

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 the last page 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)														
<p>Lesson Title: <u>Research on Emojis</u></p> <p>Content Area: <u>Science</u> Grade Level(s): <u>9-10</u></p> <p>Unit Description: _____</p> <p>_____</p> <p>Length of lesson: <u>Two 90-minute class periods</u> Number of ELs: _____</p> <table border="1"> <tr> <td>Proficiency Levels</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>ELs (numbers and/or names)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Classroom Setting: _____</p> <p>Program Model: _____</p> <p>Other relevant student information: _____</p>		Proficiency Levels							ELs (numbers and/or names)							<p>DEFINE</p>
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<p>Standards and Objectives</p> <table border="1"> <thead> <tr> <th></th> <th>Language Objectives</th> <th>English language proficiency standards</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Students will be able to describe recommendations for further studies based on experiments already conducted.</td> <td> <p>WIDA Standard 1: English language learners communicate for Social and Instructional purposes within the school setting.</p> <p>TESOL Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting.</p> </td> </tr> <tr> <td>2</td> <td>Students will be able to describe and critique an experiment described in a text.</td> <td> <p>WIDA Standard 4: English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.</p> <p>TESOL Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the area of science</p> </td> </tr> </tbody> </table>			Language Objectives	English language proficiency standards	1	Students will be able to describe recommendations for further studies based on experiments already conducted.	<p>WIDA Standard 1: English language learners communicate for Social and Instructional purposes within the school setting.</p> <p>TESOL Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting.</p>	2	Students will be able to describe and critique an experiment described in a text.	<p>WIDA Standard 4: English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.</p> <p>TESOL Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the area of science</p>	<p>DEFINE</p>					
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	Content Objectives	Content Standards	
1	Students will be able to summarize an article utilizing a visual representation.	<u>CCSS.ELA-LITERACY.RST.9-10.2</u> Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.	
2	Students will be able to identify and describe the evidence presented in a text.	<u>CCSS.ELA-LITERACY.RST.9-10.1</u> Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	

Lesson Information and Activities	SI Strand(s)
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Incorporating all four language domains

Identify how each of the language demands of the tasks are related to each language domain.

	Written	Oral
Receptive	Reading Students read an article.	Listening Students listen to their peers as they collaborate to design a graphic representation.
Productive	Writing Students write a summary.	Speaking Students orally discuss the article.

MODIFY

Key language for students (words and phrases, grammatical structures, sentence types, structure and amount of speech/text, organization of ideas, genre, etc.)

General academic language	Language specific to the content area
Emoji, misunderstand, miscommunicate, emotion, interpretation, study, cross-cultural, observation Use of modal verbs to describe recommendations: e.g., would, could	Experimental design, constant, independent variable, dependent variable, hypothesis, control Scientific explanations using evidence; one example of the language typical of this genre is the use of dependent clauses, for example, “The author provides evidence that emojis are understood in different ways.”

Key characteristics of teacher talk (ways to make the content comprehensible for all students, ways to model key language, etc.)

Adjust linguistic features used by the teacher (including vocabulary and grammatical structures) based both on students’ English proficiency levels and which version of the article is given to students.

How the lesson will incorporate bilingualism/students’ native languages as resources

Spanish-speaking students may read the article in Spanish at various lexile levels. In groups, based on home languages, students will discuss a time that they were misunderstood.

Materials and Texts

Name	Genre (e.g., narrative)	Level	Connection to Ss (What will this mean to them? How can you make it even more meaningful?)
Emojis: Just another way to miscommunicate?	Nonfiction	9-10	Students may be familiar with emojis by using them in social media and other tech-based communication. Teachers can discuss nonverbal communication and intercultural communication, and connect the discussion to the ways in which these play a role in students’ everyday lives.

Supplementary Materials and Realia

[Experimental Design Review Video](#)

Lesson Information and Activities	SI Strand(s)
<p>Estimated Time: <u>Two 90-minute class periods</u></p> <p>Language Domains: <input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Listening <input checked="" type="checkbox"/> Speaking</p> <p>Grouping: <input checked="" 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: <input checked="" type="checkbox"/> First language <input type="checkbox"/> English proficiency <input checked="" type="checkbox"/> Reading level <input type="checkbox"/> Content understanding <input type="checkbox"/> Interest <input type="checkbox"/> Other:</p> <p>Preview: Connections to past learning or the larger unit sequence</p> <ol style="list-style-type: none"> 1. Think about a time when you were misunderstood. Describe how the misunderstanding happened. Did language or cultural differences play a role in the misunderstanding? 2. Share with a partner. Describe the situation and how the misunderstanding occurred. 3. Ask students to draw their favorite emoji. Don't show anyone the emoji. 4. Collect the emoji drawings. Redistribute the emojis so that each person receives a different emoji. 5. Ask students to describe the emoji. Then, find the person who drew the emoji and discuss whether or not their interpretation of the emoji was what the artist intended to communicate. <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. Tell students that they will read about a study that was conducted involving the interpretation of emojis. They will read about the study, summarize the article, and describe how they would use this information to conduct their own study. 2. Describe the difference between an observational study and an experiment. Review terminology regarding experimental design (hypothesis, control group, variables, etc.). This video provides a good review. In an observational study, the biggest difference is that there is no treatment applied. So, the researcher creates a hypothesis and designs the experiment to observe what happens without applying a treatment. 3. Now, we will read about an observational study that looks at how emojis are interpreted differently by people, depending on the device they use to view the emoji. 4. Divide the class into groups based on reading level and first language. Several texts are provided, depending on the students' reading levels. In small groups, students will read the article. 5. Ask students to identify and discuss the researcher's hypothesis. As a group, write a hypothesis for this observational study. Then, highlight the evidence found in the article. Ask each group to discuss the evidence that researchers found to support or refute the hypothesis. Use sentence stems, such as: "The author found evidence that..." "The hypothesis is supported by evidence that..." "The hypothesis is refuted because..." 6. As a small group, students will create a visual representation of the article and observational study. Each group will create a graphic representation. <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. Each student will write 5-7 sentences (or single words for beginning ESL students) to summarize 	<p>APPLY</p> <p>APPLY</p>

Lesson Information and Activities	SI Strand(s)
<p>the graphic representation. (This is done individually for accountability and assessment purposes.)</p> <p>2. Discuss in small groups: Ask students to consider and describe the next steps they would take to explore this topic further. How might they design a similar experiment? What else do they want to know about this topic? What recommendations do they have for future experiments? Provide sentence starters for recommendations, for example: “I would recommend that....” “A good next step would be...” “I want to know...” “A future experiment could be...”</p> <p>For example, students might consider studying how culture influences the interpretation of emojis.</p> <p>3. Draw a visual representation of your recommendation(s) and write 5-7 sentences to describe your recommendations.</p>	
<p>How are parents, families, and the community invited into or associated with the content, delivery, or extension of this lesson?</p> <p>Students may discuss how emojis are interpreted differently, even within families.</p>	<p>CULTIVATE</p>

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