# **Gabe Jenkins**

9<sup>th</sup>/10<sup>th</sup> Grade Biology

Biology Lesson Plan: Aphasia: Losing Your Voice

Dr. Jamal Cooks

# Aphasia: Losing Your "Voice"

**Objective:** Students will be able to define aphasia as a loss of communication ability and describe the behavioral manifestations of two forms of aphasia—Wernicke's aphasia and Broca's aphasia. In addition, students will communicate—both in writing and spoken word—their aphasic-translated versions of song lyrics.

## **Instructional Materials:**

Teacher brings:

- 1. LCD Projector hooked up to an internet-connected computer.
- 2. Class set of handout copies of the content from this link: http://serendip.brynmawr.edu/bb/neuro/neuro99/web1/Xiong.html
- CD player
- 4. CD: The Roots' "Things Fall Apart", featuring single "You Got Me"

## Students bring:

- 1. Classroom writing journals
- 2. A pencil

## **Special Considerations:**

- 1. Students may originally think that aphasia is funny: it is very important to impress upon students the extraordinary frustration that aphasics suffer.
- 2. The performance portion of the class at the end requires that the teacher prepare students for the performances, in order to ensure that the subject is taken seriously.
- 3. The song lyrics do contain profanity, which should be quickly addressed before passing out the lyrics.

## **Procedures:**

Time	Teacher	Students	Learning/literacy
(min.)			Strategies/modalitie
			s addressed
3	Take Attendance while students do the "DO NOW"	Write down	Written literacy
	exercise: "Think back to the last time you really, really	their thoughts	
	wanted to say something to someone, but couldn't	in their	
	(either because you were scared, or because you	journals.	
	decided it wasn't a good idea, or because you'd get into		
	trouble). Describe your emotions as you remained		
	quiet."		
2	Teacher gathers responses, and listens as students	Students	Oral literacy
	complain about the frustration.	respond.	

2	Teacher explains that the subject of today's lesson is aphasia—the lack of communication ability in various forms. Teacher passes out handouts of content from this link, while using the LCD projector to project this content onto a screen for all to see: <a href="http://serendip.brynmawr.edu/bb/neuro/neuro99/web1/Xiong.html">http://serendip.brynmawr.edu/bb/neuro/neuro99/web1/Xiong.html</a>	Students listen	
15	Teacher leads a Reading Apprenticeship reading/analysis of this article.  a. Work together on pre-reading the article b. Reading topic sentences c. Trying to create our own headings d. Ultimately re-outline the document  It is during this session that the key academic ideas are discussed with students. These issues include the causes of aphasia (most often damage to the brain), as well as symptoms, and risks.	Students participate in reading/ analysis of the article. Students ultimately create an outline of the article in their journals.	Reading literacy is addressed meaningfully, as students learn how to cope with/master a scientific article that at first seems challenging.
5	Teacher asks students to explain Broca's & Wernicke's aphasias, their causes and symptoms. When teacher is satisfied that the key ideas are understood by all, s/he moves on to the next step.	Students listen, and respond orally.	Students increase oral literacy skills by explaining scientific concepts orally.
1	Teacher passes out lyrics to The Roots' single "You Got Me" (see end of lesson plan).	Students re- energize.	
4	Teacher instructs students to listen closely to the words of this song [and then plays The Roots' single "You Got Me"].	Students listen.	
12	Teacher breaks students into pairs (1 minute). Teacher then informs students that they will have 10 minutes to do 2 tasks:  a. Take one verse, and "translate it" into how a Broca's aphasic might communicate it; and b. Take another verse, and "translate it" into how a Wernicke's aphasic might communicate it.  NOTE: In order to receive full credit, <i>students must also translate the profanity out</i> of the song lyrics.	Students translate lyrics into aphasic version, writing this translated version in their classroom journals.	Forcing students to translate the lyrics strongly encourages reading literacy skills, because they can't translate it unless they understand both the lyrics themselves, as well as the symptoms of the aphasias.
8	Teacher offers extra credit to any 2 groups of two students who volunteer to perform their translations before the class	Students present their translations orally before the class.	Reading & oral literacy skills are encouraged in the performance of the translations.
1	Teacher takes vote on which was the most accurate translation	Students vote.	The vote allows teacher to see if other students understood

		Broca's &
		Wernicke's
		aphasia—in other
		words, a quick in-
		class assessment of
		the success of the
		lesson.
2	Teacher explains homework assignments:	
	a. Translate the last of the 3 verses into either	
	Broca's or Wernicke's aphasia version; and	
	b. All of us in this room are fortunate enough to be	
	able to voice our opinions & thoughts. With this	
	in mind, think of 1 thing you would like to say	
	to someone about any topic at all, and write a	
	paragraph explaining what you'd say.	
	c. Then translate this into a Wernicke's version.	

Sample Student Products: As a result of this lesson, students will produce:

- 1. In-class written assignments:
  - A. Outline of the online article of Broca's & Wernicke's aphasia.
  - B. Translate two verses of lyrics from the song into Broca's & Wernicke's versions
- 2. Homework assignments:
  - A. 15 points:
    - i. 5 points: Translate the last of the 3 verses into either Broca's or Wernicke's aphasia version; and
    - ii. 10 points: All of us in this room are fortunate enough to be able to voice our opinions & thoughts. With this in mind, think of 1 thing you would like to say to someone about anything, and write a paragraph explaining what you'd say. Then translate this into a Wernicke's version.

**Assessment:** Journal responses are monitored, and checked for appropriateness in-class; more thorough inspection of student's outlines takes place during periodic binder checks.

The in-class written assignments can receive a maximum of 15 points, broken down as follows:

- □ 10 points for creating a structurally sound, well-organized, and semantically meaningful outline of the online article. Fewer points will be awarded, if any of these aspects is subpar.
- □ 5 points for the translations, with 5 extra credit points for performing before the class.

The homework assignment can receive a maximum of 15 points, broken down as shown above.

**Reflections:** By this time in the year, students should be used to Reading Apprenticeship reading days. Consequently, I would hope that students would easily slip into the assignment, and successfully demonstrate a confidence about approaching a scientific text other than their textbook. Also, I think it will be very important to pre-discuss students' reactions to the spoken word performances at the end of class, to help students approach the subject seriously, and not just giggle.

**Literacy Aspect:** There are several different forms of literacy addressed in different facets of this lesson:

- 1. Reading skills are practiced via the Reading Apprenticeship analysis of the online text.
- 2. Written literacy skills: Students will need to produce scientifically accurate translations of song lyrics.
- 3. Oral literacy skills. Several students will practice their oral literacy skills by performing their aphasic translations of song lyrics.
- 4. General academic literacy skills. Again, although this skill does not fit easily into a category like "written" literacy or "oral" literacy, students must learn key academic skills, such as academic research skills. In this regard, students will practice their academic writing skills, particularly as they relate to research and note-taking, as students create a detailed outline of the online text. Gaining a fluent understanding of these processes represents, in my opinion, a form of literacy.

Artist: The Roots f/ Erykah Badu, Eve

Album: Things Fall Apart Song: You Got Me

Chorus: Erykah Badu (repeat 2X)

If you were worried 'bout where I been or who I saw or what club I went to with my homies baby don't worry you know that you got me

(Black Thought)

Somebody told me that this planet was small we use to live in the same building on the same floor and never met before until I'm overseas on tour and peep this ethiopian queen from philly taking classes abroad she studying film and photo flash focus record said she workin on a flick and could my click do the score she said she loved my show in paris at Elysee Montmartre and that I stepped off the stage and took a piece of her heart we knew from the start that things fall apart, intentions shatter she like that shit don't matter when I get home get at her through letter, phone, whatever let's link, let's get together shit you think not, think the Thought went home and forgot time passed, we back in philly now she up in my spa tellin me the things I'm tellin her is makin her hot startin buildin with her constantly round the clock

#### Chorus

#### [Black Thought]

and keep tellin me

now she in my world like hip-hop

Yo. I'm the type that's always catchin a flight and sometimes I gotta be out at the height of the night and that's when she flip and get on some 'ol

#### [Eve]

Another lonely night

seems like I'm on the side you only loving your mic I know you gotta get that paper daddy keep that shit tight

but yo I need some sort of love in my life, you dig me while politicin with my sister from new york city she said she know this ball player and he think I'm pretty

Psych, I'm playin boo, you know it's just wit you I'm stavin boo

and when cats be poppin game I don't hear what they

sayin boo

when you out there in the world, I'm still your girl with all my classes I don't have the time for life's thrills

so when you sweatin on stage think of me when you

and don't be listenin to your homies they be leavin you

[Black] Yeah, so what you sayin I can trust you? [Eve] Is you crazy, you my king for real [Both] But sometimes relationships get ill [Eve] No doubt

#### Chorus

[Black Thought]

Thet snake could be that chick and that rat could be that cool cat that's whispering "she tryin to play you for the fool Black"

if something's on your chest then let it be known see I'm not your every five minutes all on the phone and on the topic of trust, it's just a matter of fact that people bite back and fracture what's intact and they'll forever be I ain't on some "oh I'm a celebrity"

I deal with the real so if it's artificial let it be I've seen people caught in love like whirlwinds listening to they squads and listening to girlfriends that's exactly the point where they whole world ends lies come in, that's where that drama begins, she like