I. Introduction to Process
II. Brainstorming
III. Team Development – working with faculty
IV. Project Research
V. Networking with community
VI. Project Development
VII. Initial Proposal
VIII. Project Implementation
IX. Skill Building
X. Team Dynamics and Problem Solving
XI. Finishing Project
XII. Project Presentation
XIII. Final Report

The EMPACTS Process: The Whole Thing
We are going to discuss the risk factors when using a cell phone.
Briefly going over some key factors that may impact one's own health and safety.

- Car accidents
  - Talking
  - Text Messaging
- Radiation
- Loss of hearing
# Top 7 Highest-Radiation Cell Phones

<table>
<thead>
<tr>
<th>Manufacturer and model</th>
<th>SAR (Specific Absorption Rate) level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorola V195s</td>
<td>1.6</td>
</tr>
<tr>
<td>Motorola Zine ZN5</td>
<td>1.59</td>
</tr>
<tr>
<td>Motorola Rival</td>
<td>1.59</td>
</tr>
<tr>
<td>Kyocera Jax S1300</td>
<td>1.55</td>
</tr>
<tr>
<td>Motorola VU204</td>
<td>1.55</td>
</tr>
<tr>
<td>RIM BlackBerry Curve 8330 (Sprint)</td>
<td>1.54</td>
</tr>
<tr>
<td>RIM BlackBerry Curve 8330 (U.S. Cellular)</td>
<td>1.54</td>
</tr>
</tbody>
</table>

**Fact:** The average SAR from these 7 Cell Phones is 1.57
1. Define the word “Community” as we will use it in this project: *Cell phone users not only in our hometown, but around the world as well.*

2. List ways our project will benefit the “Community”: *Raise awareness to all cell phone users and try to reach out to others who are guilty of these actions; talking and text messaging while driving.*
Methods

Discuss the methods you think you might use to carry out your project:

- Putting visuals around campus
- Northwest Arkansas Community College website
- Word of mouth
What kind of data did we collect while we conducted our project? *Statistics, Surveys, Interviews and Reports*

How did we collect the data: *Research*

What types of charts and graphs will we make from our data? *One Table and Pie Chart*

What two locations will we use in Google Earth so that we can find the distance between: *Northwest Arkansas Community College and Walmart (Store 1)*

[http://jan.ucc.nau.edu/~cvm/latlongdist.html](http://jan.ucc.nau.edu/~cvm/latlongdist.html)
<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 7, 14, 21 and 28</td>
<td>Gather Information as a team</td>
</tr>
<tr>
<td>November 4 and 11</td>
<td>Put everything together as a team</td>
</tr>
<tr>
<td>November 18</td>
<td>Finalize the Project</td>
</tr>
<tr>
<td>November 25</td>
<td>Finished</td>
</tr>
</tbody>
</table>
DIVISION OF LABOR

- Heather Bartholomew - Gathered information and put together the project
- Ana Ramirez - Gather information and statistics
- Jamie McCain - Gather information and statistics
- DC True - Gather information and data
- Todd DeLozier - Gather information and research all areas
What technology we used to conduct our project? *Computer, PowerPoint, Internet, Cell Phones, Data and Statistics.*

What technology we used to create our final power point and to gather and analyze our data? *Computer, Internet, Cell Phones, Data and Statistics.*
COMMUNITY CONTACTS

- Who will be your contacts outside of class?

  People of the Community

- Who will tell you what you need to know and give you permissions you need to conduct your project?

  Considering we are finding all of the information to complete are project; we are heavily relying on each other and of course our community. No approval is truly necessary.

List their names, their jobs, their titles, their phone numbers and their email addresses (include yourselves and your instructor).

Heather Bartholomew, Ana Ramirez, Jamie McCain, DC True and Todd DeLozier, students

Marjorie Whitmore, Instructor
Skills Developed

Mathematics
  Learned to think mathematically, and use core concepts of class.

Oral and Written Communication

Working with Peers
  Team Building
  Cooperation
  Responsibility

Time Management and Organization

Networking
  Within and Outside the NWACC Community

Overall Professional Enrichment
  Academia
  Technology
  Service to the Community
What do you expect the results of your project to be?

- For others to be able to take knowledgeable information away from the project.
- Feel a sense of a accomplishing a primary goal.
PREVALENCE OF CELL PHONE USE AMONG DIFFERING AGES

- 20-30 years: 32
- 30-40 years: 12
- 10-20 years: 28
- 40-50 years: 0
According to the Pittsburg Post Gazette, ten years ago there were 34 million cell phone users in the U.S. Now there are over 203 million.

An estimated 73% of all cell phone use occurs while driving. That means the at any given minute in the United States 10% of all drivers are using cell phones.
A study done by faculty at the University of Utah compares the hazards of driving while talking on a cell phone, driving while legally intoxicated and a control.

The study used 40 participants and found surprising results. They used a driving simulator where the participants had to follow a pace car on a busy road. The study found that people talking on their phones braked slightly slower and used less force when pushing the brake than drunks or the control, followed at a greater distance and took longer to get back up to original speed after braking than either. Also only 3 accidents happened, all of them by subjects talking on cell phones. The study also found there were no differences in the data when hands free devices were used.