Unit #4: How Science and Technology Affect our Life

Content Area: **World Language**
Course(s): **Advanced Placement Spanish**
Time Period: **February**
Length: **Approximately 6 weeks**
Status: **Published**

Unit Overview:

In this unit, students will consider both the benefits and the hazards of technology in today's world through the lens of the environment. Students will realize that, while human inventions have made our lives more convenient, they have also introduced some threats that affect both human health and the health of the environment. Students will read, discuss, listen to, and write about the themes of discoveries and innovations, the Internet and its social impact, personal technology and communication in the Spanish speaking countries.

Essential Questions:

- What factors drive innovation and discovery in the fields of science and technology?
- What role do ethics play in scientific advancement?
- What are the societal consequences of scientific or technological advancements?

Enduring Understandings:

- Developments in science can both create and resolve challenges in contemporary society.
- Technology creates new ways for us to connect with others and how it impacts and shapes our personal and public identities.
- Science and technological advances affect people's lives, their environment, and transforms societies.

Standards/Indicators/Student Learning Objectives (SLOs):

- Read brief written messages, listen to short conversations, or view information found about science and technology to determine which ones would be appropriate for them and others based on personal interests and cultural contexts.
- Recognize previously learned words and phrases and determine the meaning of unknown words related to science and technology in the home and target culture as found in highly contextualized, ageand level- appropriate culturally authentic texts.
- Skim and scan culturally authentic target language materials from electronic information sources and other sources to identify words and phrases associated with creative technological products and practices of the target culture(s).
- Exchange information gathered about creative technological products and practices using digital tools.
- Create and present a multimedia-rich presentation that explains information related to creative target culture technological products and practices as found in age- and level-appropriate culturally authentic

materials orally or in writing.
- Describe in writing creative technological products and practices from the home and target cultures.

FL.IM.7.1.IM.IPERS 6	Exchange information from a variety of resources with classmates about global issues, including climate change.
FL.IM.7.1.IM.IPERS.1	Engage in conversations about personal experiences or events, topics studied in other content areas, and some unfamiliar topics and situations.
FL.IM.7.1.IM.IPERS.2	Interact with others to meet personal needs in a variety of familiar situations, creating sentences and series of sentences, and asking follow-up questions.
FL.IM.7.1.IM.IPERS.3	Exchange preferences, feelings, or opinions and give advice on a variety of familiar topics, creating sentences and strings of sentences, and asking some follow-up questions.
FL.IM.7.1.IM.IPERS.4	Use appropriate gestures, intonation, and common idiomatic expressions of the target culture(s)/language in familiar and some unfamiliar situations.
FL.IM.7.1.IM.IPERS.5	Initiate, maintain, and end a conversation using appropriate target language expressions and sentences.
FL.IM.7.1.IM.IPRET.1	Explain the main idea and some supporting details on familiar topics from sentences and series of connected sentences within texts that are spoken, written, or signed.
FL.IM.7.1.IM.IPRET.2	With the help of graphic organizers, compare information (i.e., main ideas, main characters, settings) in culturally authentic materials related to targeted themes.
FL.IM.7.1.IM.IPRET.3	React to oral and written instructions connected to daily activities and to some unfamiliar situations through oral and/or physical responses.
FL.IM.7.1.IM.IPRET.4	Recognize the use of verbal and non-verbal etiquette (i.e., gestures, intonation, and cultural practices) in the target culture(s) to determine the meaning of a message.
FL.IM.7.1.IM.IPRET.5	Use target language to paraphrase what is heard, viewed, or read in oral or written descriptions of people, places, objects, daily activities.
FL.IM.7.1.IM.IPRET.6	Restate oral conversations and written information on a variety of familiar and some unfamiliar topics.
FL.IM.7.1.IM.IPRET.7	Infer the meaning of some unfamiliar words in some new contexts.
FL.IM.7.1.IM.IPRET.8	Use knowledge of structures of the target language to deduce meaning of new and unfamiliar structures.
FL.IM.7.1.IM.IPRET.9	Use information gathered from culturally authentic resources to identify possible solutions to the effects of climate change.
FL.IM.7.1.IM.PRSNT.1	From culturally authentic resources, present information about personal events and social experiences to speakers of the target language, using sentences and a series of connected sentences.
FL.IM.7.1.IM.PRSNT.2	Tell stories about everyday topics and events that occur in the community, school, and personal situations, using sentences and strings of connected sentences.
FL.IM.7.1.IM.PRSNT.3	Use language creatively to respond in writing to a variety of oral or visual prompts about familiar and some unfamiliar situations.
FL.IM.7.1.IM.PRSNT.4	Report information found in age- and level-appropriate culturally authentic resources using sentences and strings of sentences.
FL.IM.7.1.IM.PRSNT.5	When expressing viewpoints, give reasons to support the claims.
FL.IM.7.1.IM.PRSNT.6	Relate stories about oneself and about events and other situations using sentences and strings of interrelated sentences.

Lesson Titles:

- Lesson 1: Access to Technolgy -"Social Media" (Las Redes Sociales)
- Lesson 2: Effects of Technology on Self and Society-"Los Moviles" (Los efectos de la technologia en el individulo y en la sociedad)
- Lesson 3: Science and Ethics (La ciencia y la ética)
  - Medicina
  - Innovaciones

Career Readiness, Life Literacies, & Key Skills:

- Global Perspectives
- Critical Thinking & Problem Solving
- Information Literacy
- Media Literacy
- Communication and Collaboration
- Life and Career Skills

TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CT.1	Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).

Inter-Disciplinary Connections:

- Social Studies
- Sociology
- Language Arts
- Technology

LA.RI.11-12.1	Accurately cite strong and thorough textual evidence, (e.g., via discussion, written response, etc.), to support analysis of what the text says explicitly as well as inferentially, including determining where the text leaves matters uncertain.
LA.RI.11-12.2	Determine two or more central ideas of a text, and analyze their development and how they interact to provide a complex analysis; provide an objective summary of the text.
LA.W.11-12.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
LA.W.11-12.1.C	Use transitions (e.g., words, phrases, clauses) to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
LA.W.11-12.2	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
LA.W.11-12.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

LA.SL.11-12.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with peers on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
LA.SL.11-12.1.A	Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well reasoned exchange of ideas.
LA.SL.11-12.4	Present information, findings and supporting evidence clearly, concisely, and logically. The content, organization, development, and style are appropriate to task, purpose, and audience.
LA.SL.11-12.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
LA.L.11-12.3	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
SOC.5-8.1.2.1	Select and use various geographic representations to compare information about people, places, regions, and environments.
SOC.9-12.1.1.2	Analyze how change occurs through time due to shifting values and beliefs as well as technological advancements and changes in the political and economic landscape.
SOC.9-12.2.2	Students will analyze how culture influences individuals, including themselves.
SOC.9-12.3.2.1	I & me
SOC.9-12.3.2.4	Identity
SOC.9-12.3.3	Students will examine the social construction of groups and their impact on the life chances of individuals.
SOC.9-12.3.3.2	Primary and secondary groups
SOC.9-12.4.1	Students will identify common patterns of social inequality.
SOC.9-12.4.1.1	Privilege
SOC.9-12.4.1.2	Power
SOC.9-12.4.2.2	Social problems
SOC.9-12.4.3.1	Distribution of power through social institutions
TECH.8.1.12.C.1	Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
TECH.8.1.12.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.12.D.4	Research and understand the positive and negative impact of one's digital footprint.
TECH.8.2.12.A	The Nature of Technology: Creativity and Innovation: Technology systems impact every aspect of the world in which we live.
TECH.8.2.12.B	Technology and Society: Knowledge and understanding of human, cultural and society values are fundamental when designing technology systems and products in the global society.

Equity Considerations

Amistad Mandate

Topic: **Afro-Latinos in the field of Science or Technology:**

- José Celso Barbosa was a Puerto Rican physician, sociologist and political leader. He was also know as the father of the statehood movement in Puerto Rico. He is the first person of African decent to earn a medical degree in the U.S.

Materials Used: Cultural Readings, PowerPoint Presentation (Afro-Latinos), Famous Afro Latino project

Addresses the Following Component of the Mandate:

- Contributions of African Americans to our Society

Holocaust Mandate

Topic: n/a

Materials Used: n/a

Addresses the Following Component of the Mandate: n/a

LGBTQ and Disabilities Mandate

Topic: n/a

Materials Used: n/a

Addresses the Following Component of the Mandate: n/a

Climate Change

Topic: n/a

Materials Used: n/a

Addresses the Following Component of the Mandate: n/a

Asian American Pacific Islander Mandate

Topic : Franklin Chang Diaz (1st Latin American Immigrant astronaut- Chinese & Costa Rican)

Materials Used: PowerPoint presentation, online authentic materials, videos, articles, visual literacy activities, info-graphs

Addresses the Following Component of the Mandate:

- Social

Summative Assessment:

- Written Presentational Communication task: Argumentative Essay about the theme *How Science and Technology Affect our Lives*
- Written Interpersonal Communication task: Email Reply about the theme *How Science and Technology Affect our Lives*
- Spoken Interpersonal Communication:2 minute recorded conversation stimulus task about the theme *How Science and Technology Affect our Lives*
- Spoken Interpersonal Communication:Cultural Comparison Presentation about the theme *How Science and Technology Affect our Lives*
- Written and print interpretive communication task about the theme *How Science and Technology Affect our Lives*
- Print, Audio, Visual, and Audiovisual interpretive communication task about the theme *How Science and Technology Affect our Lives*
- Vocabulary/Grammar Quiz - *How Science and Technology Affect our Lives*
- Marking Period Assessment

Resources & Materials:

- Temas Textbook/Workbook

- Triangulo Textbook / CD
- AP Diaz preparing for the Language Examination workbook / CD
- Tejidos workbook
- AP College Board Classroom/Resources
- AP Exams on College Board website
- Abriendo Paso textbook
- Huellas Curriculum/Materials
- Grammar textbooks
- Flash Cards
- White Boards
- Chromebooks
- Promethean board
- Powerpoint Presentations
- Youtube videos
- Digital Recording website
- Duolingo
- BBC mundo
- Google classroom
- Google documents
- Flipgrid

Instructional Strategies, Learning Activities, and Levels of Blooms/DOK:

- Identify current environmental issues we are faced with today and create possible solutions (Synthesis)
- Engage in a discussion about our responsibilities in protecting the environment (Evaluate)
- Define what are considered health issues or concerns in the US and Spanish speaking countries (Knowledge)
- Explain the cause and effect of the impact of modern technology inventions on daily life (Comprehension)
- Identify and understand the ethical, cultural and societal issues related to technology (Knowledge)
- Evaluate the positive and negative implications of scientific and technological practices through arguments on the ethics of such practices (Evaluate)
- Develop an argument and provide supporting evidence about the ethical use of information develop and defend an argument on the appropriate balance between cultural values and the pursuit of advances in science and technology (Evaluate)
- Create a plan for technology use for children (Create)
- Compare and contrast Social media use in Spanish speaking countries to the United States.(Understand)
- Delsea one
- SWAG

Formative Assessment:

Warm Up

- lunes lenguaje - Spanish writing prompt on the theme covered in class

- martes músical - Spanish Song on the theme covered in class

- miércoles de escuchar - Listening Activity on the theme covered in class

- jueves noticias - Current News article on the theme covered in class

- viernes cultural - Cultural Video or fact on the theme covered in class

Anticipatory Set

- Songs aligned with culture/theme

- Videos aligned with culture/theme

- Writing Prompts

- Authentic listening activity

- News Articles

- Authentic conversation practice

- Grammar practice

- Categorize vocabulary words

- KWL

- Whiteboard review games/practice

- Kahoot

- Quizlet Live

- Quizalize

- Blooket

- Quizizz

- Gimkit

- Padlet

Other Possible Formative Assessments Appropriate to the Lesson

- Classwork
- Homework
- Test
- Quizzes
- Emails
- Cultural Comparison
- Argumentative Essay
- KWL on topic
- Activities using vocabulary in context
- Grammar Activities
- Google Classroom Questions/Activities
- Interpersonal Conversation Prompts
- Pair and Share partner activities
- Teacher observation/Guided practice
- Answering questions in each theme in Spanish using complete sentences
- Listening Comprehension Activities
- Reading Comprehension Activities
- Class discussions/participation
- Writing prompts
- Whiteboards Activities
- Conjuguemos
- Kahoot
- Gimkit
- Quizizz
- Quizlet
- Current Events
- La Ciencia y Etica: Podcast on scientific attempts to slow aging in rats- http://tinyurl.com/9bvm43l
- La Ciencia y Etica: Students will watch the 2 part video "Forever young" www.youtube.com/wtach?v=QYgbCzfwcjU and part2- www.youtube.com/watch?v=toPkMmncN3E&feature=relmfu Working in pairs , have them list the different methods in order from most effective to least effective. Have the pairs share the rationale for their order of choices.
- La Ciencia y Etica: Summative assessment= Student will co-construct a list of methods for extending youth and their arguments for and against scientific research prolonging youth, drawing from the texts and discussions from the unit. Then they will read "El temor a envejecer, la realidad mas rechazada por la humanidad" (article on death and getting old) http://noticias.universia.net.mx/vida-universitaria/noticia/2005/02/22/109160/temor-envejecer-realidad-mas-rechazada- humanidad.html and study table : http://scielo.isciii.es/scielo.php?script=sci_arttext&lng=pt&nrm=iso&tlng=pt&pid=S0213-91112004000400012 , which summarizes the many challenges facing older adults. Each student will write a persuasive essay to address the question; ¿Hasta donde debe llegar la gente para pronlongar y mantener una alta calidad de vida?
- La Ciencia y Etica: "Vivir para siempre" (article on "transhumanistas" who belive biological boundaries can be pushed to let people live 1,000 years or more) http://news.bbc.co.uk/hi/spanish/science/newsid_5316000/5316006.stm
- La Ciencia y ética: Abriendo Paso p338-344 "Nosotros, No" by Jose Bernardo Adolph. Students will read story and complete comprehension questions as well as react in writing about whether or not they would take the injection or not.
- La Ciencia y Etica: Demographic chart showing life expectancy worldwide "Esperanza de vida mundial"

[http://upload.wikimedia.org/commons/9/96/Life_Expectancy_2007_Estimates_CIA_World_Fact book.PNG](http://upload.wikimedia.org/commons/9/96/Life_Expectancy_2007_Estimates_CIA_World_Factbook.PNG) Students will look at chart, and discuss the following questions; Segun el mapa, ⟦OBJ⟧⟦OBJ⟧⟦OBJ⟧¿Por qué crees que varia la esperanza de vida en distintas partes del mundo? ¿Cuáles son los factores que influyen en las expectativas de la vida en tu país?

- La Ciencia y Etica: Students will respond to the following question in our online discussion forum (Flipgrid): ¿Qué papel cumple la ética en los avances científicos? ¿Debe la gente vivir por siempre? ¿Cómo sería la vida cuando seas viejo? ¿Qué papel tiene los ancianos en la sociedad?
- Los Móviles: Los efectos de la tecnología en el individuo y en la sociedad • Abriendo paso p296- Comic- describe la tira cómica
- Presentational Speaking: Cultural Comparison (2 min of speaking on a topic of high interest derive from ap themes comparing the students community to an area of the spanish speaking world) -students will be given a topic and then will have a written source to read and and oral source to listen to and then will have 2 min to prepare a presentation in which they will compare their own comnunity to an area of the spanish speaking world.
- Presentational writing: Persuasive essay (250+ words), interpreting information from authentic oral and written information and chart sources -ap wkbk, listen to audio sources, read written sources and then write a persuasive essay clearly indicating a viewpoint and defending it throughly
- Los Móviles: Students will respond to essential question in a personalized context ¿Que impacto tiene el desarrollo científico en tu vida? Compara tu vida ahora con tu vida cuando eras niño, in the online discussion (EDMODO), commenting also on at least two classmates as well.
- Los Móviles: www.bbcmundo.com- "Fijate en mí y no en tu smartphone" by Aanahi Aradas. Students will read and discuss article
- Los Móviles: Students will then watch: "móviles: una revoulcion en la salud". www.bbc.co.uk/mundo/noticias/2010/12/101217_celulares_salud_am.shtml?bw=nb&mp&bbcws=1&news=1 and in small groups, discuss the content of the video report. Students will then discuss what impact the cell phone has had on their own lives, and whether they believe it to be positive or negative. Students can create a graph outlining the pros and cons. Students will interview their classmates regarding cell phone use. Questions may include: ¿Cuánto tiempo pasas con el móvil? ¿Para qué lo utlizas más? ¿Tipicamente cuántos mensajes de texto mandas en un día? Students will then gather data from their discussion and formulate a survey in Spanish based on responses using polleverywhere.com. Teacher will administer survey to other classes and the 4AP students will analyze data and present and discuss findings to class.
- Los Móviles: Temas p134- Los teléfonos inteligentes- group discussion
- Los Móviles: Temas p73-76 read- "No sin mi móvil", and questions
- Los Móviles: "ROSA"-students will read story and discuss as a class. Along with Triangulo Apropado p 110- ESSAY on "reciclaje de electronicos para proteger el medio ambiente"
- Red Social: Abriendo Paso p292- Tira Cómica- descríbela detalladamente, p294 Grafico- "El uso de computadoras en tres provincias argentinas"
- Red Social: AP Diaz p246 essay "La tele afecta a los niños?
- Red Social: Abriendo Paso p 296 " La interaction en linea tiene efectos positivos en la vida real", read and complete questions and questions that follow
- Red Social: Abriendo Paso p208 "Ser popular en el internet", complete questions and questions
- Red Social: Abriendo Paso p216 DEBATE: "Que forma es major para conocerse y comunicarse, la socializacion virtual o la real?
- Red Social: Abriendo Paso p292- Tira Cómica- descríbela detalladamente, p294 Grafico- "El uso de computadoras en tres provincias argentinas"
- Red Social: P304-DEBATE-:"La edad ideal para empezar las redes sociales"
- Red Social: Temas p 133 Grafico- "Internet: Derecho fundamental?
- Red Social: Temas p45 Tabla: "Las Lenguas de Internet", las lenguas más usadas por el internet
- Red Social: Temas p90-composicion: "La Tecnología y el entretenimiento"

- Red Social: Temas- p19 "Facebook-el monstruo de las dos cabezas", p24 graficos "Centroamerica y las redes sociales", p28 AUDIO-"jovenes y uso de las redes sociales"
- Red Social: Triangulo Apropado p247 foto w/audio- las redes sociales
- Red Social: Triangulo Apropado-ensayo-p250 "Hasta que punto posibilitan las redes sociales en Internet la integracion social entre los usuarios?

Closure

- Exit ticket
- Padlet
- 3-2-1
- Summary
- Debriefing/Oral questioning
- Hot seat (rapid fire questions)
- Discussion questioning and answers
- Worksheet guided review practice
- Gimkit, Kahoot, Quizlet

Modifications

ELL Modifications:

- Bilingual Directions
- Delsea one
- Extra time for assignments
- Intentional grouping with students who can assist ELL student
- Repeat, reword, clarify
- SWAG
- Use graphic organizer
- Use visuals

IEP & 504 Modifications:

- 1:1 Student Speaks with Teacher only
- Accompany readings with visuals and some translations
- Allow student to have access to the listening source to be able to listen to multiple times
- Allow use of computer for taking notes
- Appropriate scaffolding

- Breaking larger readings into shorter segments
- Consult Speech Therapist or Counselor about assignment to help with IEP and preparation
- Delsea one
- Duolingo.com (Student paced language practice)
- Edpuzzle (Allow students to watch videos with teacher annotations)
- Extra time for assignments
- FlipGrid (Allow student to record on their own and submit)
- Google Voice/Screencastify (Allow student to record on their own and submit)
- Pre-reading activities (May include visuals, background knowledge, cultural information)
- Preferential seating
- Provide an alternate assessment (written)
- Providing paraphrased or modified reading materials at the student's reading level
- Re-test
- Read aloud books or stories for comprehension
- Reading 1:1 (with teacher or student)
- SWAG
- Use of a scribe or talk-to text
- Word banks, multiple choice, matching questions help when possible with visuals

G&T Modifications:

- Additional real life speaking activities
- Argumentation and debate
- Authentic realia activities
- Delsea one
- Determine where students' interests lie and capitalize on their inquisitiveness.
- Encourage students to explore concepts in depth and encourage independent studies or investigations.
- Extended listening passage and activities.
- Extended reading passages with comprehension questions
- Free Response Question (FRQs) - both written and oral
- Free Response Question (FRQs) - both written and oral
- Journal article analysis
- Student led/directed discussions
- SWAG
- Writing activities with concentration on advanced grammar

At Risk Modifications

- Appropriate scaffolding
- Delsea one
- Goal Setting
- Hands on Activities
- Parent Involvement/Communication
- Preferential Seating
- Repeat, Reword, Clarify
- SWAG
- Visuals
- Word Bank

Technology Materials and Standards:

- Duolingo - www.duolingo.com
- Conjuguemos - https://beta.conjuguemos.com/verb/69
- BBC mundo -www.bbcmundo.com
- Listening Activities www.laits.com
- Blooket www.blooket.com
- Google Classroom (questions, posts, assignments, shared documents and websites, polls)
- Google Dictionary Extension (Defines vocabulary into English on websites in the target language)
- Google Docs (Document sharing, assignments)
- Google Forms (Surveys, formative and summative assessments)
- Google Sheets (Graphing, Graph Creation, Data Analysis)
- Google Slides (Projects)
- Google drawing (Assignment/Image Creation)
- College Board AP Spanish Language and Culture Website/Classroom
- Flipgrid - https://flipgrid.com/
- Wordreference.com (Online Dictionary) - https://www.wordreference.com/
- Gimkit - http://gimkit.com
- "Forever young" www.youtube.com/wtach? v=QYgbCzfwcjU and part2- www.youtube.com/watch?v=toPkMmncN3E&feature=relmfu
- "El temor a envejecer, la realidad mas rechazada por la humanidad" (article on death and getting old) http://noticias.universia.net.mx/vida- universitaria/noticia/2005/02/22/109160/temor-envejecer-realidad-mas-rechazada- humanidad.html
- http://scielo.isciii.es/scielo.php? script=sci_arttext&lng=pt&nrm=iso&tlng=pt&pid=S0213-91112004000400012
- "Vivir para siempre" (article on "transhumanistas" who believe biological boundaries can be pushed to let people live 1,000 years or more) http://news.bbc.co.uk/hi/spanish/science/newsid_5316000/5316006.stm
- "Esperanza de vida mundial" http://upload.wikimedia.org/commons/9/96/Life_Expectancy_2007_Estimates_CIA_World_Fact book.PNG
- "Fijate en mí y no en tu smartphone" www.bbcmundo.com
- "Móviles: una revoulcion en la salud" www.bbc.co.uk/mundo/noticias/2010/12/101217_celulares_salud_am.shtml?
- https://www.cbsnews.com/video/the-most-remarkable-inventions-and-innovations-of-2017/
- http://time.com/5023212/best-inventions-of-2017/

- https://www.youtube.com/watch?v=dRl8EIhrQjQ
- http://www.hydrasocialmedia.com/blog/el-ciberacoso/
- Article: vivir para siempre - http://news.bbc.co.uk/hi/spanish/science/newsid_5316000/5316006.stm
- http://www.cuartaedad.com/articulos/eterna-juventud-ficcion-ciencia/
- Que papel tiene la ciencia y la tech https://www.youtube.com/watch?v=s7B5HG42CzA
- Demographic chart showing life expectancy worldwide: Esperanza de vida mundial http://upload.wikimedia.org/wikipedia/commons/9/96/Life_Expectancy_2007_Estimates_CIA_World_Factbook.PNG
- Two-part video (Forever Young: explores the steps people take to stave off old age) Por Siempre joven — I Parte http://www.youtube.com/watch?v=QYgbCzfwcjU Por Siempre joven — II Parte http://www.youtube.com/watch?v=toPkMmncN3E&feature=relmfu
- Podcast on scientific attempts to slow aging in rats http://tinyurl.com/9bvm43l
- "Vivir para siempre" (article on "transhumanists" who believe biological boundaries can be pushed to let people live 1,000 years or more) http://news.bbc.co.uk/hi/spanish/science/newsid_5316000/5316006.stm
- "Nosotros no" (short story) http://hispanicexplorer.tripod.com/nosotros_no.htm
- "El temor a envejecer, la realidad más rechazada por la humanidad" (article on fear of death and getting old) http://noticias.universia.net.mx/vida-universitaria/noticia/2005/02/22/109160/temor-envejecer-realidad-mas-rechazadahumanidad.html

TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.C.1	Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
TECH.8.1.12.C.CS1	Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.
TECH.8.1.12.C.CS3	Develop cultural understanding and global awareness by engaging with learners of other cultures.
TECH.8.1.12.F.CS3	Collect and analyze data to identify solutions and/or make informed decisions.
TECH.8.2.12.B.CS2	The effects of technology on the environment.

Computer Science and Design Thinking Standards

CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.9-12.8.2.12.ITH.1	Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.

CS.9-12.8.2.12.ITH.3   Analyze the impact that globalization, social media, and access to open source
                        technologies has had on innovation and on a society's economy, politics, and culture.