

Tips for Supporting English Language Learners in Computer Science classes

compiled by Bill Marsland (San Francisco Unified School District - marslandw@sfusd.edu)

Here are step-by-step instructions for translating programs and documents associated with MyCS (Course 1) and App Inventor (Course 2) curriculum into other languages for students, as well as some general resources related to instructing ELL students.

Click the links to go to each section below:

[Curated resources for teaching ELL students](#)

[Translate a video in YouTube](#)

[Translate a Google Doc](#)

[Translate Scratch](#)

[Translate App Inventor](#)

[Translate Google Sites](#)

[Translate Google & Google Classroom](#)

[Translate Code.org](#)

Curated resources for teaching ELL students

Here are a few outstanding resources for teaching ELL students, with some specific tips for teaching technology to ELL students:

[12 Ways to Support ESL Students in the Mainstream](#) (Cult of Pedagogy)

[Do's and Don'ts for Teaching English Language Learners](#) (Edutopia)

[¡Colorín colorado!](#) (great website with many resources for teaching ELL students)

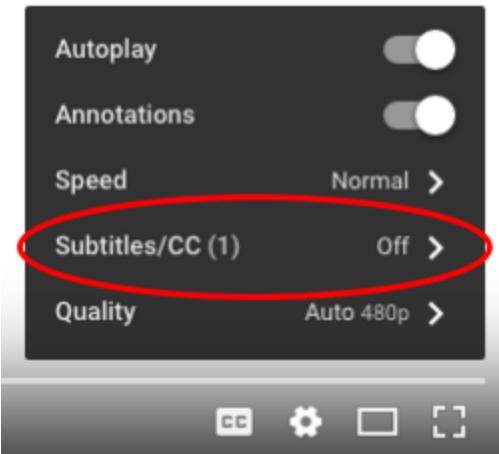
- [Technology and English Language Learners](#)
- [Preparing ELLs to be 21st Century Learners](#)

Translate a video in YouTube

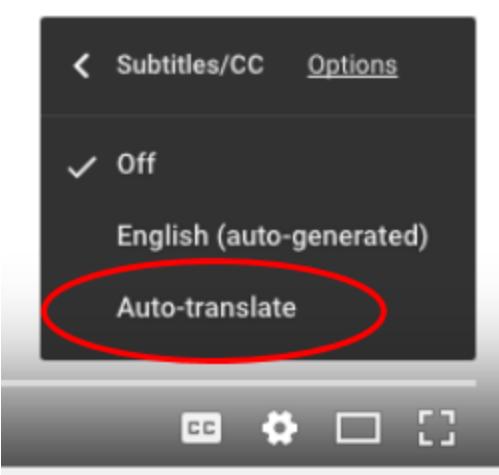
1. Click on the **gear icon** on the lower right hand part of the screen



2. Then, click on **Subtitles/CC**



3. Select **English (auto-generated)** first, then select **Auto-translate** and select a language from the list.
You have to select "English" subtitles first before they can be auto-translated.



Pro Tip: You can click on "Options" next to Subtitles/CC to change the font, color, size, and background of the subtitles so they are easier to read based on the video students are watching.

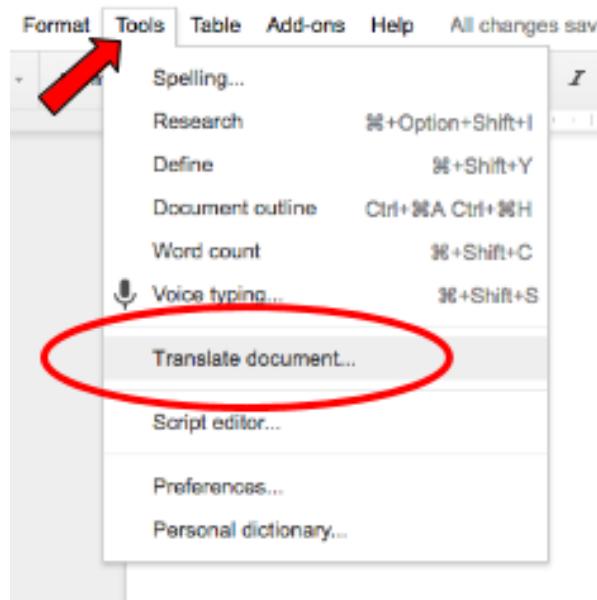
4. Now, your video will play in the original language but show subtitles in the translated language.



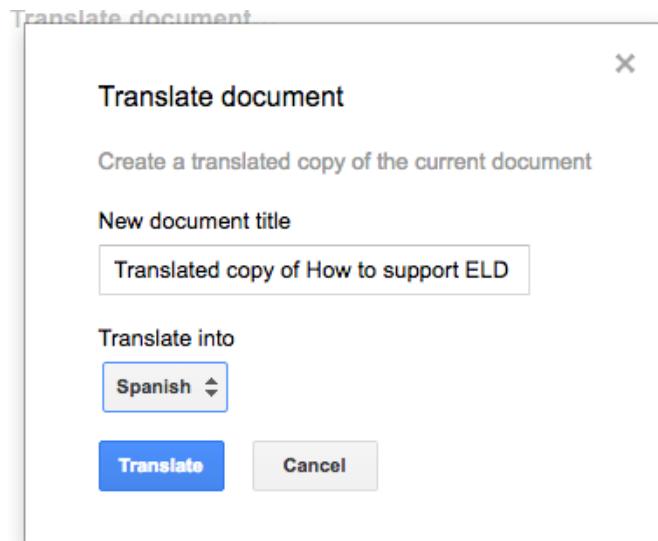
Watch this quick [screencast](#) to see how this works.

Translate a Google Doc

1. Click on **Tools** then **Translate document...**



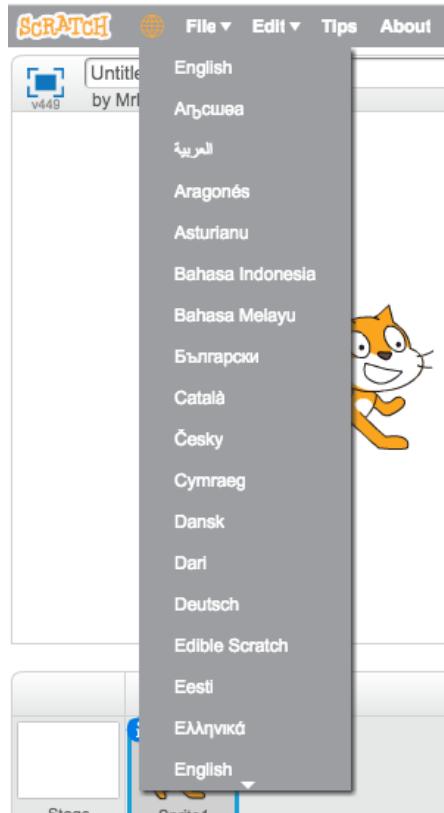
2. Select language from dropdown list, then click **Translate**



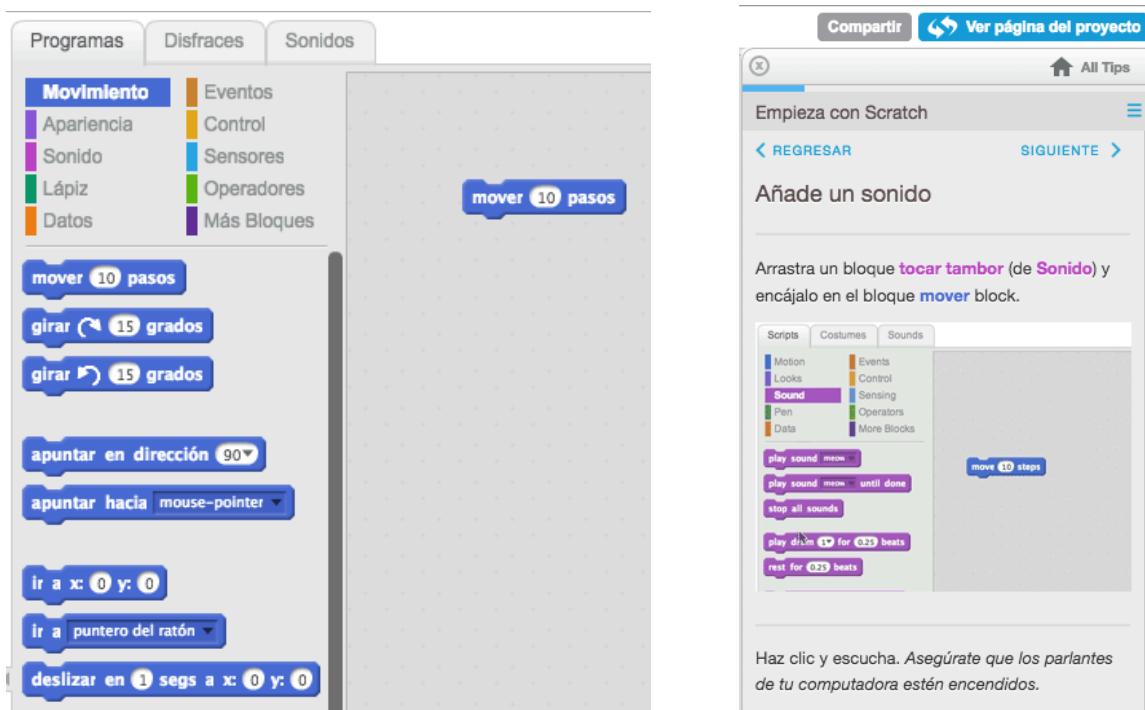
3. Translation opens up in a new document!

Translate Scratch

1. Log in to Scratch, then click **Create**
2. Between the Scratch logo and “File”, click on the globe 
3. Choose a language from the dropdown box:



4. Now, the entire page - including blocks and tutorials - are in the new language



Programas Disfraces Sonidos

Movimiento

- Apariencia
- Sonido
- Lápiz
- Datos

Eventos

Control

Sensores

Operadores

Más Bloques

Empieza con Scratch

REGRESAR SIGUIENTE >

Añade un sonido

Arrastra un bloque **tocar tambor** (de **Sonido**) y encájalo en el bloque **mover** block.

Scripts Costumes Sounds

- Motion
- Looks
- Sound**
- Pen
- Data

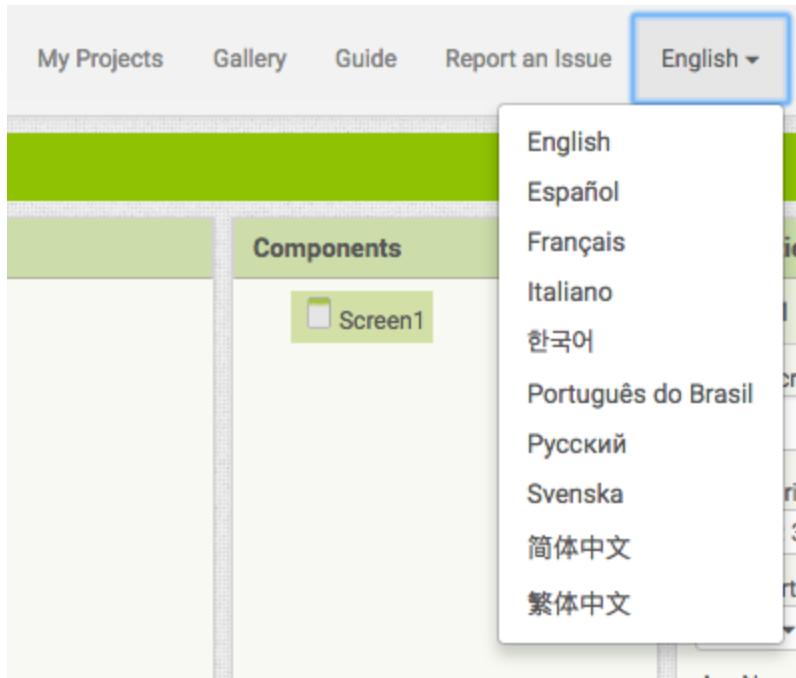
play sound *tron*
play sound *tron* until done
stop all sounds
play *tron* for 0.25 beats
rest for 0.25 beats

move 10 steps

Haz clic y escucha. Asegúrate que los parlantes de tu computadora estén encendidos.

Translate App Inventor

After entering App Inventor and opening up a project, click **English** in the upper right corner to change the language to one of the 10 available language options.



Pro Tip: Translation is not available for any of the resources, including tutorials, but you can use the YouTube translation directions above to translate the App Inventor tutorial videos.

Translate Google Sites

1. Click on the **Translate** button towards the bottom right portion of the page



2. At the top left part of the screen, select the language from the long list of languages available.

English	Bulgarian	Esperanto	Haitian Creole	Italian	Latvian	Myanmar (Burmese)	Serbian	Swedish	Xhosa
Afrikaans	Catalan	Estonian	Hausa	Japanese	Lithuanian	Nepali	Sesotho	Tajik	Yiddish
Albanian	Cebuano	Filipino	Hawaiian	Javanese	Luxembourgish	Norwegian	Shona	Tamil	Yoruba
Amharic	Chicewa	Finnish	Hebrew	Kannada	Macedonian	Pashto	Sindhi	Telugu	Zulu
Arabic	Chinese (Simplified)	French	Hindi	Kazakh	Malagasy	Persian	Sinhala	Thai	
Armenian	Chinese (Traditional)	Frisian	Hmong	Khmer	Malay	Polish	Slovak	Turkish	
Azerbaijani	Corsican	Galician	Hungarian	Korean	Malayalam	Punjabi	Slovenian	Ukrainian	
Basque	Croatian	Georgian	Icelandic	Kurdish (Kurmanji)	Maltese	Romanian	Somali	Urdu	
Belarusian	Czech	German	Igbo	Kyrgyz	Maori	Russian	Spanish	Uzbek	
Bengali	Danish	Greek	Indonesian	Lao	Marathi	Samoan	Sundanese	Vietnamese	
Bosnian	Dutch	Gujarati	Irish	Latin	Mongolian	Scots Gaelic	Swahili	Welsh	

3. All text within the Google Site will be translated into the target language

CS in SF: MyCS
Computer Science is for Everyone!

Unidad 1

Unidad 1 - ¿Qué es la informática?

La computación está por todas partes. No es sólo en nuestras computadoras portátiles, pero en nuestros celulares, nuestras calculadoras, nuestros coches, e incluso nuestros termostatos más simples y resolver los problemas más complicados. La informática se utiliza en casi todas las industrias, incluyendo la fabricación, la agricultura, y el entretenimiento.

Y, seamos sinceros, es probable que estés interactuando con un equipo en este momento.

La informática nos enseña cómo pensar críticamente y resolver problemas mediante la tecnología. La necesidad de que las personas con habilidades informáticas sigue creciendo un campo de problemas interesantes, retos creativos y enormes oportunidades.

En esta unidad, se hará lo siguiente:

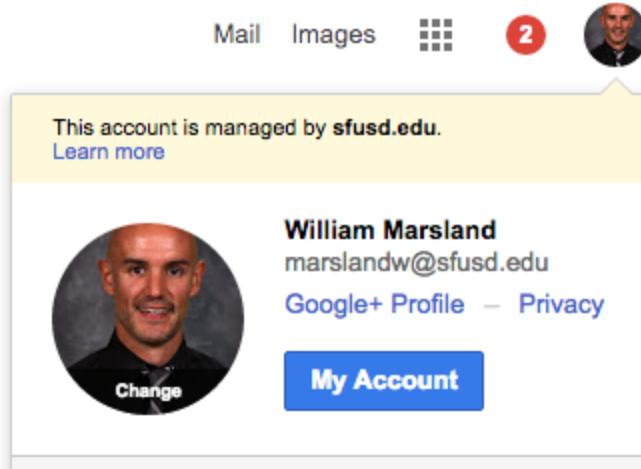
- Considera lo que significa que algo sea un ordenador
- Comprender las funciones básicas de hardware y software
- Comprender las diferencias fundamentales que existen entre la forma en que los seres humanos y computadoras piensan
- Aprender cómo la informática se aplica a la variedad de situaciones y sus campos
- Más información sobre las aplicaciones e implicaciones de los motores de búsqueda
- Crear un simple rasguño de la animación

If the site you are working with does not currently offer the Translate option, [click here](#) to access the Google Website Translator to get code to allow your website (or Google Site) to be viewed in a different language.

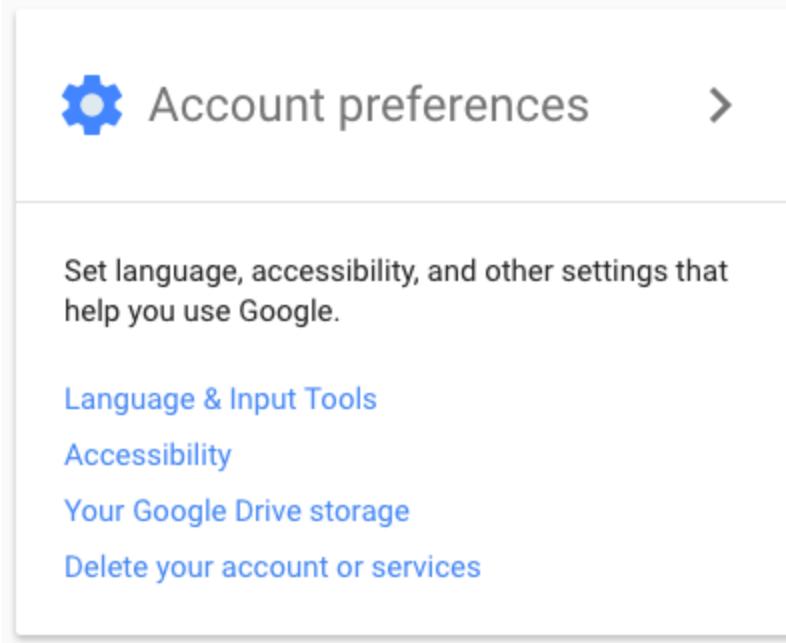
Translate Google & Google Classroom

Changing the language in a student's Google account settings will impact the language across all Google apps, including search, email, and Classroom.

1. Access account settings on any Google screen by clicking on the circle in the upper right corner



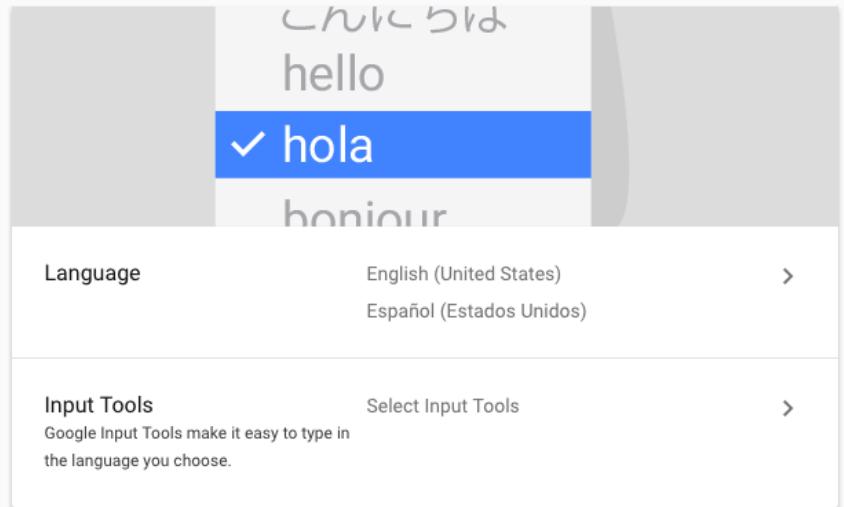
2. Click on **My Account** then under Account preferences, **Language & Input Tools**



3. Now, select from either **Language** to change the language in which text will appear on the screen or **Input Tools** to change the language that students will be typing in (including Google Docs and Classroom).

Language & Input Tools

Set Google services on the web to work in the language of your choice.



4. Select multiple languages as needed, but ensure the default language is the one the student is most comfortable in.

Language

Your [preferred language](#) for Google products. Your language variant may affect the spelling or vocabulary used by some of them.

Default language

English

United States



Other languages you understand

Español

Estados Unidos

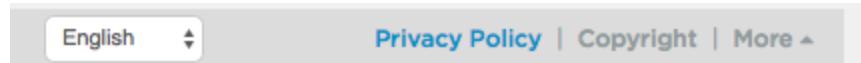


[ADD ANOTHER LANGUAGE](#)

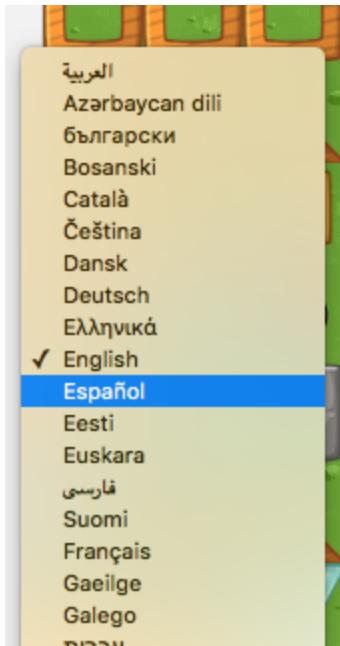
Pro Tip: In Google Classroom, all text generated by the site will now appear in the language selected by the student; assignments and questions posted by the teacher will only appear in the language in which they were written. Consider posting multiple versions of the same Google Doc or Question in the different languages your students speak/read.

Translate Code.org

1. On the bottom of any page in Code.org, click on the box that says "English" to select a new language



2. Select the language from the long pop-up list of options:



3. The entire page, including blocks and instructions, will appear in the target language.