

# Stroke

## THE NUMBER THREE KILLER IN NORTH CAROLINA

Your tribe must survive stroke by using the tools of education and action.

**Your challenge** is to create an educational power point about stroke.

## Survival Plan: Brain Attack

By Bob Abrahamson  
Alamance Community College

### Before Beginning

- Level:** My intermediate ESL students carried out this survival plan (aka project plan). It is better suited for intermediate or advanced students.
- Objectives:** By contributing to a PowerPoint presentation, students will demonstrate that they
- understand the meaning of a stroke,
  - have learned some ways to manage the risk of a stroke occurring,
  - can use English conversation and listening skills on the topic of stroke.
- Time:** Our class meets twice weekly for three hours per session. We completed this project over four consecutive sessions by using half of each class, or a total of six hours.
- Resource:** For this project you need a health educator from your community who will speak to your class, show suitable illustrations, utilize appropriate medical teaching models, and take students' blood pressure readings.

## Education and Action

### Essential Questions:

What is a stroke and what can we do to prevent it from happening?

### Guest Speaker:

A Registered Nurse from the local Health Department came to visit our classroom for our opening lesson and talked about what a stroke is and what leads up to a stroke. She brought props of clogged arteries as well as two-dimensional pictures to help students visualize what she was talking about. We passed the pictures and props around the room so students could see and touch them.

At appropriate times during the speaker's presentation, students could ask questions to keep their understanding in line with the RN's explanations. We had additional Question and Answer opportunities after the blood pressure readings (below) were finished.

### Blood Pressure Readings:

Our speaker took all students' blood pressure readings and gave each person a card with his/her name and blood pressure results. She advised/encouraged those with high blood pressure to seek a follow-up visit at a clinic.



### Follow-Up Discussion:

Students communicated their own experiences with stroke, telling about people they know who suffered from stroke and even sharing situations involving close family members. This was an excellent opportunity for exchanging ideas and thoughts in English.

### Skill-Building (spelling, pronunciation, usage):

In each of our class sessions on stroke, I wrote on the board the important words that came out of the material and out of our own discussion. This enabled students to see and write down the correct

spelling. Our primary vocabulary words for this project are given below. We sought the simplest possible definitions.

- **Clot** - *clump or mass of cells that stops blood flow*
- **Vessel** – *tube-like structure that carries blood through the body*
- **Brain** – *a body part inside the head that controls thinking, memory, emotion, action*
- **Stroke** *a brain attack: a clot stops blood flow to the brain or a blood vessel bursts in the brain*
- **Heart attack** – *death of heart muscle when blood supply is stopped, usually by a clot*
- **Artery** – *large vessel that carries blood away from the heart*
- **Vein** – *small vessel that carries blood to the heart*
- **Blood pressure** – *how hard your heart must pump to move blood through your body*

We discussed the meaning of these words, and we also talked about many aspects of stroke in order to clarify student understanding and facilitate communication in English. Eventually we expanded our vocabulary associated with stroke to include more words and phrases:

- **Numbness** – *lack of feeling*
- **Dizziness** – *lightheaded, spinning feeling*
- **Confusion** – *lack of clarity, order, or understanding*
- **Blockage** – *something that prevents blood from flowing*
- **X-Ray** – *a photo of inside the body*
- **Emergency** – *a need for help right now*
- **Seek medical attention** – *see a doctor*
- **High blood pressure** – *more than 120/80*
- **Low blood pressure** – *90/60 or lower*
- **Normal blood pressure** – *between 90/60 and 120/80*

In every class, we used the identified vocabulary for spelling practice, pronunciation practice, and sentence writing. A sample of student sentences is shown on the following page. Students' spelling and grammar have been preserved.

***If you have a stroke, you most see the Doctor.***  
***I have been normal blood pressure in this week***  
*Maria del Carmen Garcia*

The veins of my body are blue.  
My father died because he had a heart attack.  
*Migdalia Miranda*

When the Blood pressure is too high it will cause a stroke in the Brain.  
If you have high cholesterol your vein will be blocked.  
*Carmen G. Irizarry*

***I feel my Brain, work slow today.***  
***The artery is one of the bigger carries of blood, in our body.***  
*Tobias Henriquez*

*My friend had a heart attack last week.*  
*All the little babies have a delicate brain when they are born.*  
*Maria H. Reynoso-Garcia*

***the Doctor said I have a block clot.***  
***Sometimes I have high Blood pressure.***  
*Blanca Henriquez*

### **Oral Quiz**

The students themselves came up with the questions that we used for an oral quiz to check their comprehension. Examples of their questions follow:

1. What is a stroke?

2. What is an artery?
3. What is a heart attack?
4. What is the difference between a stroke and a heart attack?
5. What is blood pressure?
6. What is considered good blood pressure?

### **Creating the Power Point:**

Most of my students have had little contact with computers, so I did a brief demonstration to show how PowerPoint works. Afterward, using the information we learned in our previous classes, we developed a class PowerPoint on stroke.

We began by once again going over the material from the previous sessions. This was beneficial to all, but especially for some students who were absent during one or both of those classes and could gain some valuable knowledge about what had taken place. I showed (internet) pictures of (1) clot, (2) heart attack, (3) blood pressure, and (4) arteries. Our discussion on these stroke topics created English conversation that led into organizing our ideas for the PowerPoint content.

As the session went on, I grouped the students, giving each small group the responsibility to write the content for a PowerPoint slide. I chose a more advanced student to help lead each group, and the less advanced participated in their groups as much as possible. I remained available to help in the development by answering questions and giving ideas for organizing the format. This part of the project gave students another excellent time to work on sentence structure and pronunciation skills.

Our PowerPoint went through several iterations, which I typed on PowerPoint slides for the class. I elected to make corrections in spelling and grammar in the final product.

## **Results**

### **We Met Our Challenge!**

The class PowerPoint accompanies this project.

**Project Follow Up:**

Our plan is to share our PowerPoint with another ESL class and let their instructor use our work in creative ways to encourage and develop further English language skills and spread health information about stroke.

**Teacher Observations:**

- There was tremendous interest in this topic and students were attentive throughout.
- Students were very interested in handling the props and in actually having their own blood pressure taken.
- Students learned that a stroke and a heart attack differ with regard to where they occur.
- Students shared moving personal accounts of family members and some individual situations regarding stroke.

**Notes for the Future**

- Have/help students develop a narrative for conversation to be acted out by the students.