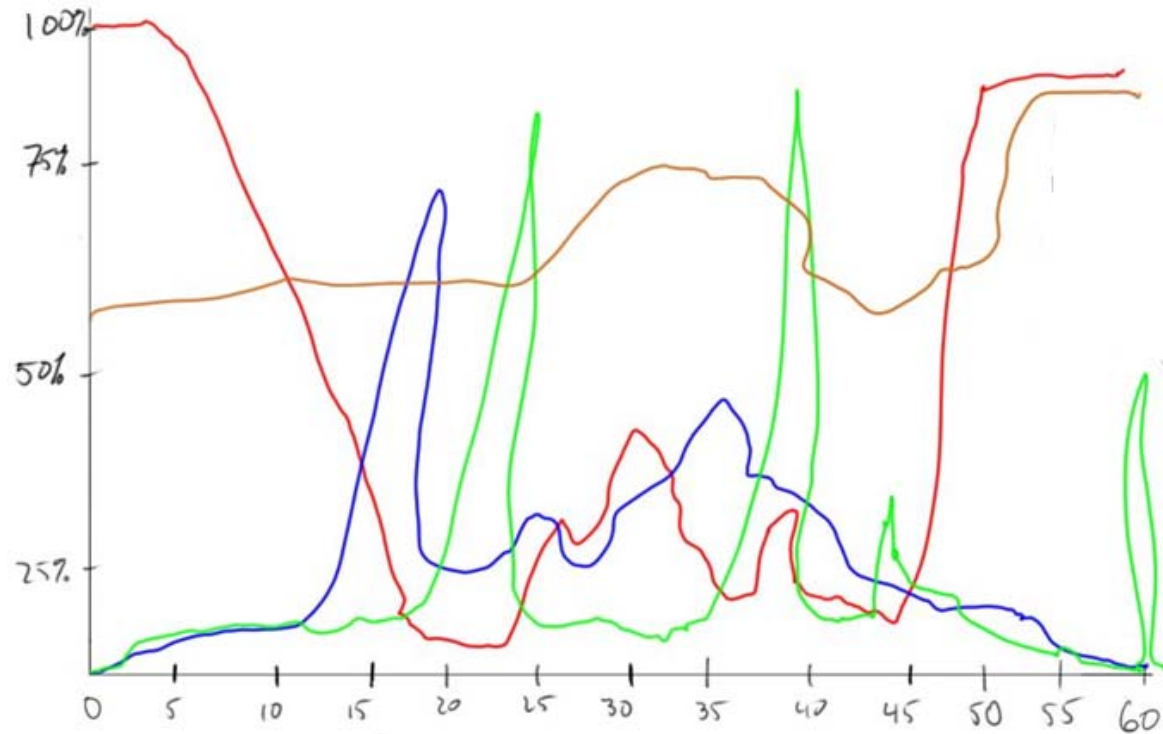


Project Conceptual Design Presentation -how to engage with audience



VIP Team Presentation

Charles Kim – Howard University
ckim@howard.edu

Presentation Event



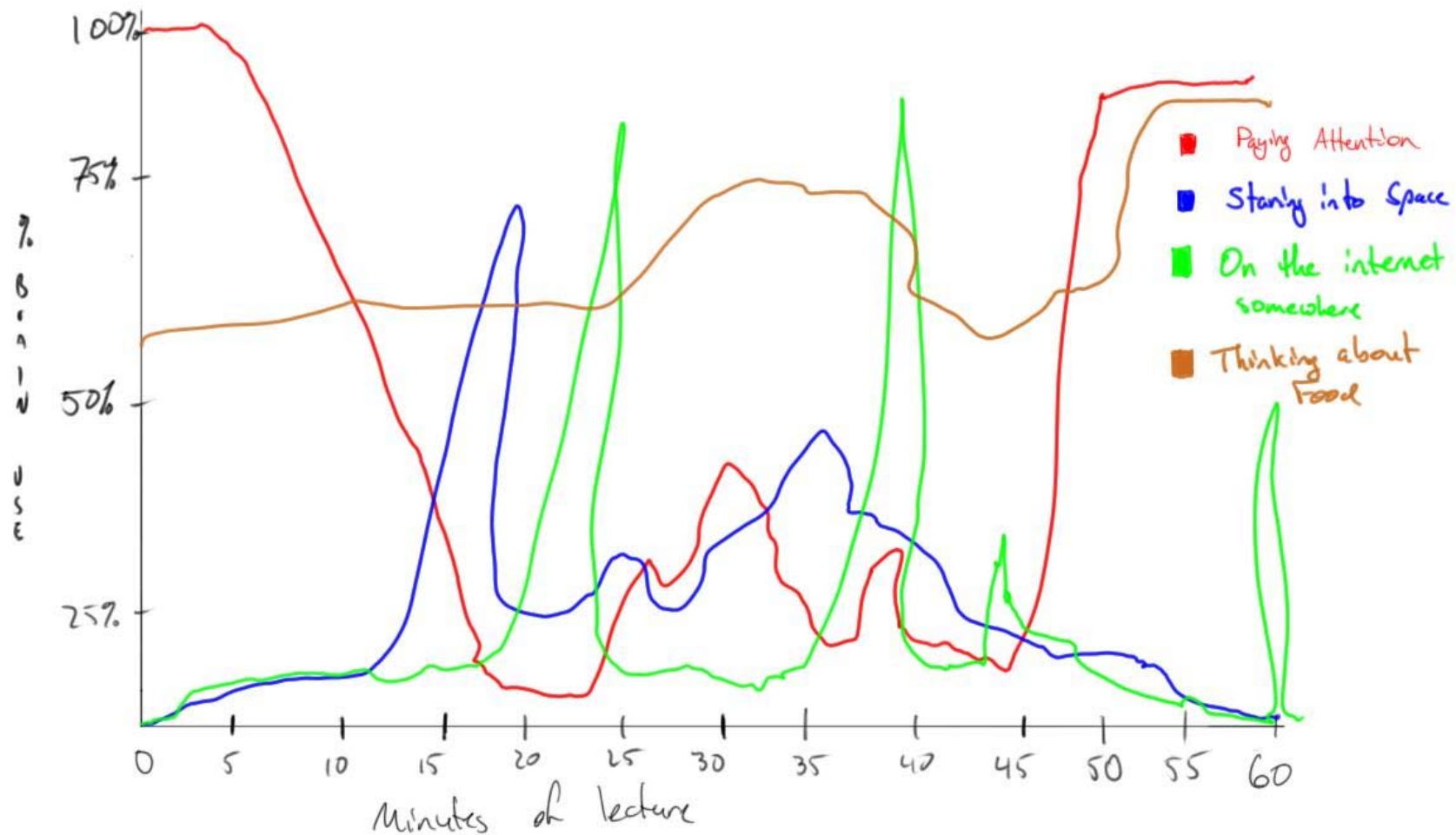
Charles Kim – Howard University

VIP Team Presentation

- Background
- Why: Needs and demands
- What: Problems and Current Status of Arts
- How: Conceptual Designs for Solution
- When: Plan for this and next semester & Progress Made so far
- Who: Team members in charge
- Conclusion: summary

How do we present better?

Attention Span



Big Difference between Written Report and Oral Presentation - 1

- Pace
 - Written Report:
 - Readers have freedom
 - own pace
 - control the amount of time
 - Read parts and change order
 - Oral Presentation:
 - Listeners have no freedom
 - must keep up with the speaker
 - no control over the time and topic

Big Difference between Written Report and Oral Presentation - 2

- Content and Order
 - Written Report:
 - Readers can scan, reread, refer from text to illustrations and back, or stop to consult another text or a dictionary
 - Oral Presentation:
 - Listeners depends on the speaker making everything clear and in logical sequence
- Feedback
 - Written Report
 - No quick feedback to writers
 - Oral Presentation
 - Immediate Feedback to presenters

Big Difference between Written Report and Oral Presentation - 3

- Length:
 - Written Report
 - vary substantially
 - Oral Presentation
 - carefully planned not to exceed the pre-established time allocated
- Nonverbal Cues
 - Written Report
 - less dependent on nonverbal cues
 - Oral Presentation
 - Strong role of body language, tone, and other nonverbal cues

Body Language -- Is this true interpretation?

BASS/SCHULER
entertainment

IT'S WHAT YOU **DON'T SAY** THAT COUNTS!



LEARN TO **READ AND INFLUENCE** PEOPLE THROUGH
NONVERBAL COMMUNICATION.

3 dimensions of Oral Presentation

- **A. Content**

- Correct delivery of key messages
- Know your subjects
- Do your homework
- 3 phases
 - Tell what you are going to tell (Outline) “Signpost”
 - Tell (Main Body) “Present” + [* Optional --- “Entertain”]
 - Tell what you just told (“Recap” & Conclusive Summary)

- **B. Visuals**

- “Everything on a slide must contribute to its purpose”

- **C. Delivery**

- Effective Presentation

A. Presentation Content

- Outline early, Summarize the key points at the end
- Necessary amount of information to convey message – Important highlights
- Hold audience interest:
reinforce the motivation for the work being presented.

VIP Team Presentation Content -- Outline

- For each team
 - “We have a project.....
 - We do this project because... {**background**, need, demand, importance, etc}
 - In plain English, this is the **problem** statement of the project
 - In technical terms, this project aims to satisfy the following **requirements**...
 - So we worked and came up with a few initial **conceptual** designs, and analyzed them and selected the best one
 - And this is the **final design** which has this hardware structure and software blocks
 - We plan to realize this final design into reality with the following timelines and **implementation plans**
 - And so far, we have made THIS much of **progress**
 - In conclusions, the project

Conceptual Design Presentation Format - 1

- **Cover (1 slide)**
 - Title and Members
- **Background (2 slides)**
 - Background of the project (industry, technology, customer, etc)
 - Needs and demands in customer's point of view
- **Problem Formulation (2 slides)**
 - Refined Problem Definition in Engineering point of view
 - Design Requirements:
- **Current Status of Art (1-2 Slides)**
 - Prior art and available technology, weakness, etc
- **Solution Approaches (4 - 5 slides)**
 - Overall introduction of the technology field (with system level schematics) and summary of the alternative solution ideas
 - Explanation of the first and major conceptual design approach (why this may work)
 - Explanation of the other conceptual design approaches
 - Top Design Selection process

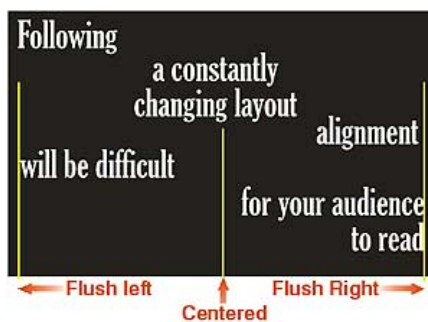
Conceptual Design Presentation Format - 2

- **Implementation Plan (1 - 2 slides)**
 - solution implementation
 - Timelines and milestones
- **Progress Made This Semester(1-2 slides)**
 - Deliverables
- **Costs and Resources (1 slide)**
 - Rough budget
 - Resources available and resources needed
- **Conclusion (1 slide)**
 - Crisp and clear summary of the proposal

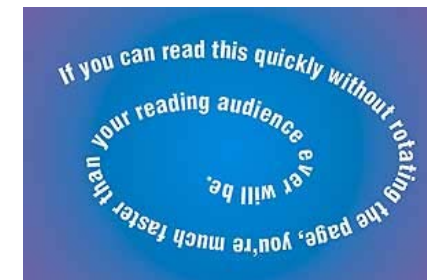
B. Presentation Visuals

- Slides for Presentation Assistance
 - One nice figure is better than a thousand words.
 - Discrete, not continuous: **Bullet Items**
 - Much more visually-oriented
 - Layout and Appearance are critical
 - **Slide Storyboard**

Too many fonts spoil THE DESIGN



**USING ALL UPPERCASE
ALL THE TIME
MAKES TEXT
REALLY HARD TO READ**



Storyboard

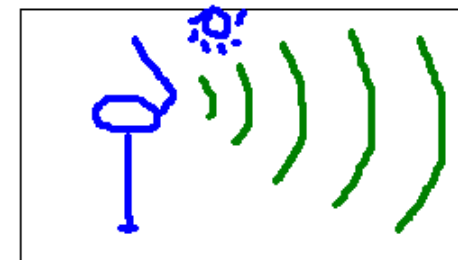
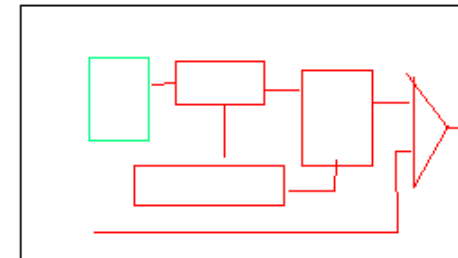
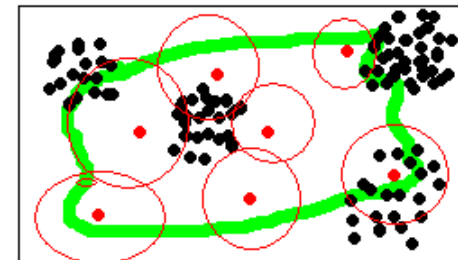
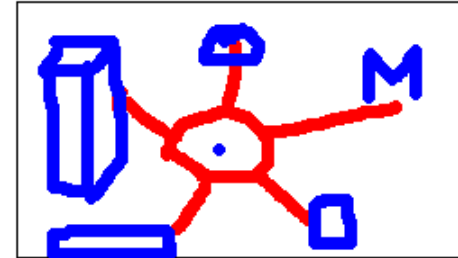
- **What is a storyboard?**
 - “a series of diagrams that are used to depict the composition of a video segment (oral presentation)”



Storyboard Steps for Presentation

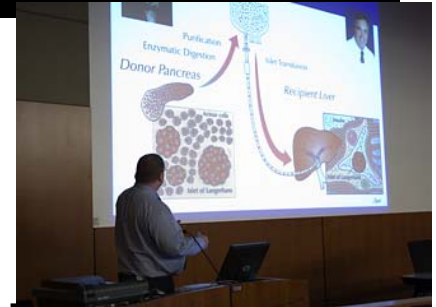
- **Steps in storyboarding**

- Develop a **rough story line** of presentation
- Plan number **figures** to summarize the story (“project”)
- Printout **each figure** following the story line one **a separate sheet of paper** and assemble into a storyboard
- See if you can **make out the “Project story”** from the figures.
- Add, delete, and revise figures and **bullet points** to support the **overall theme**
- **THEN**, add texts
- Add more slides if necessary



Tips for good Visuals

- Start from storyboard
- Begin from the objectives of presentation
- Determine the purpose of each slide
- Make sure that everything on the slide contributes to its purpose
- No more than 2 ideas per slide
- Replace a text-dominated slide with a simple figure with legend
- Bulleted lists (with **big font size**)
 - Show contents without writing complete sentences
- Spell out acronyms and abbreviations
- Avoid unnecessary animation – use only that assists the clarity of presentation
- **NOTE –Visuals are an aid to the presentation. So you have to be able to talk and present even without the aid.**



Bad Slide Example

Background

- Who:
The requirements for this project have been principally set by Northrop Grumman NGC.
- What:
Design of the Grid-Eye Sensor System will detect both the position and the intensity of the heat radiated by the surface of either a single or multiple targets.
- Why:
Northrop Grumman will thus have the choice to utilize the finished product for commercial and military purposes as they see fit in satisfying their needs.

Bad Slide Example

BACKGROUND

The foundation and idea of the project was conceptualized by the previous senior design group, who were not able to fulfill their list of robotic tasks due to time constraints. However, we have been tasked to further build on their work by not only fulfilling their list of requirements, but also adding our own robotic tasks as well. With that being said, the idea of an autonomous robot appealed to the group.



Bad Slide Example

Conclusion

Overall after assessing the situation, we have decided that creating this robot would be beneficial because its completion can assist its user in a great deal. It does not have a need that is substantially large however since convenience is an aspect that humans strive for on a daily basis this will prove to be a worthy device to purchase. From the design requirements that we mapped out, to the price that it is going to cost this device can be constructed and be fully functional by the project completion date.



Good Slide Example

Background

∞ 284M people visually impaired, 39M blind

∞ Limitations and challenges

- Lack of surrounding awareness
- Lack access to information

∞ Customers needs

- Reliable navigation assistance
- More accessible information
- Other PDA like functions: calendar, planner, clock

MORE INDEPENDENCE, BETTER LIVING!

Good Slide Example

Background

How do people ensure they have all items needed for an event?

REMINDERS



CHECKLISTS



How is monitoring and identification done in our society today?

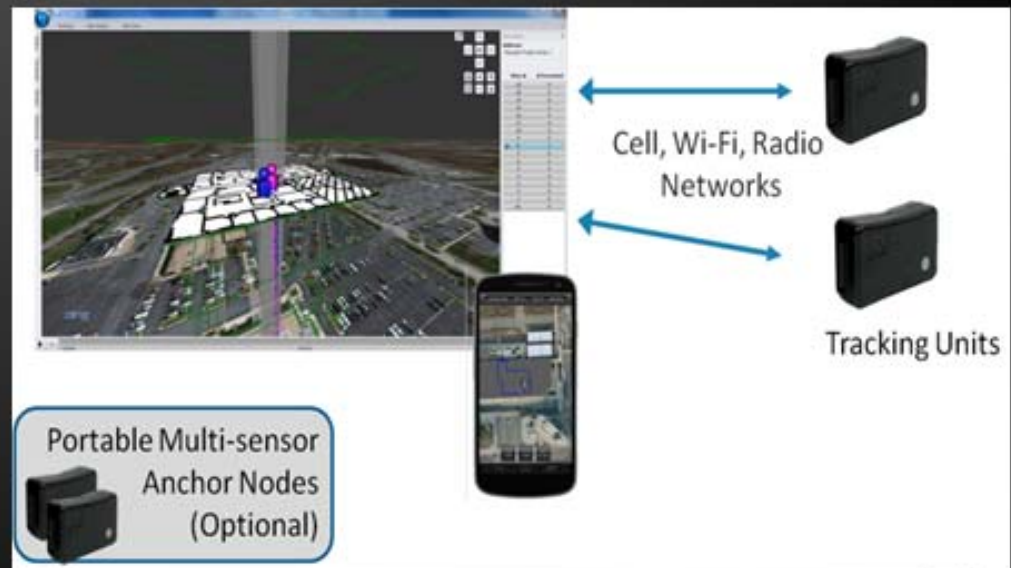
- **RFID TECHNOLOGY**
An RFID system consists of
Reader
Transponder or tag



Good Slide Example

HOMING DEVICE: IPS

- Indoor Positioning System
- TRX Systems
- NEON Indoor Maps
 - Bluetooth (Radio)
 - Wi-Fi
 - Cellular

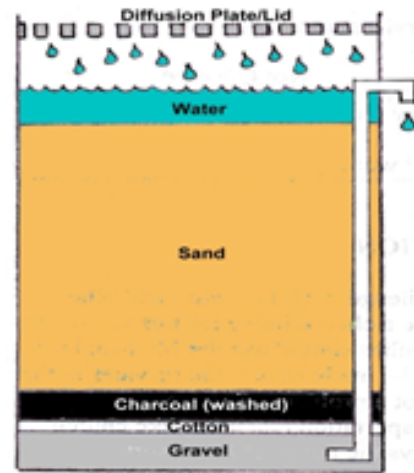


Good Slide Example

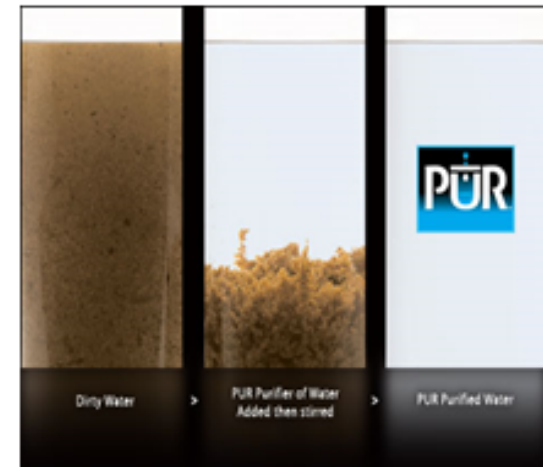
Current Status of Art



Solar Distillation



Biosand Filters



Chemical Tablets

Drawbacks:

Biosand Filters - Timely process, Limited to the amount of use per day

Solar Distillation - Water bottles have to be present

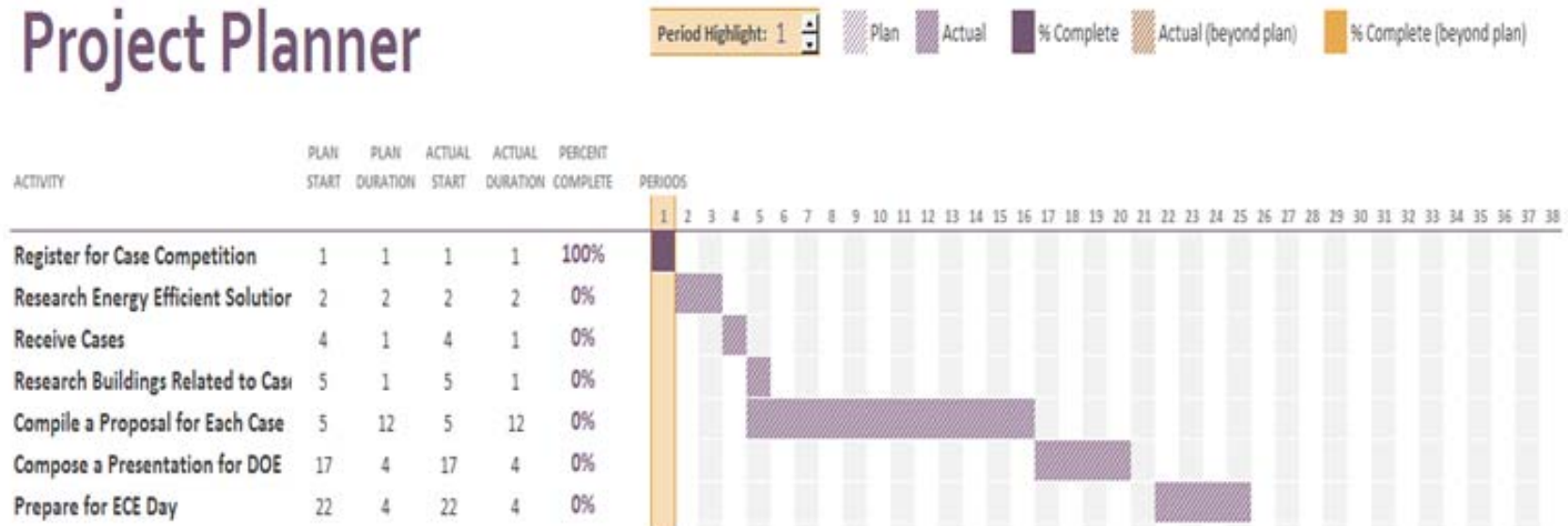
Chemical Disinfection - Supply of chemical tablets must be present

Methods do not use a technical approach

Good Slide Example

Project Management

Project Planner



C. Presentation Delivery

- Remember “You are better presenter than you think”
- Present in a relaxed, yet professional way
- Convey precise technical information clear to audience
- Practice, Practice, and Practice



Delivery Tips - Voice

- Avoid reading slides word for word
- Project your voice and keep your head up and speak so that those in the back of the room can hear you
- Speak at relaxed pace
- Avoid repeat sayings: “**basically**”
- Maintain precision
- Use complete sentences when speaking and avoid pausing for too long
- Strong and Impressive Conclusion

Delivery Tips – Posture and Body Language

- Maintain Eye Contact with audience
 - Pick 3- 4 people in different places, & rotate
- Avoid twitching, swaying, or snapping fingers
- Avoid **your hands in pockets** or crossing arms
- Dress appropriately – Dress Code
- Show enthusiasm – Body Language



Dress Code for Project Conceptual Design Presentation

- Public Presentation (Dec 3): **Business/Smart Casual**



www.thedressreview.com

CASUAL DRESSES

TOP 3 SUGGESTIONS ABOUT
WHAT BUSINESS CASUAL
DRESS TO WEAR

Delivery Tips – Answering questions

- Cannot be fully planned ahead of time
- Try to anticipate questions
- Advice for handling questions effectively
 - Make sure you understand the question
 - Knowledgeable humility is the best ally
 - Avoid belittling question asker
 - Use questions as a means of clarification
 - Learn from the questions
 - If you don't know the answer, say so.
- Repeat the question, in a large room, so that everyone knows what it is



Charles Kim – Howard University

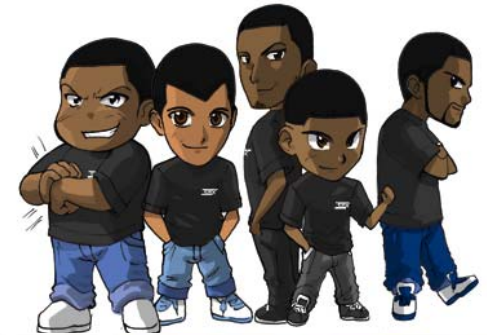
Team Presentation

- **Format**

- Equally divided presentation times
 - First, tell the audience who is going to talk on what
 - Take turns
 - Then, the first person concludes
- Dialogue Style presentation
- Tag team presentation
 - Anchormen and remote correspondents

- **Tips**

- Plan ahead and do practice, a lot.
- Everyone should share the presentation
- Smooth Transition from a presenter to another
 - A presenter should wrap up own segment,
 - then build a bridge that links what they said to the next presenter
- Decide Position and Roles in advance
 - how you will position yourselves
 - who will be where and
 - what they will do while another member is speaking?
- Take pains to make sure that
 - everyone in the group is doing his/her share
 - Everyone performs well



Charles Kim – Howard University

Grading Criteria

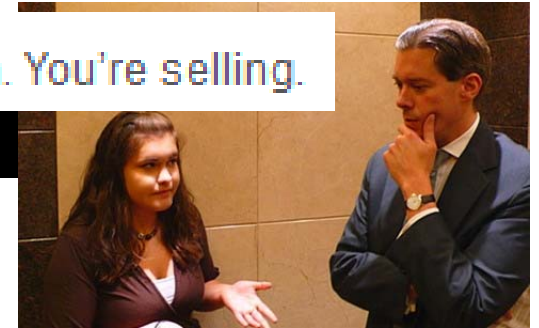
- Presentation: Dec 7 – Dec 11
- Pick your team's presentation time slot [30 minutes] as soon as possible.
- Before you decide, discuss the time with me.
- ASAP.
- We need to complete the scheduling by Dec 4.

Member	Grading Criteria
A. Subject Matter	A1. Clear Description of Subject Matter
	A2. Well defined problem with quantitative standards and constraints
	A3. Sound technical approach
	A4. Clear Objectives, Tasks, and Deliverables
	A5. Well researched Current Status of Art
B. Oral Presentation	B1. Hold audience attention through the presentation with direct eye contact
	B2. Demonstration of full knowledge of the subject
	B3. Effective use of slides and visual aids
	B4. Professional and knowledgeable Q&A
	B5. Smooth transition of team members speaking in different subjects
Total	Total Score

Elevator Speech (or Pitch)

Elevator Speech/Pitch

1. It's a pitch. You're selling.



- The name was actually coined from the idea that we sometimes meet the **important people in our lives** in elevators.
- The odd situation we encounter in most elevators is that nobody speaks to or looks at anyone else, and yet we have a captive audience for that **short period of time**.
- It now develops into a prepared presentation that **grabs attention and says a lot in a few words**.
- By telling your core message, you will be **marketing yourself and/or your business**, but in a way that will make them want to know more about you and your business [and **your project**].

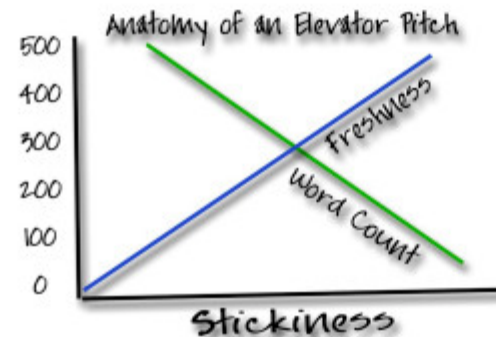
Elevator Speech/Pitch

1. It's a pitch. You're selling.

<https://aggieresearch.wordpress.com/2012/02/21/anatomy-of-an-elevator-pitch-to-the-nsf/>

Anatomy of an elevator pitch to the NSF

Posted on February 21, 2012 | [Leave a comment](#)



Last fall, the National Science Foundation introduced [a new competition for its Engineering Research Centers](#):

"The ERC Elevator Pitch Competition was inaugurated as a means to embed entrepreneurial thinking within the centers, a task that represents a cultural shift within academia, where startup activity is usually not part of the tenure process. The competition featured undergraduates, Masters students, PhDs and post-docs all competing for the Innovation Accelerator-sponsored \$5,000 prize. Though the contestants were all technology students, they had to speak in business terms, some of them for the first time."

The ERC for Revolutionizing Biometallic Materials, led by N.C. A&T, won the competition. Da-Tren Chou, a PhD student in bioengineering from ERC partner the University of Pittsburgh, was the designated pitcher. [Here are the details, as reported by the New Venturist website.](#)

NEWVENTURIST UT

From research to marketplace: the NSF challenges scientists to think entrepreneurially

Posted on February 21, 2012 at 9:05 am



All you get is 90-seconds to communicate your big idea and how it can change the world. That's a tall order for anyone; it's a unique challenge among academic scientists who tend to talk longer rather than shorter, and use technical terms rather than business ones. But turning science into business opportunities is a federal mandate for increasing US global competitiveness. The National Science Foundation (NSF) embraces this directive in many ways, from its [Small Business Innovation Research \(SBIR\)](#) program to the public-private partnership organization, [Innovation Accelerator](#), which works with NSF-SBIR companies. Both programs are focused on commercializing innovations that originate in our great research universities. In November, 2011, the NSF and Innovation Accelerator co-hosted the first-ever elevator pitch competition for scientists from the nation's [Engineering Research Centers \(ERCs\)](#).

The idea was to get scientists thinking about how to bring their technologies into the real world. John Pyrovolakis, founder of Innovation Accelerator, explains the competition origins: "I knew this was something we had to do. Getting the best and brightest from the ERCs to be market facing, even for a few weeks, serves our mission so well that we couldn't resist. Scientists need to be exposed to market drivers and business metrics in order to translate technologies to everyday use."

- The actual pitches and photos can be seen at the ERC program site: http://www.erc-assoc.org/anmtg/meeting_index.htm
- Or Google it

Formula for Composing an elevator speech

- Define your audience universe.
- Define your content or subject matter.
- Define your objective.
- Define your desired image or style.
- Define your **key message**.

micheltriana.com/2012/03/24/startup-pitch-goals-and-other-resources/



The Art of Pitchcraft

Whether you are trying to raise capital, promote your company, or promote yourself, it's essential to have an elevator pitch. You need to communicate your main message quickly, clearly, and distinctly to someone who doesn't even know you. A good pitch takes planning and practice to deliver it quickly, on the spot, and under pressure.

You have **one minute** to say it all.

<http://www.alumni.hbs.edu/careers/pitch/>

Don'ts for Elevator Speech

1. It's a pitch. You're selling.

- **Don't** let your speech sound canned.
- **Don't** ramble. Familiarizing yourself as much as possible with your speech will help keep you from getting off track.
- **Don't** get bogged down with industry jargon or acronyms that your listener may not comprehend.
- **Don't** focus just on yourself: connect with the person you talk to.

Do's for Elevator Speech

1. It's a pitch. You're selling.

- **Do** make your Elevator Speech sound effortless, conversational, and natural.
- **Do** make it memorable and sincere.
- **Do** write and rewrite your speech, sharpening its focus and eliminating unnecessary words and awkward constructions.
- **Do** deliver the important aspects of your project/experiences



<https://brandimpact.wordpress.com/2011/07/>

Speech Preparation - President

State of the Union Speechwriter for Obama Draws on Various Inspirations

By MICHAEL S. SCHMIDT JAN. 19, 2015

The New York Times

WASHINGTON — One night last week Cody Keenan, the chief White House speechwriter President Obama has christened “Hemingway,” knew he needed help.

Mr. Keenan had spent 15 days holed up in a hotel room in Honolulu as the president vacationed nearby, and seven more in a windowless office in the basement of the West Wing trying to turn a blank computer screen into a 6,000-word State of the Union first draft. The lonesome process had finally gotten to him.

So the burly 34-year-old former high school quarterback left his White House office and trudged in the freezing rain to the nearby apartment of one of his closest friends in the administration, Benjamin J. Rhodes.

It was after midnight, but Mr. Rhodes, a deputy national security adviser and the writer of many of the president’s foreign policy speeches, was up reading “To Kill a Mockingbird” to his 4-week-old daughter. The two men poured two single-malt Scotch whiskies and, with the baby resting quietly, began triage on Mr. Keenan’s prose. By 5 a.m., a more succinct draft was on its way to the president.



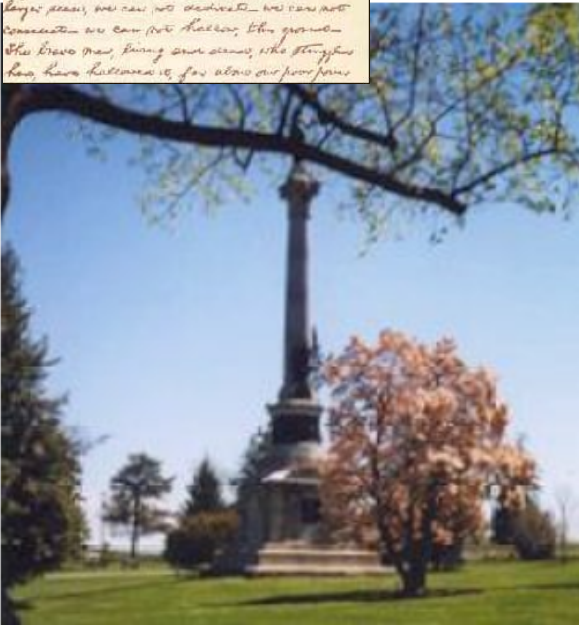
- Preparation

Speech Preparation

LINCOLN'S FIRST DRAFT OF THE GETTYSBURG ADDRESS

Fourteen and seven years ago our fathers brought forth upon this continent a new nation conceived in Liberty, and dedicated to the proposition that "all men are created equal."

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of it, as a final resting place for those who here have given the nation their lives. It is for us the proper occasion to dedicate this ground. We have here the graves of those who here have given the nation their lives.



Soldiers National Cemetery
© Abraham Lincoln Online



The Gettysburg Address

Gettysburg, Pennsylvania
November 19, 1863

On June 1, 1865, Senator Charles Sumner referred to the most famous speech ever given by President Abraham Lincoln. In his eulogy on the slain president, he called the Gettysburg Address a "monumental act." He said Lincoln was mistaken that "the world will little note, nor long remember what we say here." Rather, the Bostonian remarked, "The world noted at once what he said, and will never cease to remember it. The battle itself was less important than the speech."


There are five known copies of the speech in Lincoln's handwriting, each with a slightly different text, and named for the people who first received them: Nicolay, Hay, Everett, Bancroft and Bliss. Two copies apparently were written before delivering the speech, one of which probably was the reading copy. The remaining ones were produced months later for soldier benefit events. Despite widely-circulated stories to the contrary, the president did not dash off a copy aboard a train to Gettysburg. Lincoln carefully prepared his major speeches in advance; his steady, even script in every manuscript is consistent with a firm writing surface, not the notoriously bumpy Civil War-era trains. Additional versions of the speech appeared in newspapers of the era, feeding modern-day confusion about the authoritative text.

- Preparation
- Reading Copy

Elevator Pitch and Employment

Forbes 2/4/2013

The Perfect Elevator Pitch To Land A Job

 Nancy Collamer, Contributor

If you're looking for a job, one of the first tasks on your to-do list should be crafting an ideal "elevator pitch." It's the 30-second speech that summarizes who you are, what you do and why you'd be a perfect candidate.

You should be able to reel off your elevator pitch at any time, from a job interview to a cocktail party conversation with someone who might be able to help you land a position.

Sounds simple enough, right? But condensing of your life accomplishments into a 30-second statement that packs a punch can feel as challenging as trying to stuff an elephant into a Volkswagen Beetle.

I get that. So to help you develop a knockout elevator pitch, I've broken the process down into nine steps:

9 Step Process for a Knock-Out Elevator Pitch

1. Clarify your job target
2. Put it on paper -- Write down everything you'd want a prospective employer to know about you
3. Format it - A good pitch should answer 3 questions: Who are you? What do you do? what are you looking for?
4. Tailor the pitch to them, not you (scrath their back)
5. Eliminate industry jargon
6. Read your pitch out loud
7. Practice, practice, practice (and solicit feedback)
8. Prepare a few variations (you may have only 15 seconds only, and to a substitute)
9. Nail it with confidence (look the person in the eye, smile and deliver your message with a confidence, upbeat delivery)

Elevator Speech Practice → Submission

- Preparation & Execution
 - 1. Know the situation [**Job Interviewer**]
 - **“What is your project about:** N(needs) A (Approaches for solution) B (Benefits to customers) C (Competitors and/or Alternatives)
 - **What’s your specific contribution to the project**
 - 2. Speech writing → Reading Copy
 - 3. Practice, practice, and practice of the speech
 - 4. Memorization and *Ad Libitum* (or Ad-Lib)
 - 5. Practice in your team and get the feedback → build confidence
 - 6. Giving the speech [60 sec] in Video/Audio recording → **Due DEC 9 (F)**



Class Schedule of the Final Weeks

VIP Schedule of the last weeks			
Fall 2015		Howard VIP Coordinator: Dr. Charles Kim	
From	To	For Seniors (in Senior Design Class)	For Other VIP Team Members(EGPP)
11/4/2015 (WED)	11/4/2015 (WED)	Lecture on Alternative Design and Top Design Selection	
11/12/2015 (Thursday)	11/12/2015 (Thursday)	Submission Due - Individual Conceptual Designs + Team Design	
11/19/2015 (Wednesday)	11/19/2015 (Wednesday)	Lecture on Oral Presentation + Elevator Pitch	
11/25/2015 (Wednesday)	11/25/2015 (Wednesday)	Team Activity for Alternative Designs + Analysis of the Design and Top Design Selection (No formal class for Senior Design class)	
12/2/2015 (Wednesday)	12/2/2015 (Wednesday)	Submission Due - Alternative Designs, Ananalysis, and Top Design Selection	
12/2/2015 (Wednesday)	12/2/2015 (Wednesday)	Final Exam (1:10 - 2:10pm)	
12/7/2015 (Monday)	12/11/2015 (Fridayday)	Team Presentation* : Pick a 30-minute time slot for individual team presentation (and notify Dr. Charles Kim). Invite advisors, managers, and others to the presentation	
12/7/2015 (Monday)	12/09/2015 (Wedday)	Submission of (1) Video/Audio clip of 1-minute elevator pitch#; (2) Project Folder + Project Note; (3) Peer Evaluation; (4) Survey	
		* Team Presentation Contents : Problem statement; Current Status of Arts; Design Requirements; Conceptual Designs; Alternative designs+ Analysis+Top Design Selection; Progresses Made; Conclusions	# Elevator Pitch Subject : Answering the following 2 questions: (1) What is your project about in terms of (a) Needs, (b) Approach for solutions, (c) Competitors and/or Alternatives, and (d) benefits to customers?; and (2) What is your specific contribution to the project?