# A Comprehensive Look at Note-Taking Accommodations: From Coordination through Technology

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# Purpose

- Notetaking accommodations are critical in our field, but we have rarely taken time to reflect on the best practices
- Innovations have focused on technology tools and less on practice
- This talk is intended to share a broad overview of elements to consider to develop a holistic approach to supporting notetaking accommodations

### Learning Outcomes

- Understand the underlying processes and purpose of taking notes
- Build awareness of best practices for supporting a holistic approach to notetaking accommodations

### Accommodations

- Determine accommodations with an affirmative rationale
- Remember to focus on access
- Make accommodations clear to students and faculty
  - Avoid combining multiple accommodations into one statement
- Support accommodations with coaching on strategies and tools
- Continually assess students' experiences with various notetaking accommodations and support systems

### Accommodation Fit

- Difficult to tease apart disabilities and notetaking skill
- Use the interactive process to determine what barriers exist and the accommodations/strategies that mitigate or remove those barriers
- Accommodations should only supplement the amount of notes necessary for access
- Ask reflective questions about experiences and needs
  - How do you usually take notes (type, handwrite, record, etc.)? Why?
  - How do you feel about your notes (likes/dislikes, Success/failures)?
  - o Have you tried other tools, strategies, or accommodations?
  - o If they have a specific request in mind, why that one?

### **Anecdotal Observations**

- "I type because I can't keep up"
- "I don't take notes, I just listen"
- "I don't know what to write down"
- On-Demand lectures: Pause/play to get everything just right
- Limited practice as notetakers and studying notes
- Compare self to peers negatively

# Notetaking Research

- Encoding hypothesis: the act of processing while taking notes improves learning outcomes (p. 1159)
- External-storage hypothesis: the act of reviewing notes (from self or others) improves learning outcomes (p. 1159)
- These are not mutually exclusive, both are important
- Encoding benefits increase with engaging the lecture, verbatim notes are shallow and predict poorer performance
  - More detailed notes have been correlated with increased performance
- Key Source: The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking (2014) by Mueller, P.A. and Oppenheimer, D.M

# Applying the Research

- Students benefit from engaging lecture
- Students notes are better when they have deeper meaning
  - Students should avoid verbatim notes, transcripts
- Handwriting is correlated with better performance
- Digital notetaking can work too
  - Intentionally avoid tendency toward transcript
  - o Practice paraphrasing, short-hand, and making meaningful notes
  - Turn off digital distractions
- Students benefit from knowing this information

### **Common Accommodations**

- Independent Accommodations
  - o Goal is to supplement gaps in notes
  - Permission to audio record lecture
  - Copies of lecture slides and materials
  - o Photos of the board or overheads
  - Use of notetaking technology in the classroom
- Dependent Accommodations
  - Goal is to provide complete copy of notes
  - Copies of notes from others (usually peers)

# Recording Lecture

- Independent accommodations provide safety net for students while building their skills as a notetaker
- CRITICAL to coach students to effectively fill gaps in their notes
  - Method varies by tools/recordings
- Plan for visual information that is not picked up by audio
- Consider organization (colors, structure, sketches, importing slides)
- Avoid perfection (share lessons from research)
- Plan/discuss how to study notes
  - Top 10 strategy
  - o Pare down

# Tools of the trade/Technology

- "When you focus on the tool rather than the problem you are trying to solve, you have already missed the point."
- There are no one size fits all tools and they constantly change
- Practice with the tools and strategies you may recommend so that you know how it can be used to solve a problem
- Two most common areas of concern: missing information and organization
- Microsoft OneNote, Sonocent Audio Notetaker and Glean, Notability, Others
- Smartpens (Livescribe, Neo, others), Digital Recorders

### Peer Notes

- Own the process, you are responsible for it anyway
  - Training notetakers
  - Monitor incoming notes (build a schedule)
  - Be sure students know when/how to report missing/poor notes
- Paid and volunteer both work, but consider...
  - Creating a system with a pool of returning notetakers to be less reactive
  - o If volunteer, consider incentive programs
  - Have a contingency plan for when notetakers are not available
- Automate as much as possible
  - Avoid common trap of increased use when automated
- Continue to assess and improve

# A Summary

- Use the interactive process to decide what note-taking accommodations are appropriate; move beyond the surface
- Accommodations should be very precise and should be determined by the DS office;
  DS is responsible for implementation
- Build a holistic approach to providing note-taking support and simultaneously train note-taking skills, technology, and strategy
- Automate as much as you can automate
- Make data-driven decisions to continuously improve the peer note-taker system

### Other Resources

- Taking Notes Crash Course (YouTube Video): <u>bit.ly/TakingNotesCC</u>
- Note-taking Accommodations and Technology: The Basics
  - Part I: <u>bit.ly/Notetakingl</u>
  - Part II: bit.ly/NotetakingII
- Notes No More by Cheryl Muller, M.Ed., University of Arizona
  - o AHEAD 2017 Conference Talk (2.10) | bit.ly/AHEAD 17 List
- Note-taking Research Information
  - The pen is mightier than the keyboard: Advantages of Longhand Over Laptop Note Taking (Mueller, P.A. & Oppenheimer, D.M.; 2014) <a href="https://doi.org/bit.ly/noteresearch">bit.ly/noteresearch</a>
  - Attention Students: Put Your Laptops Away (NPR Story) bit.ly/notesresearch NPR