

04_Language for Science.

Content Area: **English Language Services**
Course(s):
Time Period: **Full Year**
Length: **4 to 7 weeks**
Status: **Published**

General Overview, Course Description or Course Philosophy

Students identified as limited English proficient, will receive pull-out services in individual or small groups settings for a minimum of 120 minutes per week of instruction. *This course is designed for English Language Learners in **grades 6-8**.* Throughout the school year the students will investigate the following global themes: school culture, holidays, diversity, challenges, growing & changing, communicating for academia & social skills. This enables the students to focus & progress on their skills in listening, reading, speaking & writing as they progress through English language proficiency levels. Students will learn content and be assessed through various performance tasks using many different methodologies that are scaffolded to meet the ever-changing needs of English language learners. The goal of the ESL program is to help students develop language skills necessary to be successful students and members of society.

OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS

Students will understand:

- participate in experiments
- make observations both orally and written
- develop models
- make claims based on evidence
- use evidence to construct an explanation
- acquire academic vocabulary as it pertains to science topics

Essential Questions:

- How does the student use English language during science instruction?
- When can we be sure that estimation is more appropriate than finding an exact answer?
- When and how do scientific theories change?
- How can I make larger representations of small objects?
- How do we create, test, and validate a scientific model?

Enduring Understandings:

- English language learners engage in oral communication in a variety of situations in the

content area of science

- English language learners engage in written communication in a variety of forms in the content area of science
- English language learners process, interpret, and evaluate written language, symbols, and text with understanding and fluency in the content area of science
- English language learners process, understand, interpret, and evaluate spoken language in a variety of situations in the content area of science
- School policies, procedures, and interpersonal communication are important skills necessary to assimilate in a new academic setting.
- There are different resources(including technology, and print) and different domains that are used in a learning environment to aid in the acquisition of content.

CONTENT AREA STANDARDS

WIDA Standard 4:

Language for Science-

English language learners communicate information, ideas and concepts necessary for academic success in the content area of science.

ELL.6.4	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science
ELL.7.4	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science
ELL.8.4	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science
ELL.6-8.1	Social and Instructional Language
ELL.6-8.1.R.1.1	Search for topics on websites, in libraries or other sources with a partner from a list
ELL.6-8.1.R.3.1	Sort information on topics of choice gathered from multiple sources with a partner
ELL.6-8.1.S	Speaking
ELL.6-8.1.W	Writing
ELL.6-8.2.L	Listening
ELL.6-8.2.R	Reading
ELL.6-8.2.R.2.2	Match general vocabulary or expressions in context with illustrations associated with various genres read orally
ELL.6-8.4	The Language of Science

RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)

21st Century Life & Careers

- Plan and deliver a media production (e.g., video, and mobile).
- Critical Thinking
- Communication
- Collaboration
- Life & Career Skills
- Information Literacy
- Media Literacy
- Chronological Thinking
- Spatial Thinking
- Presentational Skills
- Problem Solving
- Decision Making

LA.RL.8.4	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
LA.RL.7.4	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.
LA.RL.6.4	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
LA.RI.7	Reading Informational Text
LA.RI.8	Reading Informational Text
LA.RI.6	Reading Informational Text
LA.W.6.1	Write arguments to support claims with clear reasons and relevant evidence.
LA.W.7.1	Write arguments to support claims with clear reasons and relevant evidence.
LA.W.8.1	Write arguments to support claims with clear reasons and relevant evidence.
LA.SL.7.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
LA.SL.8.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
LA.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
LA.SL.7.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
LA.SL.8.4	Present claims and findings, emphasizing salient points in a focused, coherent manner

	with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
LA.SL.6.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate speaking behaviors (e.g., eye contact, adequate volume, and clear pronunciation).
SCI.6-8.MS-ESS1	Earth's Place in the Universe
SCI.6-8.MS-ESS1-2.ESS1.B	Earth and the Solar System

STUDENT LEARNING TARGETS

Refer to the 'Declarative Knowledge' and 'Procedural Knowledge' sections.

Declarative Knowledge

Students will understand: Language functions & language features

- initial thinking can be generated and conveyed
- circumstances, factors and compare changing variables
- factors that contribute to particular outcomes by offering alternatives to extend or deepen awareness
- defining investigable questions or design problems based on observations, information, and/or data about a phenomenon
- determining central ideas in complex evidence and information to help explain how or why a phenomenon occurs
- evaluating scientific reasoning that shows why data or evidence adequately supports conclusions
- identifying convincing evidence from data, models, and/or information from investigations of phenomena or design solutions
- comparing reasoning and claims based on evidence from two arguments on the same topic
- evaluating whether they emphasize similar or different evidence and/or interpretations of facts

Procedural Knowledge

Students will be able to:

- Listening: aurally comprehend spoken English in both a social and academic setting.
- Speaking: speak English in both social and school setting.

- Reading: read (decode and comprehend) text for recreational and academic purposes.
- Writing: write for personal and academic purposes.
- define investigable questions or design problems based on observations, information, and/or data about a phenomenon
- determine central ideas in complex evidence and information to help explain how or why a phenomenon occurs
- evaluate scientific reasoning that shows why data or evidence adequately supports conclusions
- identify convincing evidence from data, models, and/or information from investigations of phenomena or design solutions
- compare reasoning and claims based on evidence from two arguments on the same topic
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EVIDENCE OF LEARNING

Refer to the 'Formative Assessments' and 'Summative Assessments' sections.

Formative Assessments

- interactive notebook entries (writing, drawings, pictures)
- class participation/discussions
- teacher observations/monitors how students' are learning
- daily communication activities
- worksheets
- homework
- retell
- list
- sorting
- rubrics
- following directions
- answer comprehension questions
- charts & graphic organizers
- fluency
- practice and successfully completing activities and exercises with little assistance
- modified quizzes/tests
- listening comprehension tasks

- strategic questioning
- individual/group response
- journal writing
- on-line mini-assessments
- exit tickets

Summative Assessments

- completing projects or assignments
- role playing
- presentations
- completing assignments
- final interpersonal or speaking presentations
- tests/quizzes
- research papers
- culminating communicative activity
- cumulative work over an extended period such as a final project or creative portfolio.
- end-of-unit

RESOURCES (Instructional, Supplemental, Intervention Materials)

<https://clever.com/>

<https://mysteryscience.com/distance-learning>

<https://www.duolingo.com/>

<https://hippocampus.org/>

<https://ell.brainpop.com/>

<https://www.brainpop.com/science/>

<https://kids.nationalgeographic.com/>

<https://www.nationalgeographic.com/>

hands on activities

grade level text books

videos

science materials

INTERDISCIPLINARY CONNECTIONS

WIDA Standard 1 Social and Instructional Language is an integral part of growing and changing.

WIDA Standard 2: Reading, writing, listening, and speaking about growth and change allows the student to express their feelings about real-life experiences.

WIDA Standard 4: Focus on the changes in the environment and living things.

Career Ready Practices

CRP2. Apply appropriate academic and technical skills.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP6. Demonstrate creativity and innovation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership, and effective management.

CRP11. Use technology to enhance productivity.

Technology Operations & Concepts/ Interdisciplinary Connections:

- Integrate quantitative or technical information expressed in words in a text. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
- Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
- Environmental Literacy

- Implementation of conventions of Standard English
- Language acquisitions
- Google
- Media literacy

ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS

See link to Accommodations & Modifications document in course folder.

- modify activities & assessments
- scaffolding
- graphic organizers
- modify assessment type, length, an/or format
- modify lesson pacing and/or structure
- word banks
- provide regular and/or picture dictionaries
- couple new vocabulary with visual references
- provide extended time
- teacher modeling
- providing examples
- high level questions
- simplify written and verbal instructions
- provide additional instruction including reviews, & drills.
- alternate responses such as, drawing a series of pictures with captions, oral responses, etc.
- frequent breaks
- guided reading
- rephrase questions, directions & explanations
- shorten reading assignments
- adapt homework to reflect language proficiency and home support
- use story retellings to assess comprehension