The Dynamics of Learning Independence
Strategies to Empower Disabled Students

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What are we going to cover?

✓ The importance of learning independence
✓ The issue of learned helplessness
✓ A practical case study of promoting independence through note taking support at Trinity University

Poll Question:
How important is it to promote learning independence within disability services?

Group Discussion:
Why is learning independence important?
The importance of learning independence

Learning independence is where the learner:
- has control and ownership over their own learning process
- makes informed choices and takes responsibility for their own learning outcomes

Definition of Learning Independence
Taken from Forster (1972)

“Independent study is a process, a method and a philosophy of education in which a student acquires knowledge by his or her own efforts and develops the ability for inquiry and critical evaluation.”
Learning independence and disability

Regardless of whether they received an equitable accommodation, students with disabilities often face:

- diminished confidence in their ability
- decreased appetite to learn independently
- a learning skills gap when they enter the workforce

Samantha
Postgraduate Student, Harvard University

“I've always had someone else take notes for me. It's really difficult to rely on them and know that you don’t know how to do that skill yourself. I don’t feel as good a student as everyone else.

Peer notetakers are a form of anxiety for me because they remind me that I struggle with this.”

In a study of over 930 students with disabilities:

- 61% believed they could not study independently
- 20% believed that they could study as well as their peers
Christian Yee
Note Taking Coordinator
University of California-Berkeley

“The most important thing is independence.

When you get a job, you won’t find someone to take notes for you in meetings. You’ve got to learn on your own.”

Problems with Traditional Note Taking

Notes sometimes become a substitute for course participation.

- Because a student is receiving notes from someone else, the student might not participate as fully in the course.
Learned Helplessness

- Regardless of whether they received an equitable accommodation, students with disabilities often face diminished confidence in their ability and appetite to learn independently.
- The idea of "learned helplessness" encapsulates the sense of powerlessness that both the personal challenge and provided accommodation can render in a learner.
- All students are struggling to take control of their studies following a period of disruption in Education (and beyond), evidenced by a 2020 Active Minds survey of 2086 college students where 79% stated that they would need extra support to achieve their learning outcomes.

Owning Disability

- Disabled students work through their own ownership of their disability and how it shapes their learning experiences
- Activism as a tool for identity-development
  - Translates into self-advocacy and understanding how their disability impacts their learning
- Peer Note Taking often removes student ownership of their own learning process and can hinder identity development

A Case Study: Note Taking Support
Independent note taking is important for learning

There is value for students in being provided with a note taking support that encourages independent note taking.

- The act of taking notes is critical to the learning process and retention
- Taking their own notes means students identify deeper meaning

12% increase in test scores for students who began taking notes in class

Does providing students with a note taking accommodation that teaches an independent note taking process lead to improved outcomes?

Who did we survey?

Over 400 students using Glean as part of their studies

From 290 North American Higher Education Institutions
Can independent note taking help students improve their grades?
In short: yes. Students achieved better grades, improved their study skills, and had a better learning experience.

90% of students said they achieved better grades
95% of students said they improved how they learn
88% of students said they found studying less stressful

Read the full research in our whitepaper
Can a note taking support improve students’ grades?

Peer notes is now a ‘legacy’ support system

In May 2021, we surveyed disability services professionals at 95 North American Institutions. Among other questions, we asked:

How has the pandemic affected...
- the way you provide note taking support now?
- your 5-year plan for note taking support?
Over the next 5 years…

43% are looking to decrease peer notes

67% are looking to increase technology

Amy Jobst
Assistant Director, Testing Center & Student Access
University of Notre Dame

“For all incoming students, there’s no conversation about peer notes, we’re letting them know that this is how we’re meeting the accommodation need for note taking.

Peer notes is no longer our default. Glean is.”
4 reasons to move away from peer notetaking

- **Challenging to administer**
  - Coordinating support is time consuming and complex.

- **Poor notes impacts learning**
  - Studies show that better notes lead to better learning outcomes.

- **Unreliable and of variable quality**
  - Poor quality or missing notes from peer notes affects compliance.

- **Creates dependence, not independence**
  - Relying on peer notes limits the own student’s note taking skills.

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**Student email to Faculty**

College of the Holy Cross

“I hope that you are well. I noticed that you guys discontinued my use of note taking technology and I would like to know the reason for this decision.

An alternative would be hiring a notetaker to take notes for me. However that does not give me my autonomy I fully deserve just as much as everyone else on this campus. If there is software that exists to make me thrive independently, I would like to use it.”

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**Amy Breton**

Former Assistant Director of Accessibility Services

College of the Holy Cross

“We’ve had a lot of students who have been able to express their desire for autonomy in the note taking process.”
Kelsey
Student at Concordia University Wisconsin

“Before starting college, I was nervous how I would keep up with my classes on my own without the extra support from others.

I am beyond grateful for the opportunity and independence this technology has offered me as a college student. The grades I earn do not happen on their own. It is because of the amazing resources such as Glean I can feel proud of everything I have accomplished.”

A Case Study: Note Taking at Trinity University

Why User-focused Note Taking?

- According to some sources, when students take notes actively they “increase encoding of lecture content”
- Kobayashi says that note taking facilitates student understanding of the material presented in lecture.
- This makes the student more invested in class participation.
Deciding to Promote Independence, Pt. 1

- Prior to switching, Trinity relied heavily on peer-provided notes at a high cost ($8000 per semester)
- Significant number of students never accessed these notes or complained about the quality and expediency of notes
- Noticed students often were turning to their own solutions half-way through the semester, often involving technology
- Those students who stuck with peer-provided notes either used them as a safety net or had a disability-related reason why another solution wouldn’t work

Deciding to Promote Independence, Pt. 2

- Research phase involved assessing student preferences and exploring empirical data about different solutions
  - Primary goal is to encourage student ownership of the learning process and promote positive identity development
- Conducted a pilot study in Spring 2021 semester to determine efficacy of solutions
- Used the collected data and information to establish an SOP around note taking support

Putting Strategy Into Practice, Pt. 1

- Balancing individual consideration with optimal use of staff time and resources
- Required management of resistance to change primarily from students
- Integrated education of students and faculty into launch plan
  - Including research and data collected
  - Focused on educational outcomes and philosophy behind the switch
Putting Strategy Into Practice, Pt. 2

- When working with resistant students, some critical steps included:
  - Listening and engaging in the interactive process
  - Encourage reflection on practices they previously used
  - Connect any insights from this reflection to better solutions or strategies the student could use
- Follow-up for efficacy throughout the semester was critical to mass adoption

Putting Strategy Into Practice, Pt. 3

- Staff became experts in different mediums of note taking
- Primary focus was on understanding the student’s prior experiences of successful intake of information in class
- Staff chose an option based on information provided by student:
  - Clean
  - SmartPen
  - Otter AI
  - OneNote
  - iPad w/ Notability

Results after our first year

During our Spring 2022, we chose to focus on assessing the adoption and efficacy of independent-first note taking solutions.

- 75% Students indicating that a technology-based note taking solution improved their performance in a course
- 61% Students indicating a very successful experience with a technology-based note taking solution
- 86% Students indicating a rating of very or extremely satisfied with their overall experience with SAS
Student Impact, Pt. 1

- 72% of respondents mentioned how an independent-first note taking solution helped them keep up with the content in the course
- 55% indicated that using one of these solutions helped them study more effectively
- 50% felt that one of these solutions helped them take better quality notes
- 14% of respondents felt that one of the solutions required an unreasonable commitment of time to editing and using notes.

Student Impact, Pt. 2

- “I have some note taking strategies that work well for me, so I used some technologies to make up for the areas that don’t work well.”
- “Glean is unobtrusive and not distracting enough to cause you fall behind what is being said by the professor, or a peer.”
- “I do better when I write things down but I can’t always keep up with the professor and so I normally have giant gaps in my notes but by being able to go back over the lecture I was able to have complete notes.”

Where Do We Take Notetaking?

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<thead>
<tr>
<th>Learning on Legacy (Sh)</th>
<th>Integrating Technology</th>
<th>Go With What We Know (or Have)</th>
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<tbody>
<tr>
<td>Know when legacy solutions are appropriate</td>
<td>Stay knowledgeable on technology-based solutions encouraging independence</td>
<td>Use the interactive process to our advantage</td>
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<tr>
<td>Encourage independence development through legacy solutions</td>
<td>Know the limitations of technology</td>
<td>Collect data to make data-based decisions</td>
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<td>Articulate to students the long term benefits of NOT learning on legacy solutions</td>
<td>Balance between time saved and time spent with technology-based solutions</td>
<td>Listen to students for the core elements of how they learn best</td>
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<td>Be cost conscious (but not cost prohibitive)</td>
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Group Discussion:
How can you improve opportunities for learning independence on your campus?

Come and talk to us in the Exhibit Hall
- Experts in the relationship between note taking and learning
- Learner-driven solution with insights for educators
- Focus on skills-building for productivity
- Built to improve UDL in classrooms