

Lesson Plan Template

Instructions: This lesson plan template provides a space for you to plan lessons around the Education Connections model of Sheltered Instruction (SI), which includes four strands—*define, modify, cultivate, apply*. (See page 4 of this document for more information on the four strands). Fill out the information about your lesson plan in the space provided in the left-hand column, *Lesson Information and Activities*. While you plan, list which strand(s) relates to this portion of your planning in the right-hand column, *SI Strand(s)*, along with any notes about how the strand can be implemented effectively in this lesson.

Lesson Information and Activities							SI Strand(s)
Lesson Title: <u>Origins of the Universe</u>							Define
Content Area: <u>Science</u> Grade Level(s): <u>9-10</u>							
Unit Description: Students will read about, summarize, compare and contrast several theories of the origin of the universe. Then, students will work in groups to apply the information from the article and create a skit to demonstrate the theory.							
Length of lesson: two 90-minute class periods Number of ELs: _____							
Proficiency Levels							
ELs (numbers and/or names)							
Program Model: _____							
Other relevant student information: Lesson plan is written with Intermediate/Advanced students in mind, but could be adapted for students of lower proficiency levels.							
Standards and Objectives							Define
	Language Objectives		English language proficiency standards				
1	Students will be able to write a summary statement for each theory of the universe identified in the text.		TESOL Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting.				
2	Students will be able to incorporate academic vocabulary (congruent with their level of English proficiency) and at least one grammatical structure in their skit.		Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the area of science.				
	Content Objectives		Content Standards				

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1	Students will be able to compare and contrast four theories of the origins of the universe using a 4- column graphic organizer.	
2	Students will be able to create a skit to demonstrate a theory of the universe.	

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<p><u>Incorporating all four language domains</u></p> <p>Identify how the language demands of the tasks are related to each language domain.</p> <table border="1"> <thead> <tr> <th></th> <th>Written</th> <th>Oral</th> </tr> </thead> <tbody> <tr> <th>Receptive</th> <td> <p>Reading</p> <p><i>Students silently read the article individually, then read it aloud as a whole group</i></p> </td> <td> <p>Listening</p> <p><i>Students collaborate and listen to ideas to create a skit.</i></p> </td> </tr> <tr> <th>Productive</th> <td> <p>Writing</p> <p><i>Students write what they know about the origins of the universe on the board.</i></p> </td> <td> <p>Speaking</p> <p><i>Students discuss the article.</i></p> </td> </tr> </tbody> </table>			Written	Oral	Receptive	<p>Reading</p> <p><i>Students silently read the article individually, then read it aloud as a whole group</i></p>	<p>Listening</p> <p><i>Students collaborate and listen to ideas to create a skit.</i></p>	Productive	<p>Writing</p> <p><i>Students write what they know about the origins of the universe on the board.</i></p>	<p>Speaking</p> <p><i>Students discuss the article.</i></p>	<p>Define</p>
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<p><u>Key language for students</u> (words and phrases, grammatical structures, sentence types, structure and amount of speech/text, organization of ideas, genre, etc.)</p> <table border="1"> <thead> <tr> <th>General academic language</th> <th>Language specific to the content area</th> </tr> </thead> <tbody> <tr> <td> <p>Provokes, foolproof, backed up, indisputable, dominated, distinguish, energy, matter, motion, observe, phenomenon, perceive, permeate, predicts, distribution, lumpy, punctuated, proponents, fundamental, skeptical, conforms, hypothesis</p> <p>Phrasal Verbs: Work out, backed up, came to be, spread apart, turned to</p> <p>Dependent clauses: Since the early 1900's, To clock the speeds of these galaxies, if the source is moving away from you, to examine the light from the galaxies, no matter whether, instead of an even distribution of matter, because the light from quasars..., like its predecessor, with enough mass</p> <p>Linking words and phrases: in fact, after all, rather, the trouble is, so far, what's more, that is, instead, for example, meanwhile, at first glance,</p> </td> <td> <p>Doppler Effect, Big Bang Theory, Steady State Theory, The Plasma Universe and Little Bangs, plasma, universe, cosmos, velocities, galaxies, receding, spectroscopy, Redshift, spectrum, vortex, wavelength, astronomer, cosmological, astrophysicist, quasars, ionized, empirical, mass</p> </td> </tr> </tbody> </table>		General academic language	Language specific to the content area	<p>Provokes, foolproof, backed up, indisputable, dominated, distinguish, energy, matter, motion, observe, phenomenon, perceive, permeate, predicts, distribution, lumpy, punctuated, proponents, fundamental, skeptical, conforms, hypothesis</p> <p>Phrasal Verbs: Work out, backed up, came to be, spread apart, turned to</p> <p>Dependent clauses: Since the early 1900's, To clock the speeds of these galaxies, if the source is moving away from you, to examine the light from the galaxies, no matter whether, instead of an even distribution of matter, because the light from quasars..., like its predecessor, with enough mass</p> <p>Linking words and phrases: in fact, after all, rather, the trouble is, so far, what's more, that is, instead, for example, meanwhile, at first glance,</p>	<p>Doppler Effect, Big Bang Theory, Steady State Theory, The Plasma Universe and Little Bangs, plasma, universe, cosmos, velocities, galaxies, receding, spectroscopy, Redshift, spectrum, vortex, wavelength, astronomer, cosmological, astrophysicist, quasars, ionized, empirical, mass</p>						
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<p><u>Key characteristics of teacher talk</u> (ways to make the content comprehensible for all students, ways to model key language, etc.)</p> <p>The teacher will chunk the reading, write a summary statement after each section of the article, and use a graphic organizer to make the content comprehensible.</p>											

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<p><u>How the lesson will incorporate bilingualism/students' native languages as resources</u></p> <p>Group students according to home language so that they may discuss their skits bilingually. Depending on the class, the teacher may also choose to ask students to present their skits bilingually.</p> <p><u>Materials and Texts</u></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #c6e0b4;"> <th style="text-align: left; padding: 5px;">Name</th> <th style="text-align: left; padding: 5px;">Genre (e.g., narrative)</th> <th style="text-align: left; padding: 5px;">Level</th> <th style="text-align: left; padding: 5px;">Connection to Students (What will this mean to them? How can you make it even more meaningful?)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">The Origin of the Universe by David Fishman</td> <td style="padding: 5px;">Nonfiction</td> <td style="padding: 5px;">9</td> <td style="padding: 5px;">Ask students to think about a time when they experienced the Doppler Effect. What was it like? What happened?</td> </tr> </tbody> </table> <p>Supplementary Materials and Realia</p> <p>Video: The Doppler Effect</p> <p>Video: From Big Bang to Man</p>				Name	Genre (e.g., narrative)	Level	Connection to Students (What will this mean to them? How can you make it even more meaningful?)	The Origin of the Universe by David Fishman	Nonfiction	9	Ask students to think about a time when they experienced the Doppler Effect. What was it like? What happened?	<p>Cultivate</p>
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<p>Estimated Time: two 90-minute class periods</p> <p>Language Domains: X Reading X Writing X Listening X Speaking</p> <p>Grouping:</p> <p style="padding-left: 20px;"> <input type="checkbox"/> Independent Work <input checked="" type="checkbox"/> Pair <input checked="" type="checkbox"/> Small Group <input checked="" type="checkbox"/> Whole class </p> <p>Reason for grouping:</p> <p>X First language X English proficiency <input type="checkbox"/> Reading level X Content understanding <input type="checkbox"/> Interest <input type="checkbox"/> Other:</p> <p>Preview: Connections to past learning or the larger unit sequence</p> <p>Note: It is recommended that lesson(s) preceding this would teach key academic language used in this article, including, but not limited to, vocabulary. For insight into which language forms to teach, visit the Academic Word Finder by Achieve the Core. Copying the text of the article and inserting it into the Academic Word Finder tool will yield important information about which words might warrant more focus and attention. Teaching these words in context can also provide opportunities to scaffold other academic language forms for students, for example, verb forms and grammatical structures that are associated with use of these key vocabulary terms.</p> <ol style="list-style-type: none"> 1. Tell students that they will learn about how the universe began. They will read, watch videos, and work together to create a scenario that explains the origin of the universe. 2. Draw a circle on the board and write “Origins of the Universe” <i>above the circle</i>. Give students markers or chalk and ask each student to write one or two things they know about the origins of the universe. <p>Presentation: Primary activity steps associated with lesson implementation</p> <p>Differentiation, scaffolding, modifications, strategies employed, interaction activities, materials integrated that function to shelter language and content for the EL students</p> <ol style="list-style-type: none"> 1. Distribute copies of the article, <i>The Origin of the Universe</i>. Project the article onto the board. 2. Tell students that you will read the article as a whole class. Then, the teacher will divide the class into 3 groups to create a skit or “act out” a portion of the article. 3. Divide the class into 5 groups. Students should sit with their group members while they read the article aloud. 4. Whole class Spirit reading or Jump-in Reading of the article: Tell students that they will read an article aloud together. The teacher will begin the reading. When the teacher stops, a student may jump in and read until they want to stop. Then, another student may read. It is the students’ choice if they want to read and for how long they would like to read. Tell students that the teacher will stop at the end of each section to facilitate their comprehension of the article. 5. At the end of each section, ask each group to discuss what they heard and write a summary statement about the section. Groups will share out their summaries and the teacher will choose the summary that best fits, which will then be written on the board. All students will copy this summary on to their articles. 6. At the end of the article, after students have summaries of each section, draw a 4-column chart or project the 4-Column Notes handout on the board. 	Modify

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<p>7. In groups, students discuss and work together to compare and contrast each theory using the 4-column chart.</p> <p>Assessment: Activities for formative and summative assessment during and after primary lesson activities. How does assessment account for the language demands embedded in core content for ELs?</p> <ol style="list-style-type: none"> 1. Assign each group one of the following: Big Bang Theory, Doppler Effect, Steady State Theory, The Plasma Universe and Little Bangs, or The End of the Universe. 2. Tell students that they will act out their section of the article. 3. Distribute the rubric and review the rubric and outline expectations. 4. Tell students to review their summary statements and the 4-column notes as a group. 5. Groups should have 20-30 minutes to plan their skit and gather or make simple props if needed. 6. Groups present their skits. 7. Wrap-up: Thank the students for presenting. 8. Optional: Consider asking students to self-assess their performance and participation using the rubric. 	Apply
<p>How are parents, families, and the community invited into or associated with the content, delivery, or extension of this lesson?</p> <p>Invite families for the group presentations. Provide refreshments and invite the whole family (including younger siblings) to join the class.</p>	Cultivate

Education Connections' Four Strands of Sheltered Instruction

Sheltered Instruction is an approach that makes academic content, as well as language development, more accessible for EL students. The Education Connections activities are based on **Four Strands** of Sheltered Instruction. They are: Define, Modify, Cultivate, Apply.

Define

- Develop, define, refine, communicate, and assess *content objectives* for every lesson
- Develop, define, refine, communicate, and assess *language objectives* for every lesson
- Ensure objectives derive from, and are aligned with, English language proficiency (ELP), as well as content standards

Modify

- Differentiate instruction through lesson adaptation and instructional modifications
- Scaffold instruction in response to students' individualized language and content learning needs
- Identify the language demands and domains embedded in lessons and explicitly address language use and needs for both teaching and learning

Cultivate

- Explicitly identify and acknowledge the cultural competence, human capital, knowledge, experiences, and resources students bring to the classroom
- Invite parental and/or familial involvement in the school and classroom and make connections that extend beyond the core curriculum
- Support native language maintenance, additive bilingualism, and biliteracy development

Apply

- Directly promote language use through interaction with peers, teachers, as well as the core content
- Encourage and facilitate language use in both English, as well as students' home languages
- Develop and implement activities that require use of all four language domains