

Unit 4: La Ciencia y la Tecnología (Weeks 20-23)

Content Area: **World Language**
Course(s):
Time Period: **Full Year**
Length: **9 Weeks**
Status: **Published**

Unit 4: La Ciencia y la Tecnología

Unit Rationale

This unit examines the relationship between science, technology, and contemporary society. Students will explore how technological advancements impact communication, social interactions, and global issues. By critically analyzing both the benefits and drawbacks of technology, students will develop informed perspectives on its role in their lives and society as a whole. This understanding is essential for success in the AP Spanish exam, where contemporary themes are emphasized.

Essential Questions

- **How does technology impact human relationships and communication in modern society?**
- **What are the ethical implications of technological advancements on personal privacy and social interaction?**
- **In what ways can technology serve as a catalyst for social change and global connectivity?**

Pre-Assessments

Technology Impact Questionnaire

- Students answer questions regarding the effects of technology on their lives and society.

Instructional Plan

Learning Activities/Unit of Study:

- Teacher led cognate guessing and translating of simple past tense of regular and irregular verbs.
- Creating conversation through Q & A related to weather and travel, especially focusing on a few famous Spanish sites.
- Daily student participation in Spanish.
- Reiterating past grammar with notes on the board to be copied.
- Teacher-led exercises in the textbook.
- Going over HW together for reiteration and comprehension, as well as feedback.
- Review of exercises in the workbook.
- Kahoot and Blooket game review.

Resources:

- Temas
- AP Spanish
- End of unit vocabulary lists
- Internet review sites such Quizlet & Edpuzzle

Skill Set #1:

Students will know...

- **Skill Set 1:**

Students Will Know...

- Key terminology related to technology and science in Spanish-speaking contexts.
- The benefits and challenges of technological advancements.
- How technology influences communication and relationships.
- Ethical considerations surrounding technology use.

Skill Set #2:

Students will be skilled at

- **Reading Skills:** Analyze articles discussing technology's impact on society.
- **Writing Skills:** Compose persuasive essays on technology-related issues.
- **Listening Skills:** Develop comprehension skills through listening to discussions on technology.

Modifications and/or Accommodations

Suggested Modifications (ELL, Sp. Ed, Gifted, At-risk of Failure)

English Language Learners

Native language support: The teacher provides auditory or written content to students in their native language.

Adjusted Speech: The teacher changes speech patterns to increase student comprehension. This could include facing the students, paraphrasing, clearly indicating the most important ideas, and speaking more slowly.

Visuals: The teacher uses graphics, pictures, visuals, and manipulatives. This helps ELL students better understand and comprehend the subjects at hand.

Front-Loading Vocabulary: The teacher front loads vocabulary. This means providing students with a list of important vocabulary words they will need to know for a book, lesson, etc. prior to the lesson being taught. Including pictures to go with the vocabulary words is also very beneficial for the students.

Special Education Students

Chunking: The teacher presents information in a way that makes it easy for students to understand and remember. Chunking is based on the presumption that our working memory is easily overloaded by excessive detail. The best way to deliver information is to organize it into meaningful units. Because students with special needs get overloaded easily, chunking is an effective strategy to use with them.

Checking for Understanding: It is important to constantly check for understanding, especially for students who have accommodations. Teachers want to make sure students understand the concepts being covered in a way that makes sense to them.

Extra time: The teacher provides students with special needs extra time to complete work or answer questions. It is important to give students enough time to process their thoughts.

Oral Reading: The teacher will read work orally to students. Class work such as tests and literature circles may need to be read aloud to the student.

Timers: The teacher will use timers as an instructional tool. The use of timers is beneficial for students who have trouble completing tasks. Timers can be helpful so the student is aware of how much time they have to complete an assignment.

Students with 504 Plans

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Gifted & Talented Strategies

Extensions/Enrichments: Teachers will provide gifted and talented students with extension/enrichment projects. Students will be challenged to further their understanding, to apply acquired knowledge, and/or to produce something in reference to acquired knowledge.

Modify/Change Activities: Teachers will monitor and modify activities to accommodate those students who need to be challenged further. Additional reading, problem-solving, writing, or project work is necessary for those students who are ready to move on at a rate more accelerated than their peers. In this way, G & T students are provided the same opportunity for support as special needs students.

Students at Risk of School Failure

Directions or Instructions: Make sure directions and/or instructions are given in limited numbers. Give directions/instructions verbally and in simple written format. Ask students to repeat the instructions or directions to ensure understanding occurs. Check back with the student to ensure he/she hasn't forgotten.

Peer Support: Peers can help build confidence in other students by assisting in peer learning. Many teachers use the 'ask 3 before me' approach. This is fine, however, a student at risk may have to have a specific student or two to ask. Set this up for the student so he/she knows who to ask for clarification before going to you.

Alternate or Modified Assignments: Always ask yourself, "How can I modify this assignment to ensure the students at risk are able to complete it?" Sometimes you'll simplify the task, reduce the length of the assignment or allow for a different mode of delivery. For instance, many students may hand something in, the at-risk student may jot notes and give you the information verbally. Or, it just may be that you will need to assign an alternate assignment.

Increase One to One Time: When other students are working, always touch base with your students at risk and find out if they're on track or needing some additional support. A few minutes here and there will go a long way to intervene as the need presents itself.

Contracts: It helps to have a working contract between you and your students at risk. This helps

prioritize the tasks that need to be done and ensure completion happens. Each day write down what needs to be completed, as the tasks are done, provide a checkmark or happy face. The goal of using contracts is to eventually have the student come to you for completion sign-offs.

Hands On: As much as possible, think in concrete terms and provide hands-on tasks. This means a child doing math may require a calculator or counters. The child may need to tape record comprehension activities instead of writing them. A child may have to listen to a story being read instead of reading it him/herself.

Tests/Assessments: Tests can be done orally if need be. Break tests down in smaller increments by having a portion of the test in the morning, another portion after lunch and the final part the next day.

Seating: Seat students near a helping peer or with quick access to the teacher. Those with hearing or sight issues need to be close to the instruction which often means near the front.

Integration of Diversity, Equity and Inclusion; Climate Change; Informational and Media Literacy

In our high school Spanish classrooms, we will integrate Diversity, Equity, and Inclusion (DEI), Climate Change, and Informational and Media Literacy to create a well-rounded and culturally responsive learning environment. Through a focus on DEI, students will explore the diverse cultures and perspectives of Spanish-speaking countries, fostering an appreciation for the richness of these communities and their varied experiences. We will address issues of equity and social justice, encouraging students to reflect on similarities and differences in social structures between their own communities and those of Spanish-speaking countries.

The topic of Climate Change will be incorporated into the curriculum through discussions of environmental issues that impact Spanish-speaking regions. Students will explore how these communities are affected by and respond to climate challenges, allowing them to engage in global citizenship and environmental awareness.

Informational and Media Literacy will be emphasized through activities that encourage students to critically analyze Spanish-language media, identify biases, and compare different sources. This approach will help students develop skills to interpret information accurately and thoughtfully, enabling them to become informed and engaged citizens in both their local and global communities.

New Jersey Student Learning Standards: Content Area

WL.K-12.1	Communicate
WL.K-12.2	Cultures
WL.K-12.3	Connections

WL.K-12.4

Comparisons

WL.K-12.5

Communities

Learners use the language to investigate, explain, and reflect on the nature of language through comparisons of the language studied and their own. Learners use the language to investigate, explain, and reflect on the concept of culture through comparisons of the cultures studied and their own.

Learners use the language both within and beyond the classroom to interact and collaborate in their community and the globalized world. Learners set goals and reflect on their progress in using languages for enjoyment, enrichment, and advancement.

Develop insight into the nature of language and culture in order to interact with cultural competence.

Communicate effectively in more than one language in order to function in a variety of situations and for multiple purposes.

Learners use the language to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied. Learners use the language to investigate, explain, and reflect on the relationship between the products and perspectives of the cultures studied.

Integration of Career Readiness. Life Literacies and Key Skills

CRP.K-12.CRP1

Act as a responsible and contributing citizen and employee.

CRP.K-12.CRP1.1

Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

CRP.K-12.CRP2

Apply appropriate academic and technical skills.

CRP.K-12.CRP2.1

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

CRP.K-12.CRP4

Communicate clearly and effectively and with reason.

CRP.K-12.CRP4.1

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.

CRP.K-12.CRP5

Consider the environmental, social and economic impacts of decisions.

CRP.K-12.CRP5.1

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.

CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP7.1	Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP8.1	Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

Integration of Computer Science and Design ThinkingNew Section

CS.9-12.8.1.12.AP.1	Design algorithms to solve computational problems using a combination of original and existing algorithms.
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.EC	<p>Ethics & Culture</p> <p>Successful troubleshooting of complex problems involves multiple approaches including research, analysis, reflection, interaction with peers, and drawing on past experiences.</p> <p>Decisions to develop new technology are driven by societal and cultural opinions and demands that differ from culture to culture.</p> <p>Individuals evaluate and select algorithms based on performance, reusability, and ease of implementation.</p> <p>The ability to ethically integrate new technologies requires deciding whether to introduce a technology, taking into consideration local resources and the role of culture in acceptance. Consequences of technological use may be different for different groups of people and may change over time. Since technological decisions can have ethical implications, it is essential that individuals analyze issues by gathering evidence from multiple perspectives and conceiving of alternative possibilities before proposing solutions.</p>

Interdisciplinary Connections: NJSL for ELA, Social Studies, Science and/or Math

ELA.L.SS.9–10.1	Demonstrate command of the system and structure of the English language when writing or speaking.
ELA.L.KL.9–10.2	Apply knowledge of language to make effective choices for meaning, or style, and to comprehend more fully when reading, writing, speaking or listening.
ELA.L.VL.9–10.3	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, including technical meanings, choosing flexibly

	from a range of strategies.
ELA.L.VI.9–10.4	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings, including connotative meanings.
ELA.R	Reading
ELA.W	Writing
SOC.9-12.1	What are effective strategies for accessing various sources of information and historical evidence, determining their validity, and using them to solve a problem or find a solution to a public policy question?
SOC.9-12.1.2	Spatial Thinking
SOC.9-12.1.3	Critical Thinking

21st Century Life and Career

SEL.PK-12.1.1	Recognize one’s feelings and thoughts
SEL.PK-12.1.4	Recognize the importance of self-confidence in handling daily tasks and challenges
CAEP.9.2.12.C	Career Preparation
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
CAEP.9.2.12.C.5	Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.

SEL Competencies

SEL.PK-12.1	Self-Awareness
SEL.PK-12.2	Self-Management
SEL.PK-12.3	Social Awareness
SEL.PK-12.4	Responsible Decision-Making
SEL.PK-12.5	Relationship Skills