Michigan Tech

Constructing a Good Oral Presentation

Professor Faith A. Morrison

Department of Chemical Engineering
Michigan Technological University

Michigan Tech

Constructing a ~~Good Oral Presentation~~

Video

Professor Faith A. Morrison

Department of Chemical Engineering
Michigan Technological University

Michigan Tech

Constructing a ~~Good Oral Presentation~~ ~~Video~~ Report

Professor Faith A. Morrison

Department of Chemical Engineering
Michigan Technological University

Michigan Tech

Best Practices

Content

1. Address your objectives
2. Know your audience
3. Tell a story
4. .....

Formatting

1. Avoid large amount of writing
2. Use colors that show up
3. Use big fonts
4. Don't overcrowd slides
5. .....

Presentation

1. Look out at audience
2. Move around a bit
3. Speak up
4. .....

Can find good advice on the web:

- http://www.d.umn.edu/~jgallian/goodPPtalk.pdf
- http://www.slideshare.net/orzelc/how-to-give-a-good-powerpoint-presentation
- .....

Dave Paradi's PowerPoint Blog

Michigan Tech

http://pptideas.blogspot.com/2011/09/full-results-of-annoying-powerpoint.html

•Web survey
•603 respondents

•What are your top three PowerPoint annoyances?

1. The speaker read the slides to us – 74%
2. Full sentences instead of bullet points – 53%
3. The text was so small I couldn't read it – 48%
4. Slides hard to see because of color choice – 34%
5. Overly complex diagrams or charts – 26%

Dave Paradi, author of "*102 Tips to Communicate More Effectively Using PowerPoint*"

Michigan Tech

Best Practices

Content

1. Address your objectives
2. Know your audience
3. Tell a story
4. .....

Formatting

1. Avoid large amount of writing
2. Use colors that show up
3. Use big fonts
4. Don't overcrowd slides
5. .....

Presentation

1. Look out at audience
2. Move around a bit
3. Speak up
4. .....

Can find good advice on the web:

•http://www.d.umn.edu/~jgallian/goodPPtalk.pdf
•http://www.slideshare.net/orzelc/how-to-give-a-good-powerpoint-presentation
•.....

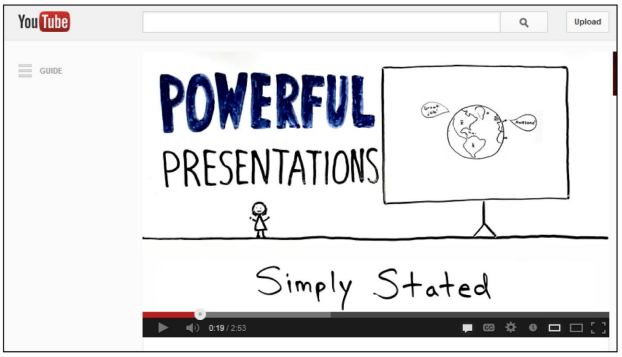
What's <u>your</u> list?

•Check Web
•Brainstorm

Created by MARC STRONG

Michigan Tech

How to Give an Awesome (PowerPoint) Presentation ("Simply Stated" Whiteboard Animation). http://youtu.be/i68a6M5FFBc



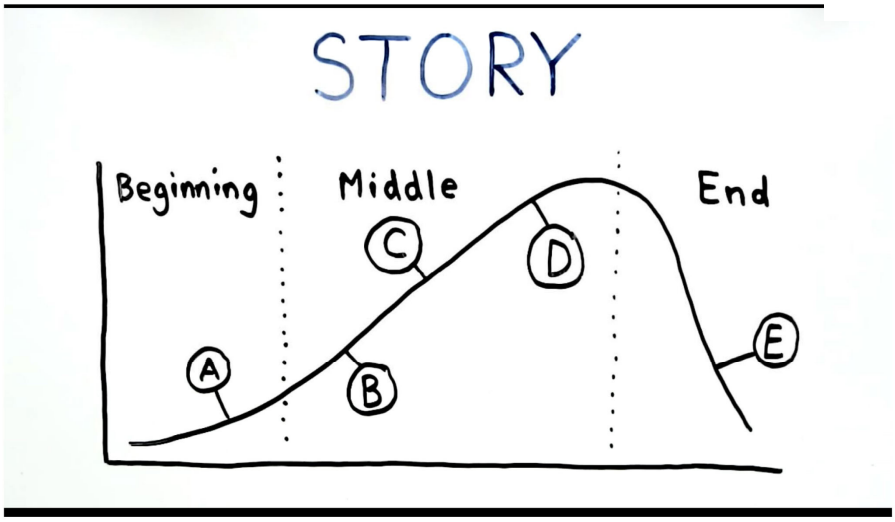
Michigan Tech

Summary:

1. _____
2. _____
3. _____
4. _____

Created by MARC STRONG

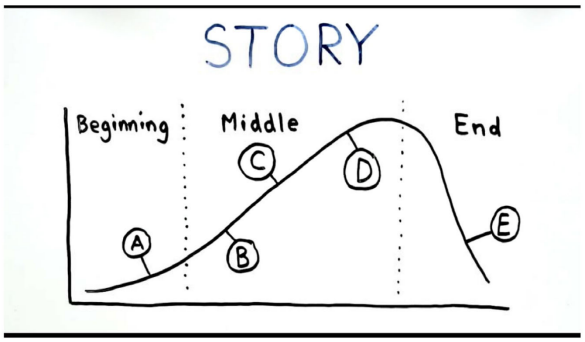
How to Give an Awesome (PowerPoint) Presentation ("Simply Stated" Whiteboard Animation). http://youtu.be/i68a6M5FFBc



Michigan Tech

Next time you're in a presentation, take a look at their methods.

Michigan Tech



?

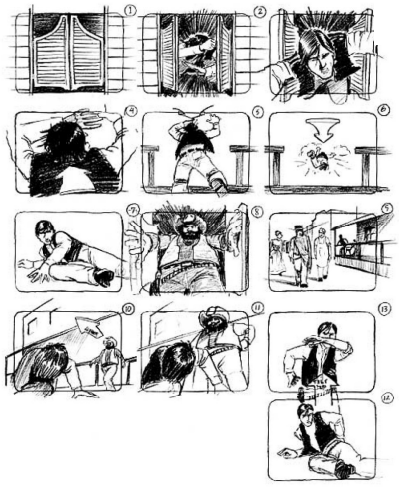
Did they tell a story?

Michigan Tech

Storyboarding your Presentation

- **Storyboards** are used in film-making to sketch out the shots that are planned for filming.

- We can adapt the *storyboarding* concept to sketch out the story we are telling in our reports



Source: accad.osu.edu/womenandtech/Storyboard%20Resource/

Michigan Tech

Memo

To: Group 7A: Chelsea Cioffi and Kojo Quaye

From: Prof. Morrison

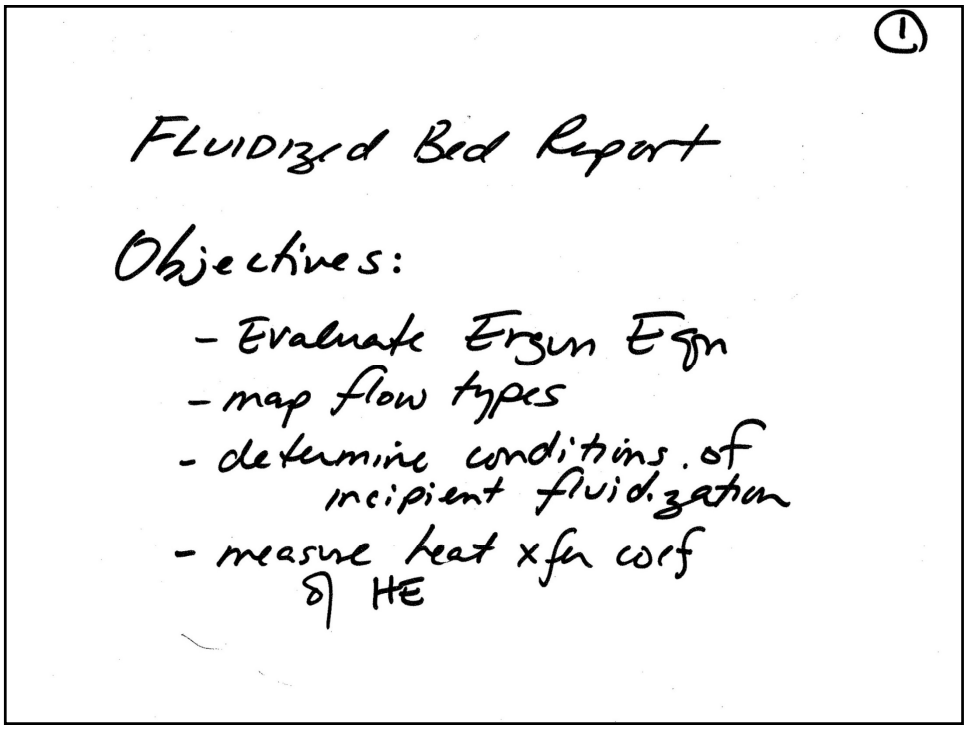
Date: 4 February 2013

Subject: Fluidized Bed: Objectives for Cycle 1

The Departmental Staff has assembled four different fluidized bed columns for us to use to study the hydrodynamics of fluidized beds. We need to learn how to use this apparatus and to determine the accuracy with which any of the published models for flow through fluidized beds reflect our measurements on the actual beds. We would like to use the apparatus to study detailed dynamics of fluidized beds.

In particular we are interested in a thorough evaluation of the Ergun equation, a mapping of the flow types observed on the lab equipment, and a determination of the conditions of incipient fluidization for the column. For all objectives it is essential that the accuracy of the results be tested statistically. If you identify operating conditions that are not accurately represented by the Ergun equation, please find a model, if possible, that does accurately represent those regimes.

In parallel with the objectives above, we have been asked by a coworker to measure the heat transfer coefficient of the heating system for a fluidized bed as a function of operating conditions. Please compare your measured values with heat transfer correlations from the literature.



Once upon a time . . .

(2)

FLUIDIZED BEDS

- upward flow (H2O or air)
- lower density once fluidized
- good mixing (Good heat xfr)
- different flow regimes

sketch

(3)

FIXED BED (Ergun Eqn)

sketch

Incipient Fluidization

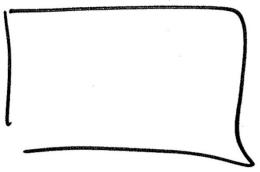
sketch

Smooth fluidization

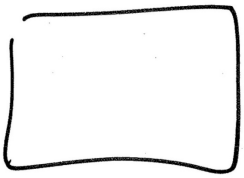
sketch

4

slugging flow



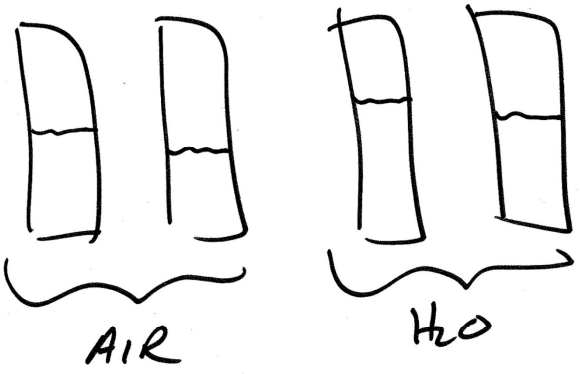
transparted bed



We can investigate; map.

Our Experiments / Methods

4½



Vary Q
measure: bed height, ΔP

(Results)

(5)

FIXED BED

(show fits to Ergun)

(6)

Incipient Fluidization

describe expts
Show data

(7)

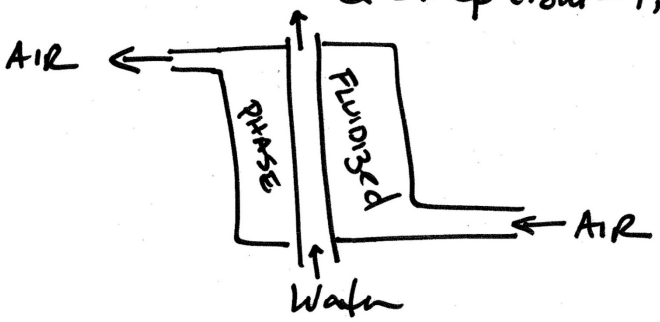
Mapping of flow types

our data with literature

(8)

Heat exchanger w/ Fluidized Phase

$Q = mc_p(T_{out} - T_{in})$



$Q = UA\Delta T_{lm} \Rightarrow U$

9

Results for U [W/m²K]

TABLE

10

Summary and Conclusions

- Here's how our data compared with Ergun
- the flow type map turned out like this
- incipient fluidization was seen to...
- Heat Xfer coefs were measured as a < U < b W/m²K for water Re of d<Re<e

Now it's your turn:

Produce a "Storyboard" for your Friday Project Video