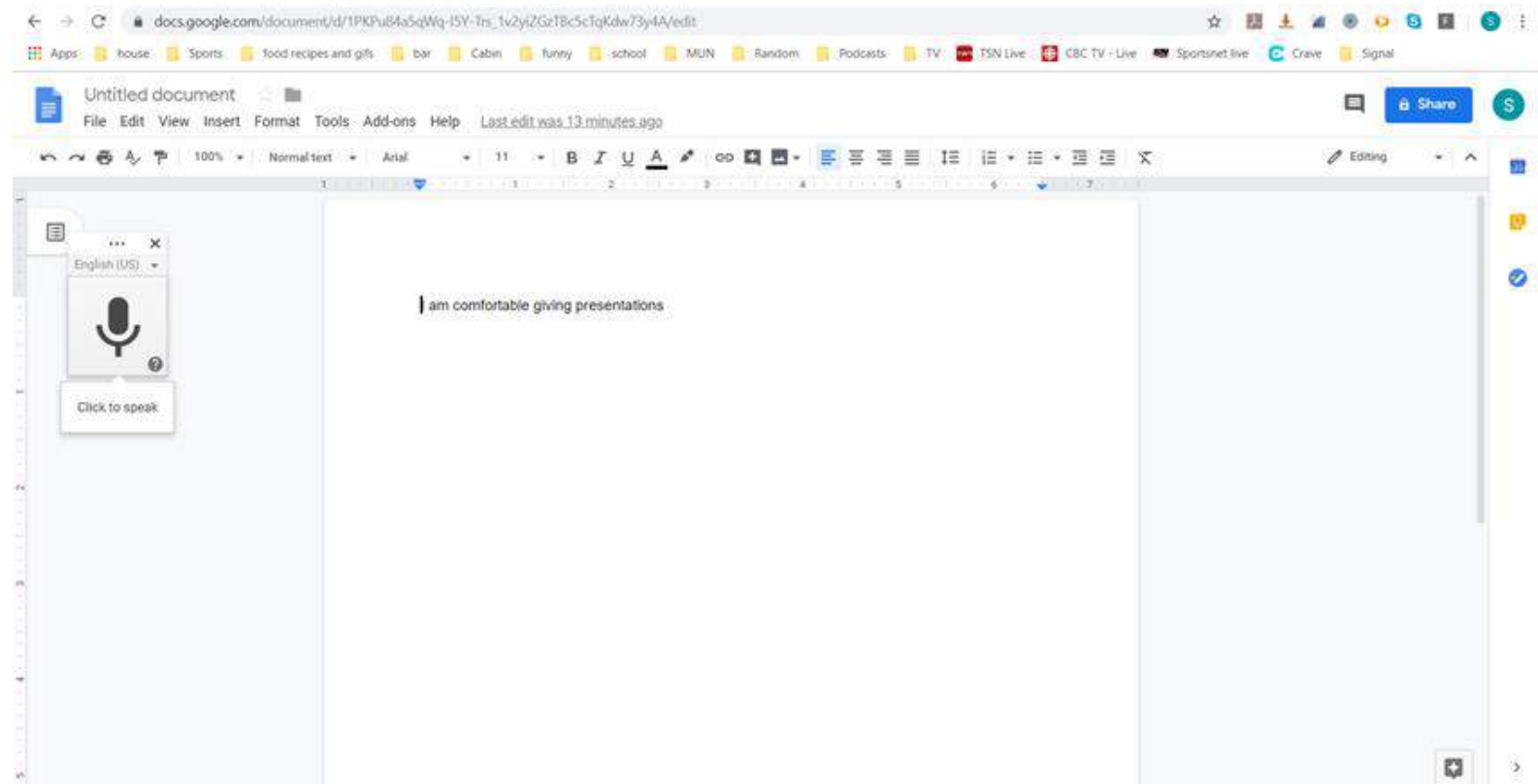
# Speech-to-Text

- Students who struggle with writing can avail of the speech to text option.
- Go to “Tools”
- Click on “Voice Typing”



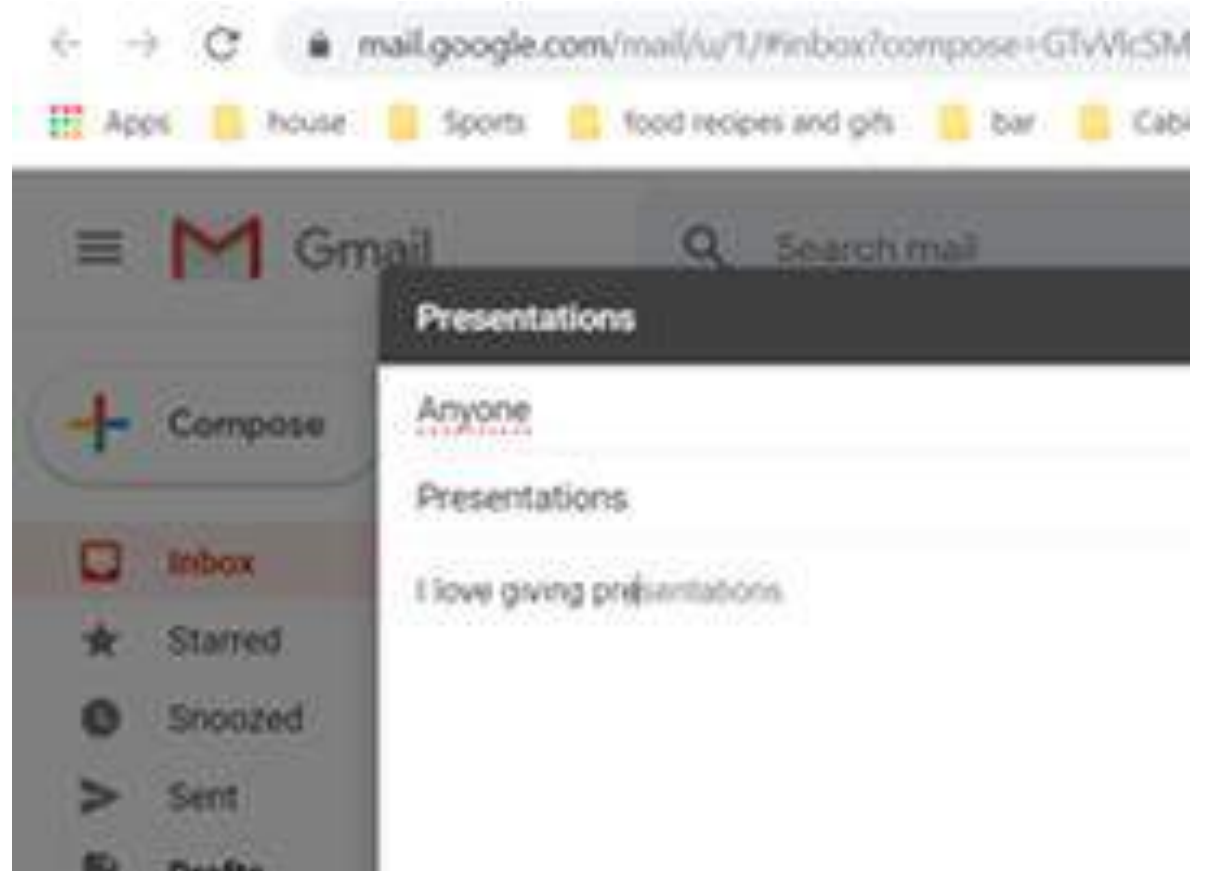
# Speech-to-Text

- Once you click “Voice Typing”, a picture of a microphone will appear
- Click on the microphone and start speaking
- As you speak, the words will populate with accuracy on your Google Doc or Slide



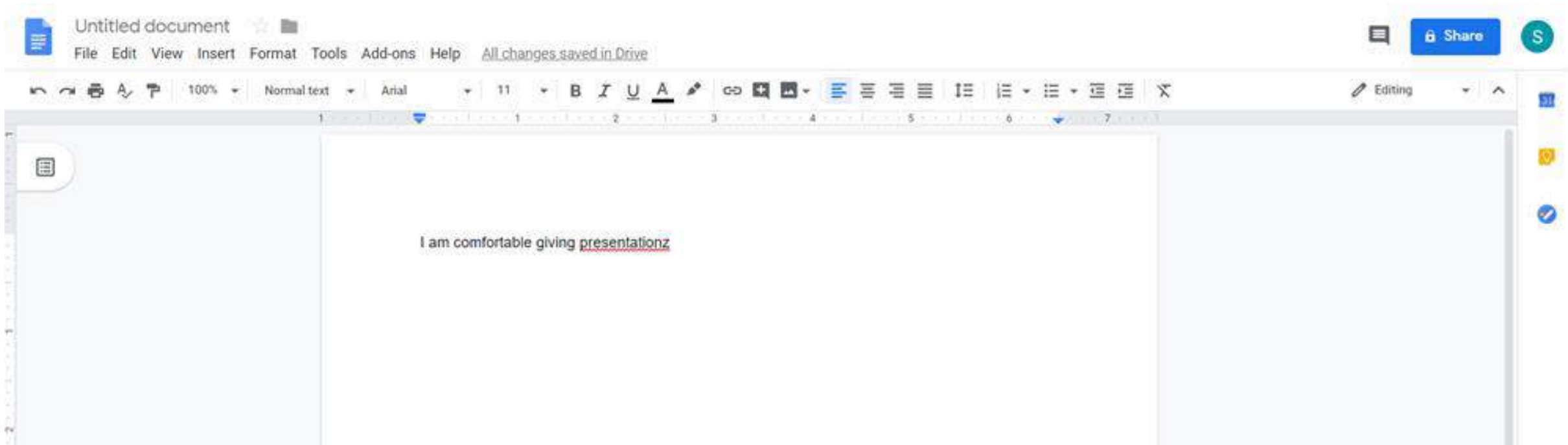
# Word predict and Autofill

- Another option for students who struggle with writing is “Word Predict” and “Autofill”
- Here we see that I love giving presentations
- Google predicted “Presentations” after I typed “P-R-E”



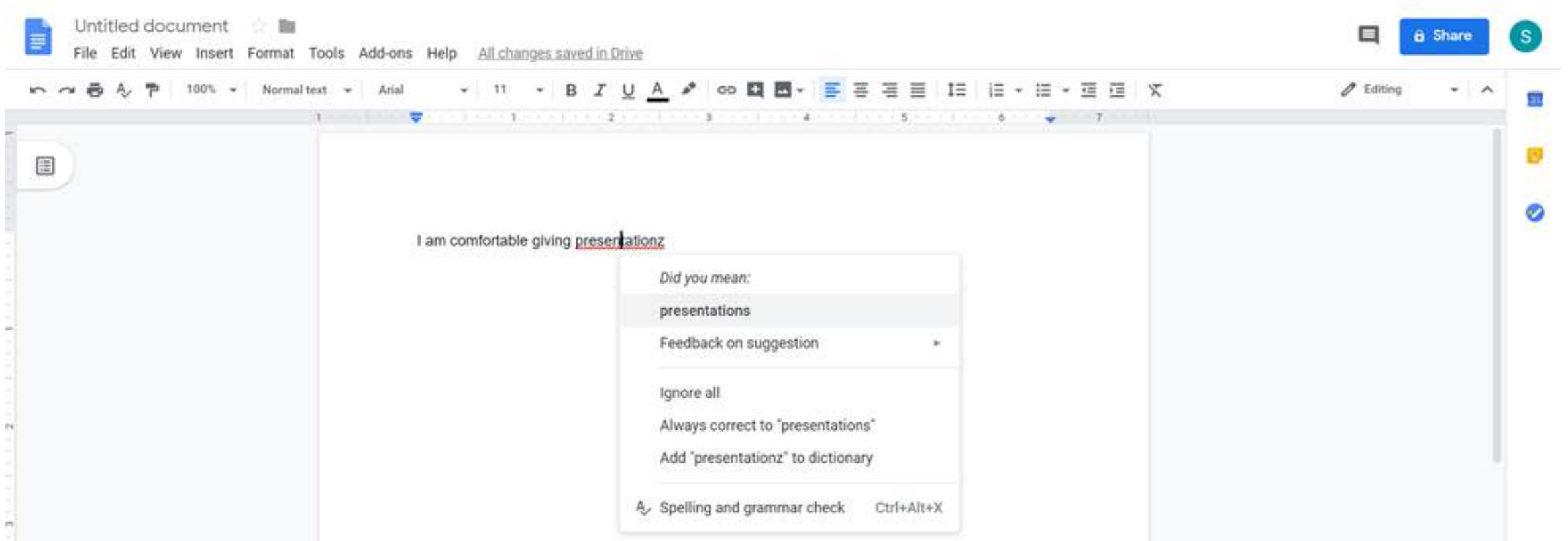
# Spellcheck

- Like most word processors, “Spellcheck” underlines a word that may be misspelled



# Spellcheck

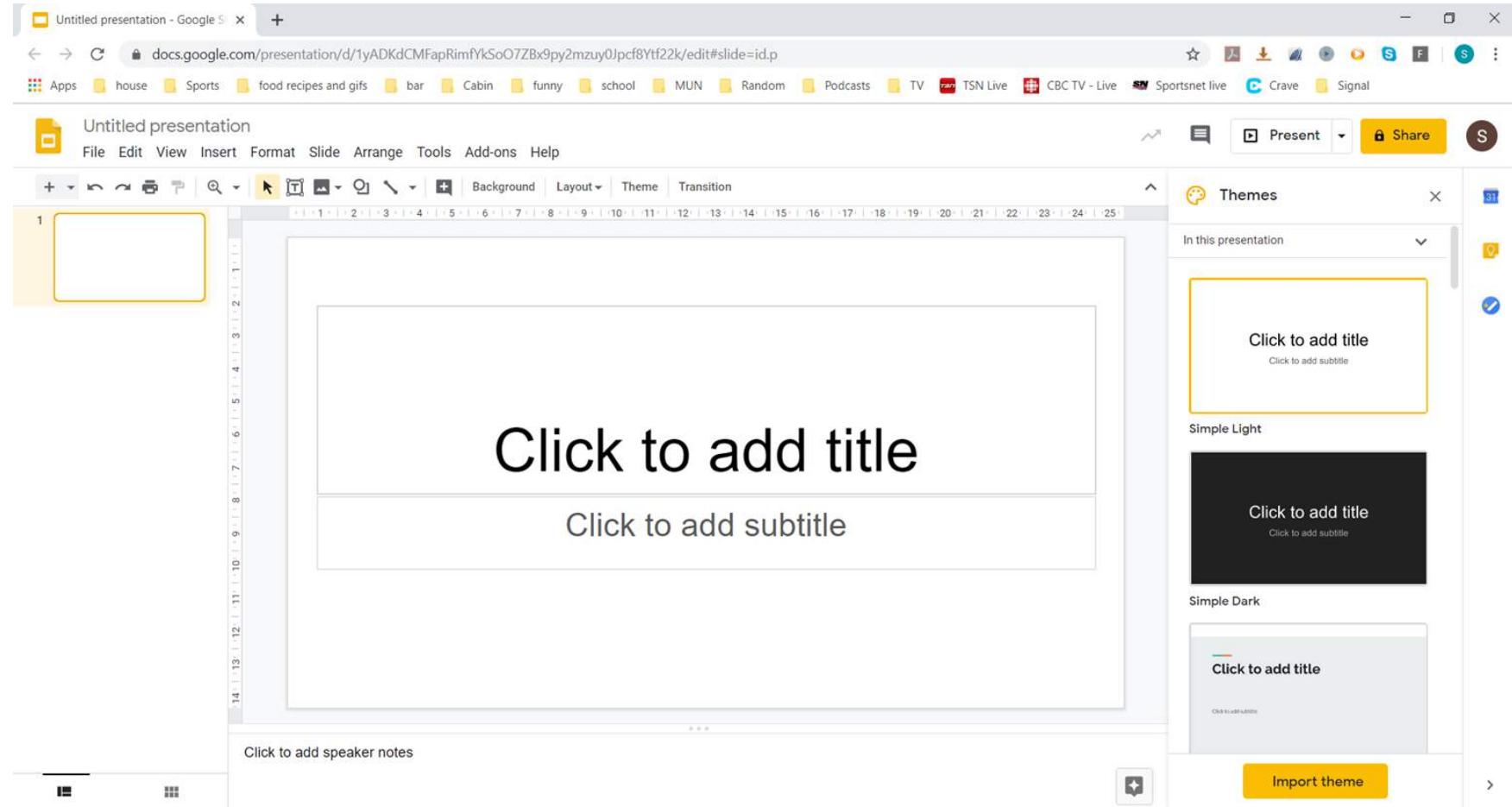
- Spellcheck provides suggestions for the proper way to spell the word you are typing





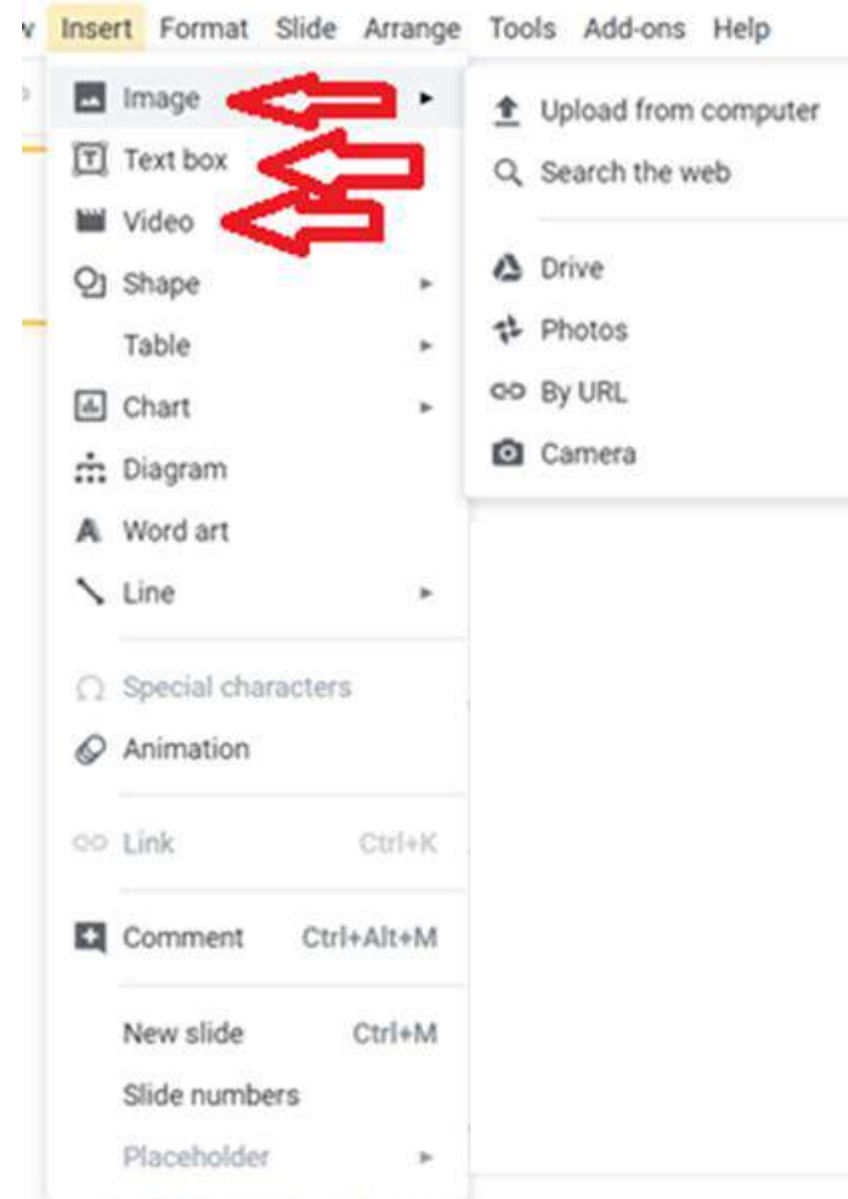
# Google Slides

- “Google Slides”, which is similar to the PowerPoint platform, provides presentation software and has the same functions as Google Docs



# Google Slides

- This program allows users to insert images, text, video, shapes, to be included in their presentation



# Teacher's use of Google Classroom

- Google Classroom supports learning by enhancing organization, communication, and assessments, and supplementing material teachers already present.



# Teacher's use of Google Classroom

- Google Classroom is a communication tool and allows communication between teachers, students, and their parents
- Students can communicate with the teacher through Google Classroom, or through a forum



# Teacher's use of Google Classroom

- Students can complete assignments online.
- Using Google Slides or Google Docs, a teacher can create an assignment, post it to Google Classroom, and students can complete their assignment with their phone, laptop, desktop, Chromebook or tablet anywhere there is an internet connection.



# Student's use of Google Classroom

- Google Classroom provides the ability to complete projects, assignments, and class work using computer technology
- They can access content at any time.
- They can communicate and receive feedback from their teachers and peers on group-based activities.
- Students can review classroom activities and materials at home, even if students misplaced their own classroom materials.





# Student's use of Google Classroom

- Students have plenty of opportunity to access, interpret and communicate their knowledge.
- When considering classroom activities that require practice and revision, teachers look to Google classroom to post classroom materials, so students can access them at home, practice, repeat, and perfect.
- Students work together on the same project, on the same document or slide show, from different computers, to allow peer editing and therefore learn from each other.



# Benefits of using Google Classroom

- Students benefit by using Google Classroom through teacher's accessibility.
- Everything is available online.
- Students stay on task.
- The built-in software supports, such as word prediction and autocorrect, help students with writing difficulties produce better.



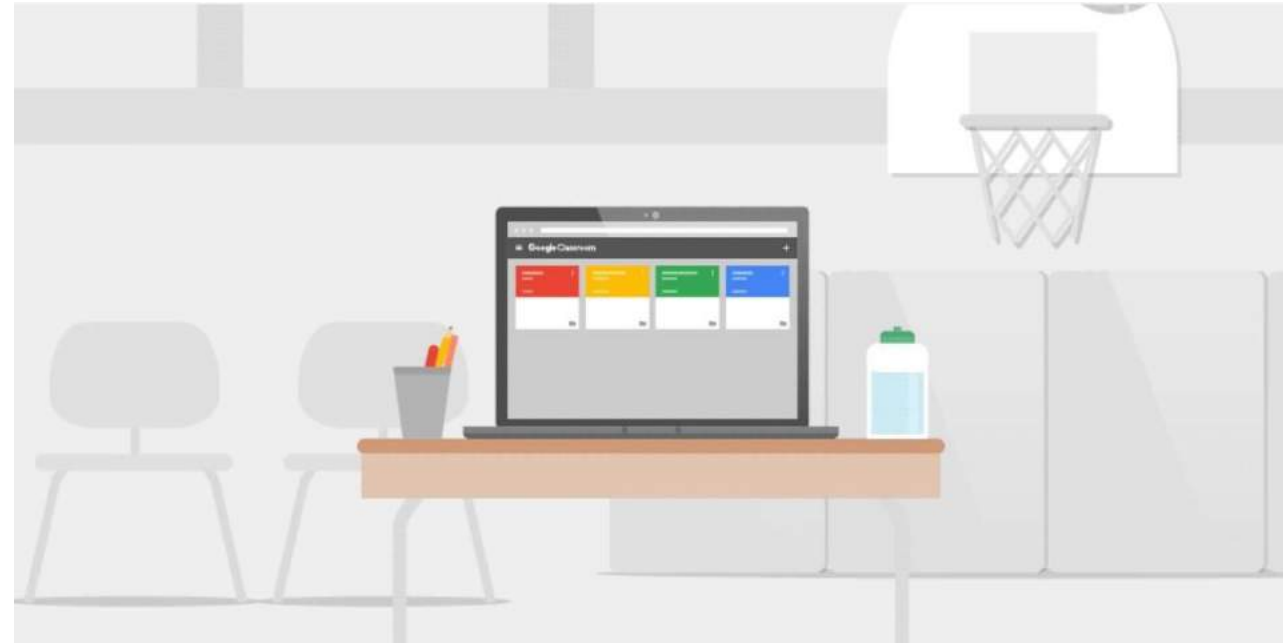
# Benefits of using Google Classroom

- There is less stigma attached to students who need support.
- All students are using the same intervention and the same device to meet their individual needs.



# Challenges with Google Classroom

- A school can only afford so many Chromebooks per year.
- Even if a school could give every student a device, there would have to be a costly upgrade to the Wi-Fi.
- Not every student has a computer, laptop, tablet or mobile phone.



# Challenges with Google Classroom

- Students are capable with handheld technology.
- They know how to:
  - Use a phone,
  - Take a video,
  - Send a text,
  - Download and navigate and an app.
- **But, their keyboarding skills are on a decline.**



# Student's Attitudes Towards Google Classroom

- Through Google Classroom, teachers provide information, review materials, deadlines, and links to materials.
- Teachers use Google Classroom to communicate information, and post class notes, deadlines, and study materials.
- Students have a positive attitude towards Google Classroom because it keeps all of their subjects in the same place.





# Student's Attitudes Towards Google Classroom

Students enjoy:

- Having direct access to teachers to receive prompt feedback on their schoolwork
- Interacting with technology to complete assignments
- Knowing that as they are completing their work, a teacher can monitor their work in real time and make suggestions.

