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DOCU-SHOW - A MODERN WAY TO PRESENT RESULTS

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DOCU-SHOW - A Modern Way to Present Results

Synopsis:

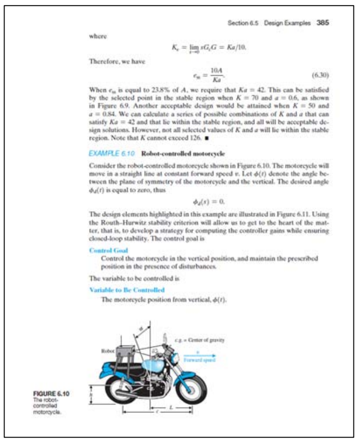
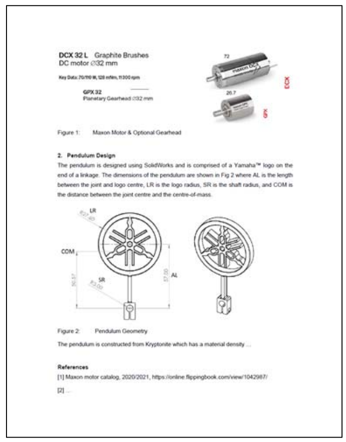
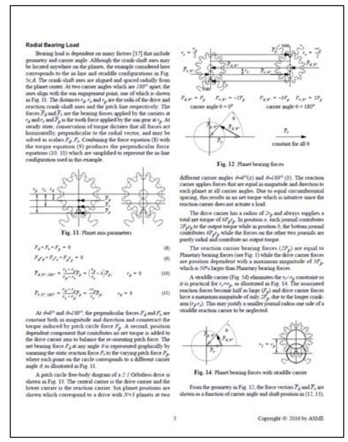
A replacement for the "formal report" is presented which may be used in project courses or research assignments. It combines detailed descriptions with uncluttered presentation slides so that both the final report and final presentation are integrated into a single document.

Docu-Show

The Evolution of Technical Communication

Motivation

The conventional forms of technical communication are well suited to conventional business practices. But modern industrial relationships are collaborative and require technical documentation that is digestible by a more diverse audience. It is shown here how a new form of technical communication can be introduced into the curriculum to better prepare students for modern business practices, and be used by educators to optimize the efficiency of lecture hours.

Text Book	Formal Report	Publication
		

Students exposed to 3 conventional forms of Technical Communication.

<u>Text Books</u>

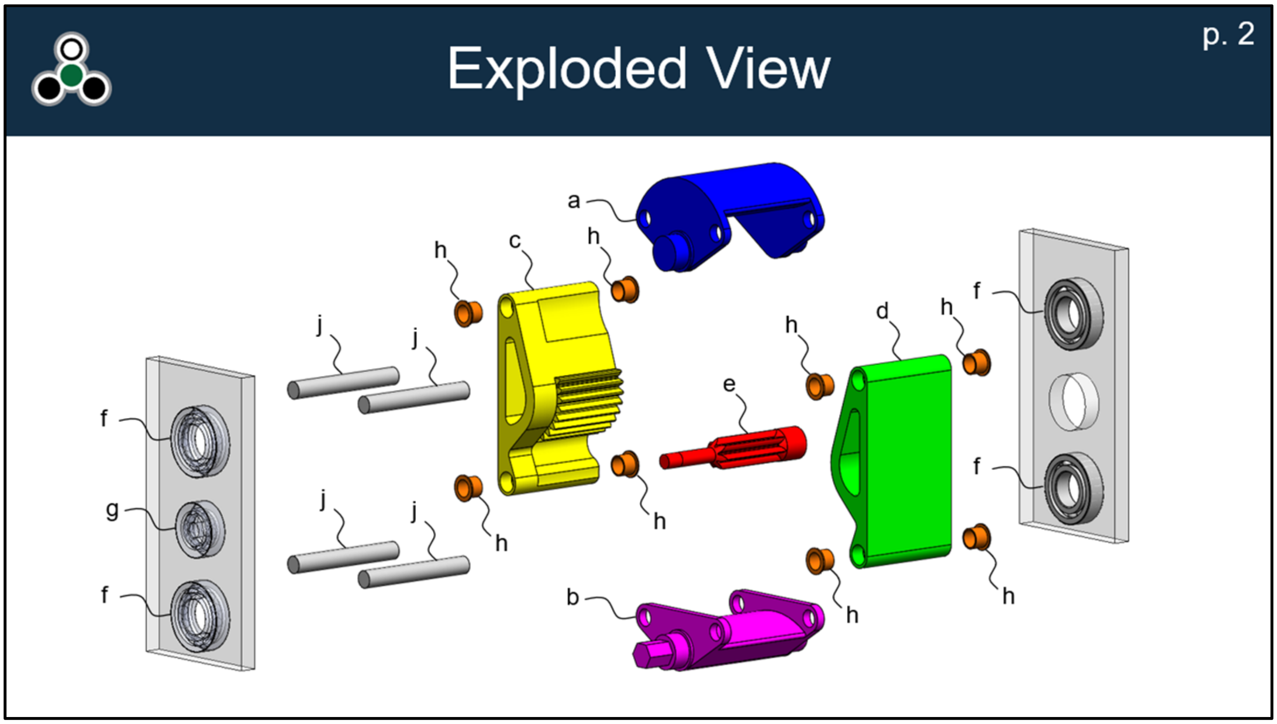
- General Topics
- Complete
- Exposure in all education channels

<u>Formal Reports</u>

- Specific applications of technology
- References to background material
- Taught in High-School & Under-Graduate education

<u>Technical Publications & Whitepapers</u>

- Innovations
- Assumed expert reader
- Learned “on-the-job” in Graduate education



Busy professionals prefer to **DISCUSS**, not **READ**.

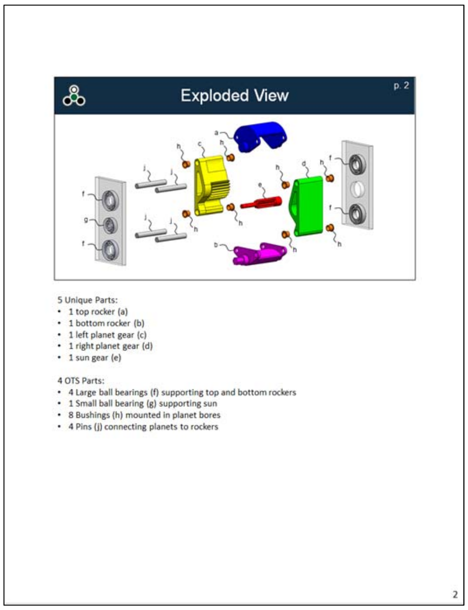
Slide Decks
- Online meetings
- Investor pitches
- Technical Presentations (with handouts)

Diverse Audience
- Engineers
- Project Managers
- Investors

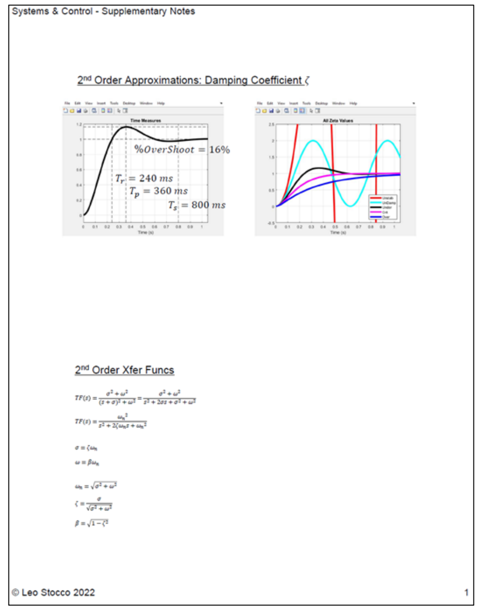
Format
- Pictures only at meeting
- Explanations in handout (for absent participants)

Students benefit from exposure to this approach.

Student Presentation / Report



Lecture Slides



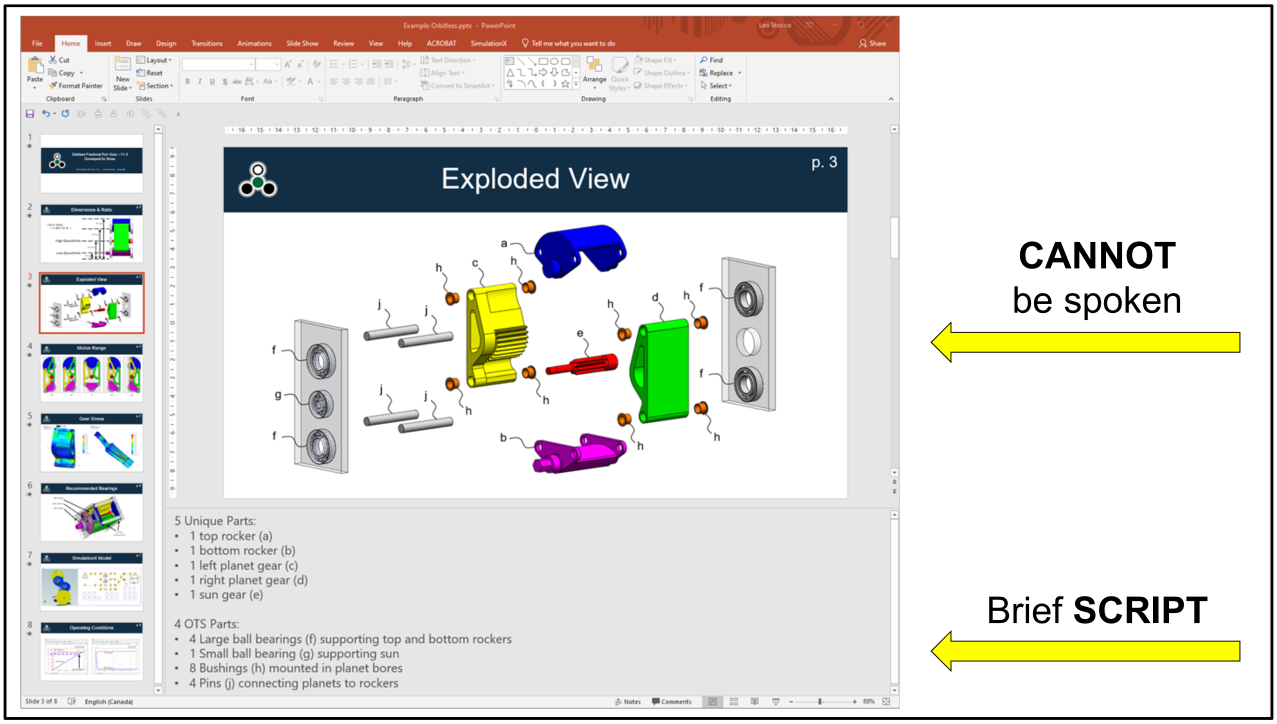
Student reports can be aligned to prepare them for industry collaboration.
A similar approach can be used to provide effective learning material.
The difference addresses the requirements of the intended audience.

Industry Collaborator

- Needs to **UNDERSTAND** your work
- Will ask **YOU** to solve similar problems, if needed
- More interested in **RESULTS** than **PROCESS**

Student

- Needs to **REPRODUCE** your work
- Must solve similar problems **THEMSELVES**
- More interested in **PROCESS** than **RESULTS**



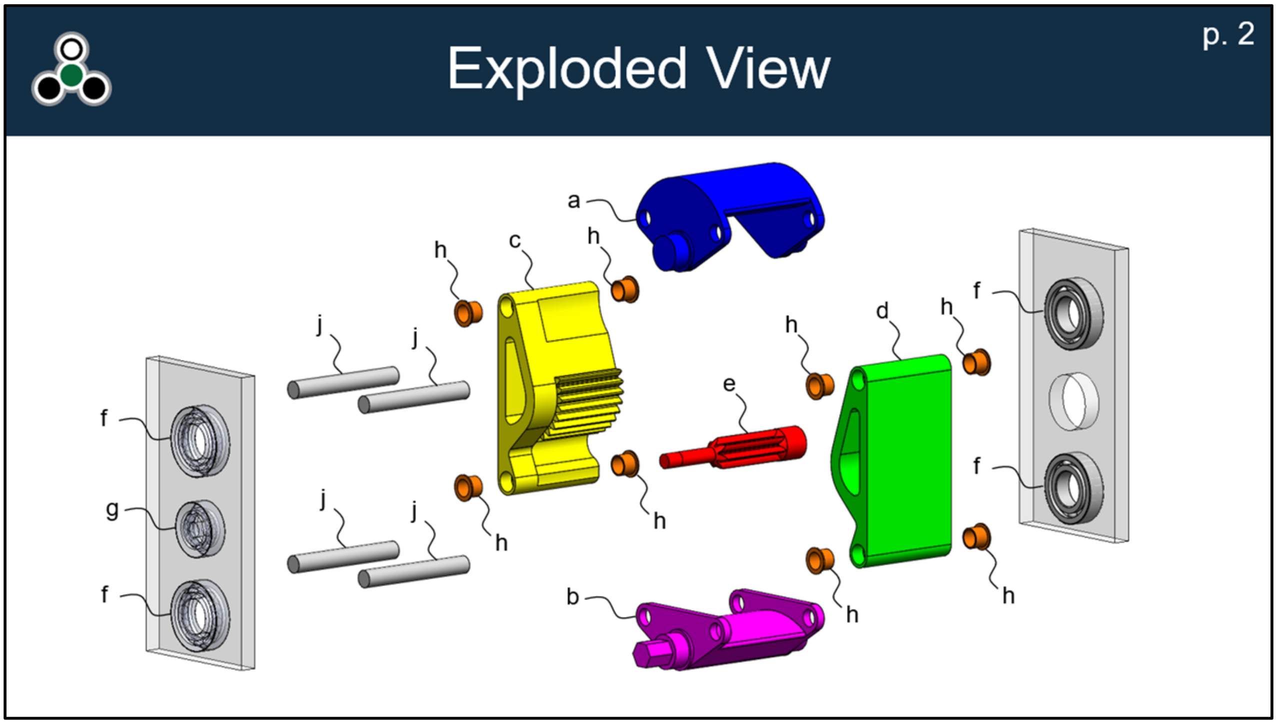
Notes do not appear during presentation.

Advantages

- No difference between slides & handouts
- Promotes good presentation methods
  - Excessive text on Slide leaves nothing for Notes
  - Audience not distracted by reading
  - No picture to show → is slide needed at all?
  - Focus on presenter

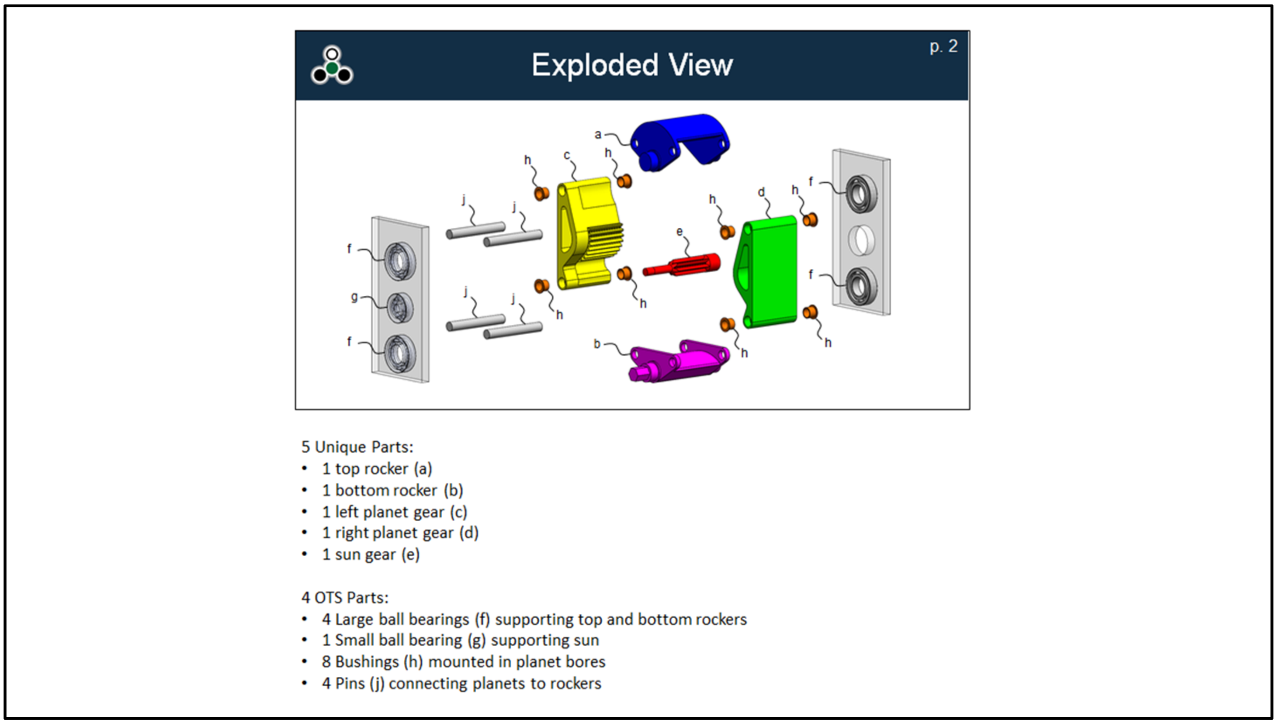
Disadvantages

- Not ideal crib-notes for presentation
- Too detailed → use **BOLD** print
- Requires additional preparation



Slide

- Used during presentation.
- All words are **SPOKEN**.
- You want participants to **LISTEN,** and **CONVERSE**,
- You do not want participants to **READ**.



<u>Handout</u>

- Intended for participants who:
  - Preparing ahead for the talk.
  - Missed the talk.
- Text is **NECESSARY**.
- Stands on its own.

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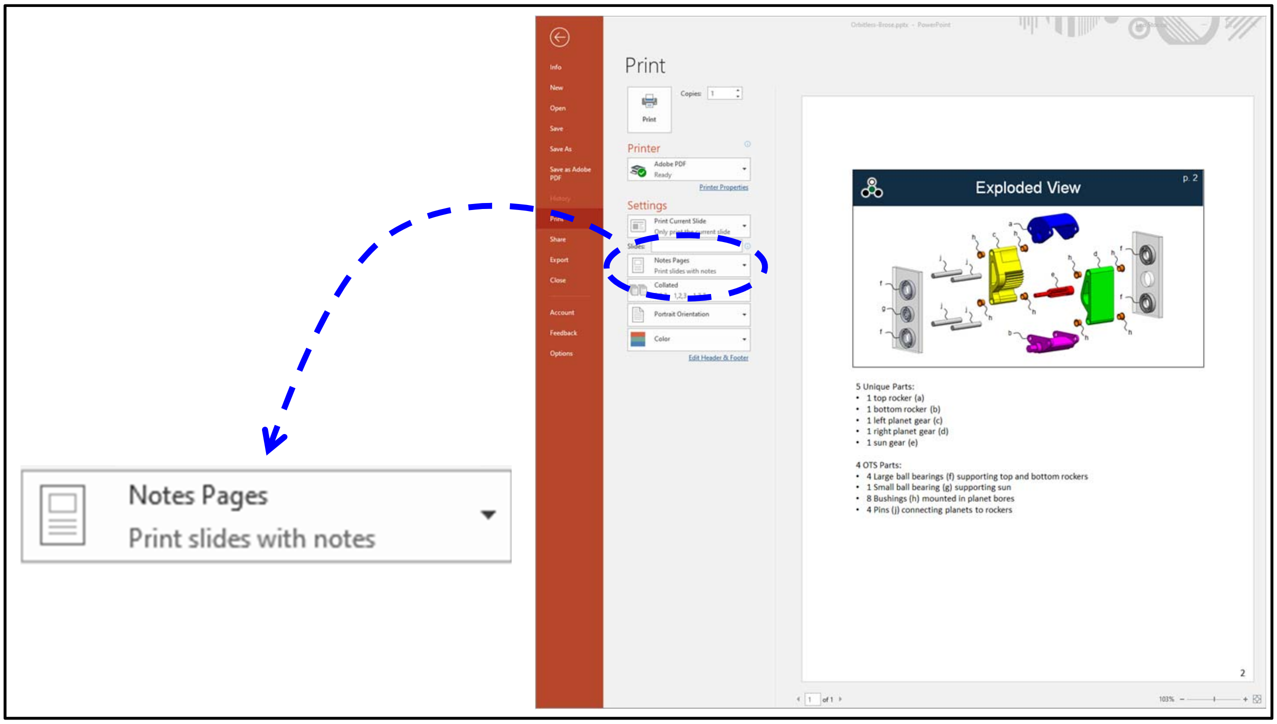

<u>Generate Handout</u>

- **Print** menu
- **Notes Pages** option

<u>Time Efficiency</u>

- 1 document → 2 functions
- More time devoted to technical work
- Less time devoted to documentation

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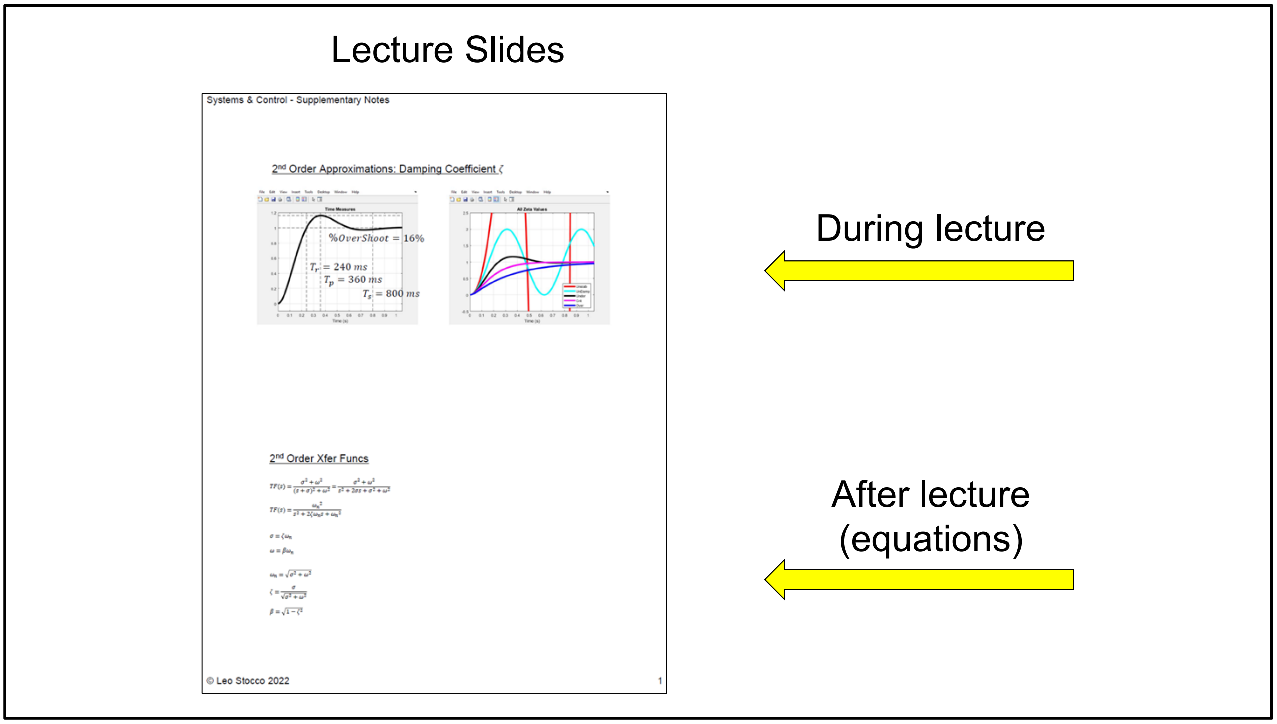


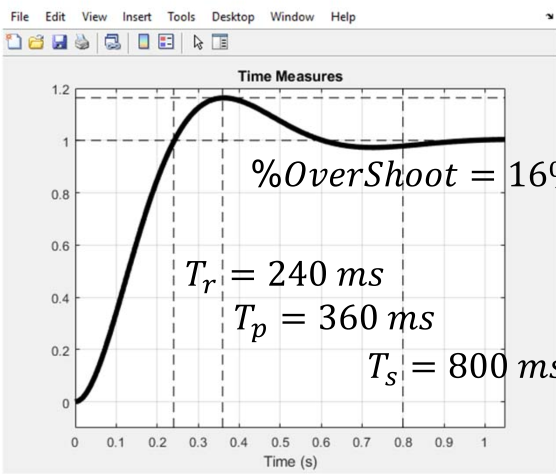
<u>Follow-Up Slide</u>

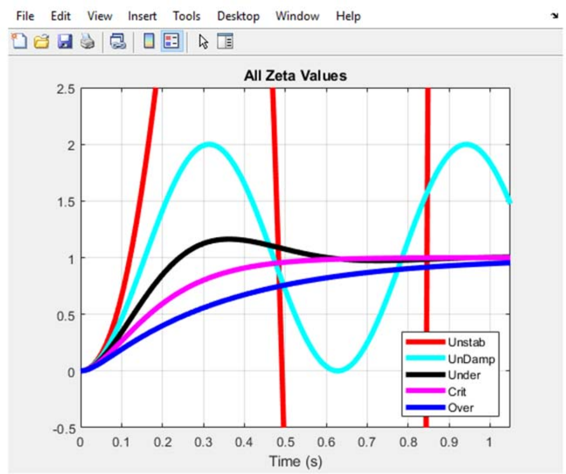
- Seen briefly during presentation
- Clean record of hand-written lecture material

<u>Benefits</u>

- Full PowerPoint editing capabilities
- Typos OK during lectures
- Students made aware of posted material
- Promotes effective lecture habits
    - Human involvement with “boring” elements

2nd Order Approximations: Damping Coefficient ζ





Demonstration slide.

2nd Order Xfer Funcs

$$TF(s) = \frac{\sigma^2 + \omega^2}{(s+\sigma)^2 + \omega^2} = \frac{\sigma^2 + \omega^2}{s^2 + 2\sigma s + \sigma^2 + \omega^2}$$

$$TF(s) = \frac{{\omega_n}^2}{s^2 + 2\zeta\omega_n s + {\omega_n}^2}$$

$$\sigma = \zeta\omega_n$$

$$\omega = \beta\omega_n$$

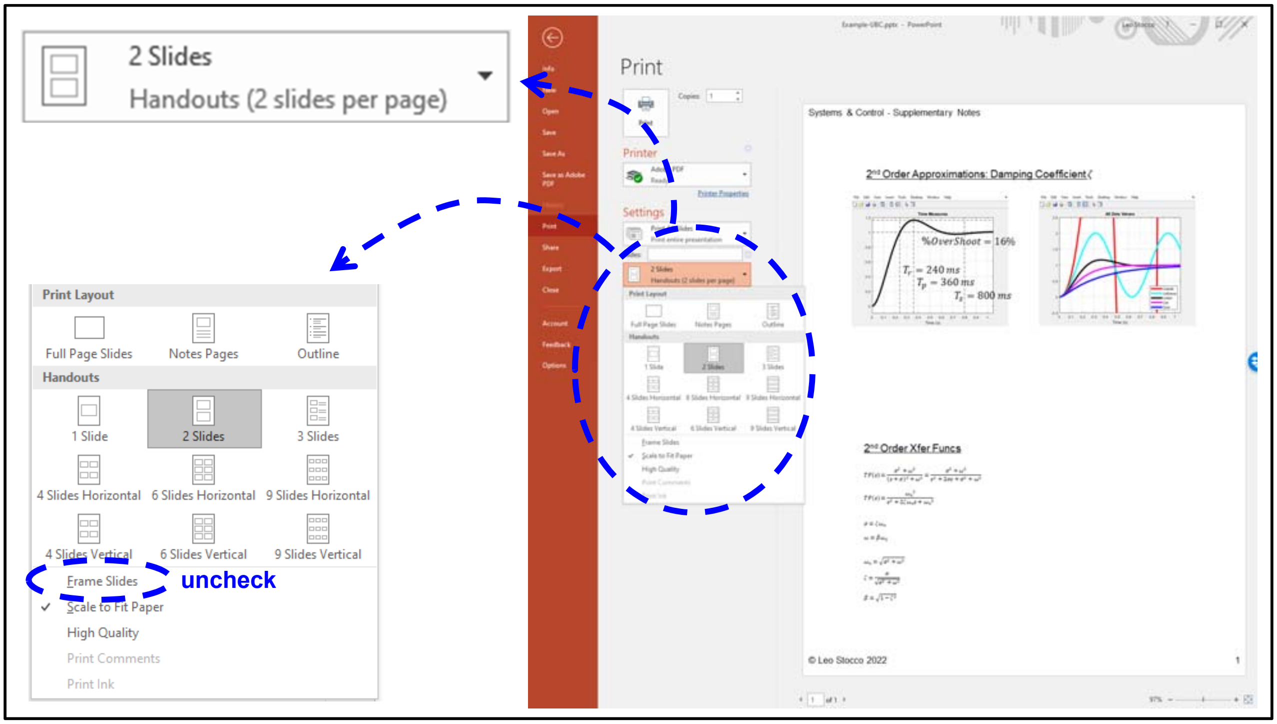
$$\omega_n = \sqrt{\sigma^2 + \omega^2}$$

$$\zeta = \frac{\sigma}{\sqrt{\sigma^2 + \omega^2}}$$

$$\beta = \sqrt{1 - \zeta^2}$$

Blank space for personal notes

Demonstration slide.



Generate Handout

- **Print** menu
- **2 Slides** option

Organization

- Slide & Supporting information on same page
- De-select “Frame Slides” for added annotation space

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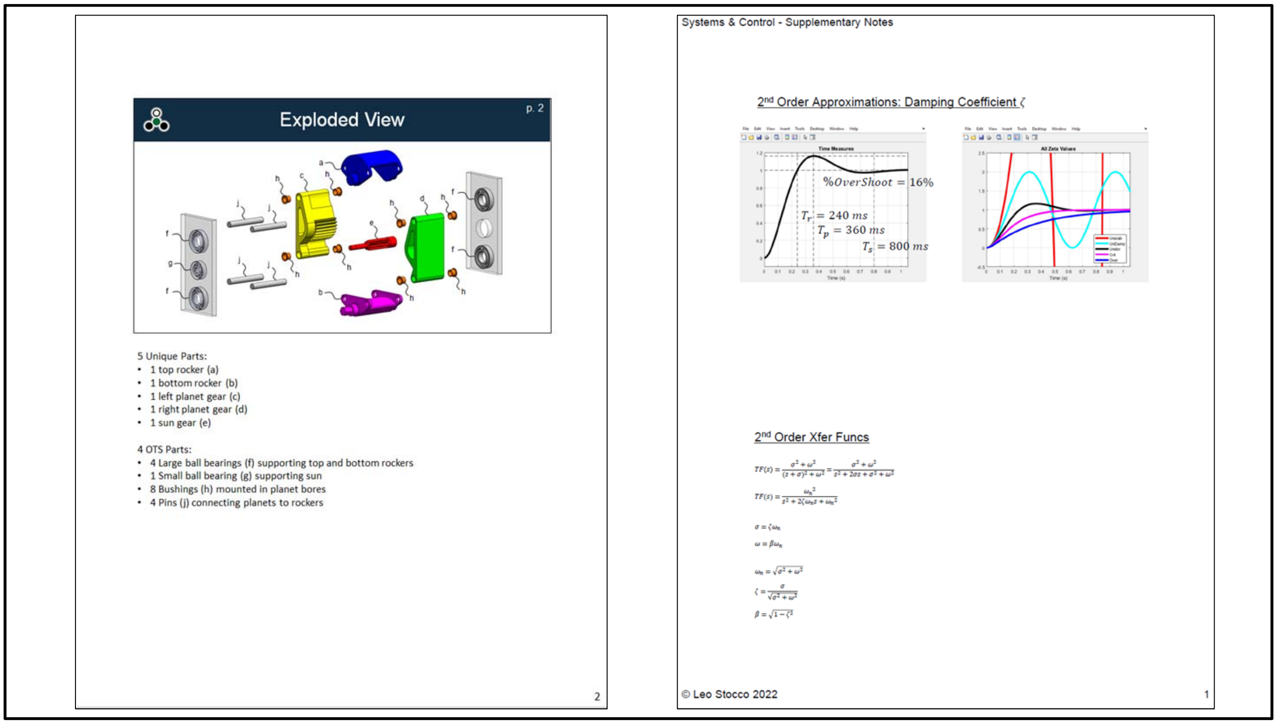

Summary

Report can be read and understood but leaves questions.
One document for both presentation and report.

Lecture notes do not stand on their own.
Enough information provided to:

- Encourage engagement during lecture
- Encourage annotation
- Discourage copying
- Avoid typos in student notes

Both formats:

- Optimize the time of both author & reader
- Maximize effective use of presentation time