Explanation of the LINCS Strategy

LINCS Home

A memory tool called the LINCS device serves as the centerpiece of this routine. It is used to promote understanding and recall of an important term (also names, places, events, or other discrete facts) and its essential features. LINCS devices are co-constructed by the teacher and students, who simultaneously analyze the new term's features and construct the memory device. The essential information about the term and the memory device can be recorded on a blank LINCS Form or it can be written on individual note cards. An example of a blank LINCS Form is presented below.



Components of a LINCS device

A LINCS device consists of five major components. The LINCS Form provides space for recording each component of the memory device. Below, each component of a LINCS device is discussed, along with an example of how it is recorded on the LINCS Form.

After each of the five sections are described, a completed LINCS Form is provided showing how memory devices can be created for all of the important terms related to a lesson about the US Constitution.

Section 1: The Term

The first section of the LINCS Form provides a space to record an important term (or important name, place, event, or significant fact) that all students are expected to both understand and remember. After the meaning of the term has been explored in the context of a content lesson (e.g., after

"compromise" has been defined and understood in the context of learning about how the US Constitution was written), the term is noted on the LINCS Form.

It is important to understand that LINCS memory devices are NOT created for all the terms that appear in published study guides, highlighted in bold print in a text, or listed at the end of a chapter. Only those that are considered essential for students to know are included. Guidelines for determining which terms are most essential are provided below.

Section 2: The Essential definition



Often a term that is considered important enough that all students are expected to remember it will have a great deal of information associated with it. For example, the dictionary definition of "compromise" includes the following: *1.a. a settlement of a dispute by a partial yielding of both sides. b. adjustment for practical purposes of rival systems, theories, etc. 2. the result of such settlement or adjustment. 3. anything halfway between two different things. 4. an exposing to danger, suspicion, etc. an endangering.*

In addition to the dictionary definition of the term is all of the surrounding contextual information about the term. For example, learning the meaning of "compromise" in the context of exploring how the US Constitution was written involves understanding how the framers of the Constitution debated issues, advocated positions, and eventually came to a compromise.

It is important to understand that what is actually listed in the "Essential Definition" space is only the parts of the definition that are most essential, or critical, for students to know. In other words, long definitions and complex meanings must be reduced to their essential elements, or critical semantic features. Note that once the definition has been written on the form, the most critical words in the definition are underlined.

Section 3: The Reminding Word

Term	3 LINCing story	LINCing picture	Essential definition
Compromise Reminding Word			<u>agreement</u> , but each <u>gives up</u> something
promise			

The 'Reminding Word' component of the memory device is a common word whose meaning students readily know and that phonetically sounds like part of the new term. It is called the "*Reminding Word*" because it will be used as a way to remind students of both auditory and visual LINCing clues to enable students to access memory of the new term's definition. The Reminding word and the 'LINCing Story' (see below) work together to provide the auditory memory link for the new term. The Reminding Word will also be used to help students recall a visual image of the new term's definition. While the auditory link by itself can be used to enhance the new term, using both the auditory link and the visual link (see 'LINCing Picture' below) is preferable.

In the "Reminding Word" space on the form, noted is a word that is (a) phonetically similar to part or all of the term, and (b) whose meaning will be very familiar to students. The Reminding Word MUST have both characteristics! It is not important for the meaning of the Reminding Word to be similar to the meaning of the new term. For example, *promise* phonetically sounds similar to *compromise*; students already readily understand what *promise* means. It is NOT important that the meanings of *prize* and *compromise* be very different.



Section 4: The LINCing Story

The purpose of the LINCing Story is to provide students with a mnemonic device that enables them to connect, or link, the meaning of the new term with familiar background knowledge. In this case, the meaning of the new term is connected to the familiar term using a LINCing Story.

An effective LINCing Story has several characteristics:

- * the story <u>always</u> contains the Reminding Word
- * the story sometimes also contains the new term
- * the story helps students recall the meaning of the new term
- * the story is short and simple

The example above, "Both <u>promised</u> to <u>give up something</u> to reach an <u>agreement</u>," the Reminding Word (*promise*) has been used in the story in a manner that helps students remember that *compromise* means giving up something to reach an agreement, and both parties win as a result.

Note that the most essential words in the LINCing Story have been highlighted, so that students will focus particular attention to these.

Section 5: The LINCing Picture

Term	LINCing story	LINCing picture	5 Essential definition
Reminding Word	Both <u>promised</u> to <u>give up something</u> to reach an agreement		<u>agreement,</u> but each <u>gives up</u> something

The "LINCing Picture" component of the memory device provides the visual memory link for the new term. The LINCing Picture is a simple picture that depicts in some way, the essential features of the new term's definition. The most effective LINCing Pictures include elements that are related to the Reminding Word. The picture need not be sophisticated artwork, as stick figures and other very simplistic drawings work effectively as a visual links.

The picture above shows two people, each with their arms outstretched as if each is giving up something to the other in order to reach a compromise. Notice also that the two figures are shaking hands, as if they are promising to give up something in order to seal a deal after reaching an agreement. Thus, this LINCing Picture includes an element related to the Reminding Word, "promise", and elements related to the definition of the new term, "compromise".

Students should use their own language to describe the picture and explain how it helps them to remember what the new term means.

> HOME USING GRAPHIC ORGANIZERS EXAMPLES

Explanation of LINCing Picture			
NEW TERM	LINCING PICTURE EXPLANATION	REMINDING WORD CONNECTION	
compromise	Two people each handing the other something in order to reach an agreementShaking hands to indicate a promise		
republic	Campaign 'Vote for Bill' Lollipop reminds students that in a republic, campaigns are held to elect representatives	Voters <u>lick</u> lollipops	
impeach	Elected official getting booted out of office and into jail because he committed a crime	<u>Peach</u> flying out of president's hand on his way to jail	
amend	Law with an amendment sewed' onto it	Sewing indicates <u>mend</u> ing	
ratify	Law with 'APPROVED' stamped onto it indicating it has been ratified	No <u>rat</u> s law	

LINCS devices			
Term	LINCing story	LINCing picture	Essential definition
compromise Reminding Word promise	Both <u>promised</u> to give up something to reach an agreement	<u>ES</u>	<u>agreement</u> , but each <u>gives up</u> something
republic Reminding Word	Bob <u>licked</u> the other candidate in the election to be the <u>representative</u>	VOTE V Bill Bob	voters choose <u>representatives</u>
impeach _{Reminding Word} peach	the Prez stole a <u>peach</u> , so he was charged with a crime & was <u>impeached</u>		il bring <u>charges</u> against an <u>elected official</u>
amendment Reminding Word mend	They <u>mend</u> ed the broken law to make it better	Law Amendme	ent <u>Chang</u> e, usually a <u>law</u> or bill
ratify Reminding Word rat	they <u>ratified</u> the law to get rid of the <u>rats</u>	No RATS Law APPROVED	approve a bill or <u>law</u>
List the parts	ndicate a Reminding word	Note a LINCing story C	onstruct a LINCing picture S elf-test

Term	Lincing story	Lincing picture	Essential definition
Manifest Destiny Sounds like Man	The man's <u>destinity</u> was to <u>own the whole</u> thing		Belief: US was superior nation - God's will was US to expand borders to Pacific & beyond
Monroe Doctrine ^{Sounds like} money	stop the <u>money</u> from going back to Europe	Stop! Do NOT ENTER	1823 US said Western Hemisphere closed to European colonization; new tries= attack on US
imperialist ^{Sounds like} empire	Create a financial empire by taking over other countries" trade	Your county must sell us bananas at the price we wish to pay cause we control your economy	Someone who favors expanding the size of their country & building an empire
Sphere of influence Sounds like here	Here is my part of China, Keep your business away from here.	Here's my zone. Stay out!	Zones in China economically controlled by European nations (no competition!)
Open Door Policy _{Sounds like} Open door	Open the door to your <u>China</u> store & _ <u>let others trade</u> here too	No admittance (except British!) "Hey, let me trade too & you'll make more \$\$\$"	British controlled trade, but US wanted to open it to all countries so everyone would benefit
List the parts © 2000 Edwin S. Ell	ndicate a reminding word	Note a lincing story Construct	a lincing picture S elf-test

The figure below shows how the LINCS devices can be recorded on note cards.



HOME USING GRAPHIC ORGANIZERS EXAMPLES & EXPLANATIONS

The LINCS Strategy Steps

A "strategy" is a systematic plan of action for effectively and efficiently solving a problem. It involves both decision making and action plans. The process associated with a specific strategy can often be communicated in a series of steps. Since each step represents a key action the learner takes while implementing the strategy, the most effective strategy steps begin with verbs to signal action. Many students use the steps as a means for facilitating selfinstruction regarding what to do while performing the strategy.

The strategy steps for creating and using LINCS devices are as follows:

List the parts * List the new term * list the essential parts of the new term's definition **Indicate a Reminding Word** * sounds like part of the new term * is a familiar word with a meaning you know **Note a Lincing Story** * helps you remember the definition * always contains the Reminding Word



As a form of advance organizer, the teacher may use the LINCS steps for the lesson. Here, the steps might be listed on the board or provided as a handout. Then, as the teacher moves through the lesson and begins each new step of the process, the teacher can refer to the steps to help students maintain a sense of where they are in the lesson and the focus and intent of the current instruction.

To remember the five LINCS steps, you can use the acronym **LINCS** created by the first letters of the steps. Since the word **LINC** describes the process of linking new information to background knowledge, students readily associate the steps with the process of constructing and using LINCS memory devices. Some students use the steps to help them recall what they need to do as the LINCS devices are constructed.

Teachers have found that the acronym helps them guide their students through the process of creating a LINCS device, so that their students can eventually construct the devices on their own.

> HOME USING GRAPHIC ORGANIZERS EXAMPLES & EXPLANATIONS