



UTM STUDENTS' UNION RECOMMENDATIONS FOR

THE NOTE-TAKING PROGRAM

UTMSU LOBBY WEEK

2023/2024

for elevator from $\frac{\partial C_{L,0}}{\partial \alpha} = \frac{\partial C_{L,0}}{\partial \alpha} \frac{\partial \alpha}{\partial \delta}$

$$F = L = \frac{1}{2} \rho V^2 C_L$$

$$\hookrightarrow \delta = 0.1 \quad \frac{\partial C_L}{\partial \delta} = 0.08$$

$$F = L = \frac{1}{2} \rho V^2 C_L = 0.08$$

$$C_{L,0} = C_{L,0} + C_{L,0} \delta = 0.08$$

$$\hookrightarrow C_{L,0} = -0.032$$

$$V_{\delta} = 2.7^\circ$$

$$\delta = 0$$

$$\Rightarrow C_{L,0} = -0.032 + 0.08(0.08)(0.1)(2.7)$$

$$\therefore C_{L,0} = 0.057$$

7.16 STICK-FREE STATIC STABILITY

Let us return to the concept of stick-free static stability. In this case, the elevator is not fixed to the fuselage and is free to move. This means that the elevator will move in response to the aerodynamic forces acting on it. The stick-free static stability is defined as the stability of the aircraft when the elevator is free to move. This is a more realistic condition for a pilot, as they can move the elevator to maintain control of the aircraft. The stick-free static stability is a measure of the aircraft's ability to maintain its attitude without the pilot's input. It is a critical factor in the design of aircraft, as it affects the aircraft's handling and performance. The stick-free static stability is a function of the aircraft's geometry and the aerodynamic forces acting on it. It is a complex problem that requires a deep understanding of aerodynamics and aircraft design. The stick-free static stability is a key factor in the design of aircraft, as it affects the aircraft's handling and performance. It is a complex problem that requires a deep understanding of aerodynamics and aircraft design.

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introduction

Accessibility is a right, not a privilege.

The University of Toronto Mississauga (UTM) Accessibility Services is committed to providing “services and programs that enable students with disabilities to maximise their educational potential” as well as “ensuring that all students with disabilities can freely and actively participate in all facets of university life (1). The University of Toronto Mississauga Students' Union (UTMSU) is likewise committed to “providing a barrier-free environment for our members” in accordance with the Accessibility for Ontarians with Disabilities Act (2005) (2).

This document aims to create awareness regarding areas for improvement in Accessibility Services, namely through the introduction of a paid note-taking program. This report provides student testimonials, feedback and advice from several academic departments, research from various universities across North America, results from a survey conducted by the UTMSU, and recommendations and opportunities for implementation.

1 utm.utoronto.ca/accessibility/future-uoft-students/about-accessibility-services

2 utmsu.ca/about-us/accessibility

necessity

The Accessibility Campaign is necessary due to several pressing reasons:

01

GOOD NOTES TAKE TIME & EFFORT

Note Taking is a skill that requires concentration, organization, and a deep understanding of the course material—it requires considerable effort, dedication, and time from volunteers to provide this essential service to students with accessibility needs. Yet, due to a lack of incentive to join the program and continue providing notes throughout the semester, students are unlikely to be willing to spend the necessary time and effort to commit fully while balancing all the other responsibilities of being a student.

02

FINANCIAL ACCESSIBILITY

The University of Toronto is ranked first in Canada, yet it is one of the few universities that does not provide any sort of monetary compensation to note-takers. Other high-rated universities on the QS rankings list, including the Massachusetts Institute of Technology (3), Cambridge University (4), University of Oxford (5), Stanford University (6), and University of California Berkeley (7), as well as other highly ranked Canadian universities such as the University of British Columbia (8), provide either an hourly compensation, a gift card, or a stipend in recognition of note-takers' valuable service to students with disabilities.

03

INADEQUATE NOTES & STRUCTURE

Students with accommodations rely heavily on notetakers to support their academic journey, and they deserve high quality notes to support their learning. Yet, numerous students stated that note-takers either did not provide adequate notes (with some uploading lecture slides without additional notes, incomplete notes, or missing notes), or failed to provide notes throughout the entire semester. The creation of a paid position will allow Accessibility Services to regulate/enforce certain quality guidelines and expectations for uploading notes, and hold note-takers accountable for the quality of notes submitted.

There is a clear correlation between the lack of incentive and the quality and consistency of uploaded notes.

The UTMSU recommends the implementation of a paid note-taking program to ensure that

- a) students that volunteer for the program are compensated for their time and efforts, and
- b) Accessibility Services can establish quality guidelines, hold note takers accountable for their work, and ensure that students will have access to notes throughout the semester by providing an incentive to note-takers.

Furthermore, offering compensation will significantly increase the participation of students in the program, resulting in more opportunities for students registered with accessibility services to receive notes as part of their accommodations.

The implementation of a paid note taking program would be a step in the right direction in ensuring that UTM Accessibility Services can provide a high-quality, comprehensive service to students with disabilities.

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- 3 studentlife.mit.edu/das/accommodation-procedures/students/information-specific-accommodations
 - 4 disability.admin.cam.ac.uk/study-and-exams-support/human-support/disability.admin.cam.ac.uk/job-opportunities
 - 5 ox.ac.uk/sites/files/oxford/field/field_document/Note%20taker_o.pdf
 - 6 cae.stanford.edu/students/academic-accommodations/notetaker-services
 - 7 dsp.berkeley.edu/auxiliary-service-units/note-taking
 - 8 facultystaff.students.ubc.ca/student-engagement/centre-accessibility/student-assistants/notetakers



current state OF AFFAIRS

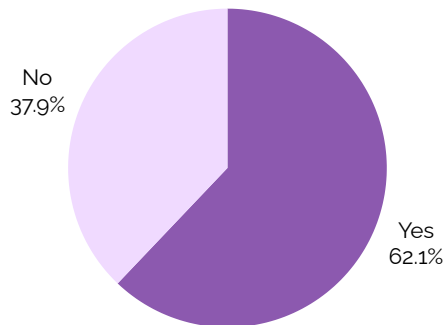
The current note taker program that is maintained by Accessibility Services does not provide monetary compensation to the volunteers. Instead, volunteers are offered Co-Curricular Credit and an optional letter of reference from Accessibility Services.

A survey conducted by the UTMSU in December 2023 found that many students who are registered with Accessibility Services had been left stranded without notes mid-semester as volunteer note takers dropped out of the program. Likewise, students stated that there was a clear lack of communication between faculty, the department, and themselves, which made it difficult to coordinate and ensure that there would be a note taker for the course, as well as communicate when a note taker dropped out of the program mid semester.

62.1% of students responded that there has been a situation where notes were not available/ accessible for their accommodations.

(while 37.9% selected "no").

Education for All Survey, 2022



There is also the issue of lack of incentive for students to join the program. According to our survey, students spent an average of 4 hours per week on completing and uploading notes, per course. For many, this is a significant commitment in addition to classes, assignments, and extracurriculars, etc. Volunteer note takers should be compensated for the the time spent on completing and submitting notes.

The University has committed to providing opportunities for "students with disabilities to maximize their educational potential" (9). The UTMSU believes that implementing a paid note taking program will increase incentive to join the program, thus decreasing the likelihood that students will be unable to find a note taker for a course, and find that the note taker has dropped out of the program mid-semester. Creating a paid position will also increase the accountability of note takers.

In conversation with academic departments, the UTMSU was made aware of a distinct lack of communication between the instructors and Accessibility Services.

Likewise, there is no system for clear communication between instructors, students, and accessibility services to ensure that students registered with accessibility services are provided with high quality notes throughout the semester.

This lack of communication coincides with students' claim that, while note-takers volunteer at the beginning of the semester, they tend to a) drop off towards the middle of the semester, or b) upload mediocre notes throughout the semester.





Ultimately, though the UTM Accessibility Services note-taking program provides students with an essential service, there are several areas for improvement.

The UTMSU found that students registered with Accessibility Services have had several experiences where they either received incomplete, or inadequate notes through the program, or the notetaker they relied on dropped out of the program midway through the semester, and they were unable to find another.

Implementing a paid note taking program would increase the incentive for students to join the program, thus reducing the likelihood that notetakers will be unable in a course. Likewise, it would allow Accessibility Services and the registered students to maintain certain expectations regarding the quality of notes.

9 utm.utoronto.ca/accessibility/future-uoft-students/about-accessibility-services

the state of affairs

IN OTHER INSTITUTIONS

UNIVERSITY OF BRITISH COLUMBIA

The Centre for Accessibility at the University of British Columbia has provided compensation to their note takers since 1991 (10). Notetakers are paid a set stipend depending on the amount of courses they have registered to take notes in, and are paid twice a month for their work including “time spent outside of class proofreading and editing the notes” for clarity, and in recognition of the valuable service they provide (11). Note takers are hired throughout the year, and the application process includes the submission of a resume, cover letter, unofficial transcripts, and a sample of their notes from the course.

TORONTO METROPOLITAN UNIVERSITY

The TMU Academic Accommodation Support (AAS) Peer Note-taking program provides notes to students registered with AAS for lecture-based courses. Note takers are required to have a minimum GPA of 1.67 and must be TMU students, and are paid \$200 per course.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

MIT Disability and Access Services (DAS) employs note takers as part of its peer note taking program, and offers hourly compensation to note takers. According to the DAS site, there is a clear line of communication between the student, instructor, and the Services coordinators—students are expected to provide feedback and notify DAS if there is an issue with the note taker, instructors are expected to make a “good faithful effort” to assist students who may be finding it difficult to find a note taker, and DAS provides students with “tips on selecting an appropriate note taker” (12).

10 facultystaff.students.ubc.ca/sites/facultystaff.students.ubc.ca/files/Notetaking%20Training%20Manual%202021%20-%202022.pdf

11 students.ok.ubc.ca/academic-success/disability-resources/become-a-notetaker

12 studentlife.mit.edu/das/accommodation-procedures/students/information-specific-accommodations

13 dal.ca/campus_life/academic-support/accessibility/accommodations-/classroom-accommodation.html

DALHOUSIE UNIVERSITY

Dalhousie University offers note taking accommodations to students through their accessibility services. They offer volunteer peer-note taking positions and also hire a single note-taker for each class every term. The selected student is provided with a minimum honorarium of \$75 per course at the end of each term and also receives recognition on their Co-Curricular Record (CCR). Their responsibilities include meeting with note-taking coordinators and regularly uploading electronic copies of notes to the student accommodation software Accommodate, as well as scanning hard copy notes using the Student Accessibility Centre scanner if necessary (13).

ONTARIO COLLEGE OF ART & DESIGN

The Wellness Centre of OCAD University provides hourly compensation for note takers (\$15.68) (14). The Centre for Students with Disabilities hires note takers and compensates students up to \$1000 (15). The roles and responsibilities of note takers listed on the site include submitting "legible and detailed notes" in a timely manner for all assigned courses "in order to receive payment on a bi-weekly basis" (16).

BOSTON UNIVERSITY

Disability and Access Services at Boston University maintains a note-taking program to provide notes to students registered with a qualifying disability. Students are required to select their student at the beginning of the semester—if students are unable to confirm a note taker, they are able to request their professor's support in either recommending a student or announcing in class. Students are likewise expected to inform their note takers of incomplete paperwork, ensure that notes are uploaded in a timely manner, and have a strong working relationship with their note taker. The site also states that the "note taker is receiving payment to provide [the student] with legible, comprehensive in-class notes, and it is up to [the student] to tell them how to make these notes the best for [them]" (17).

14 www2.ocadu.ca/news/ocad-u-student-wellness-centre-is-hiring-note-takers

15 www2.ocadu.ca/news/csd-faa-note-taking-pilot-program

16 www2.ocadu.ca/news/ocad-u-student-wellness-centre-is-hiring-note-takers

17 www.bu.edu/disability/accommodations/procedures/specific/notetaker-service



Result

Allies victory

- Fall of Nazi Germany and the Empire of Japan and Italy
- Allied military occupations of Germany, Japan, Austria and foundation of the Federal Republic
- Beginning of the Nuclear Age

United Nations

- Emergence of the United States and the Soviet Union as the final superpowers
- beginning of the Cold War

Participants

Allies

- Commanders and leaders: **Maxim Gorky**, **Joseph Stalin**, **Franklin D. Roosevelt**

In August 1945 and the Pacific Republic of China by 1947. In 1945, the Allies launched a surprise attack on Japan, supported by one of the largest air forces in history. The attack was successful, and the Japanese Emperor announced his surrender. The war ended with the atomic bombing of Hiroshima and Nagasaki in August 1945. The Allies then moved to occupy Germany, Japan, and Italy. The war was a turning point in history, leading to the end of colonialism and the beginning of the nuclear age.

Allies

concluded with an invasion of Normandy and the Soviet Union's capture of Berlin by Soviet troops, led by Marshal Georgy Zhukov and the German Wehrmacht on 8 May 1945. The war was a turning point in history, leading to the end of colonialism and the beginning of the nuclear age.



STUDENT *testimonials*

“Accessibility note taking services are never available, accessible, **there are basically no notes** at all because it's voluntary.”

“Missing classes is inevitable and **not all classes have notetakers** resulting in students having to ask professors who don't always give [notes].”

“I feel that they **could have a better system or program for note takers** that makes you feel more **engaged and involved**. I don't even know who my **'supervisor'** is if I wanted to reach out for a letter of recommendation from them.”



As a 2nd year student at UTM, I've encountered challenges stemming from the periodic lack of note-taking support within accessibility services. This deficit has made things a bit more difficult when it comes to my academic experience, hindering my ability to effectively engage with course materials and perform to the best of my abilities. The absence of comprehensive notes provided by note takers has created some barriers to learning, particularly in instances where I require supplementary materials to reinforce lecture content or reference for studying purposes.

The repercussions of this inadequacy extend beyond mere inconvenience, but instead they present as heightened stress levels, lower confidence in my academic performance, and ultimately, compromised learning outcomes. Additionally, navigating this process has necessitated considerable time and effort on my part, which takes away from the energy I could otherwise allocate to mastering course material.

To add to this, there have been some instances where I was unable to attend lectures/tutorials etc because of prior commitments for doctors appts, and did not have access to complete notes, which just adds to the stress levels. In response to these challenges, I advocate for the implementation of a paid note-taking system within accessibility services at UTM, as I recognize the pivotal role that comprehensive notes play in facilitating access to education for students with disabilities.

By advocating for the establishment of a paid note-taking program, it aims to address the heightened anxiety/stress levels that students like myself experience when we do not have access to notes. I believe that education should be equitable to each and every student, and by implementing a paid note taking system, we can ensure that students' are receiving the notes that they deserve, and there is an incentive for those who are taking these notes.

Anonymous
UTM Student

“The notes that were posted were sometimes adequate and comprehensive, but there were **often large gaps in the content or time between submissions.**”

In addition, for courses where there were multiple note takers at the start of the courses due to the large class sizes, **most (if not all) of the notetakers stopped taking notes** at or before the middle of the course.”

“Professors are not aware of the problems surrounding note takers: they assume that because I have notetakers as part of my accommodations, I will always be able to access notes through this service, therefore they do not need to provide any other types of supports, however, **notes are often incomplete and/or missing entirely.**”



FACULTY *consultations*

UTMSU executives met with various departments to present the recommendations and ideas mentioned in this document and discuss implementation.

We were met with positive reactions from some departments in relation to paid note-taking. However, improvements to the quality of the note-taking program in general were met with concerns over placing excessive pressure on faculty to regulate the quality of the notes.

The UTMSU values the input of the university departments and has taken into consideration the input and feedback provided by a member of the departments we consulted.



RECOMMENDATIONS & *implementation*

Based on research and discussions with students and faculty, the following suggestions would improve note-taking for students.

01 CREATION OF PAID NOTE-TAKER POSITIONS FOR STUDENTS

Compensation would demonstrate the value placed on the service provided by note takers, and ensure the consistent uploading of notes. The UTMSU believes that volunteer note takers deserve more compensation than a CCR notation and the possibility of a recommendation letter at the end of the semester. Therefore, we are advocating that UTM implement a paid note taking program and join other high-ranking universities in providing paid positions for students while improving essential Accessibility Services on campus.

02 INCREASED COMMUNICATION BETWEEN STUDENTS, INSTRUCTORS, AND ACCESSIBILITY SERVICES

In our conversations with department chairs, we were made aware of the lack of communication between Accessibility Services and faculty. Implementing a system whereby instructors and accessibility services can easily communicate the requirements of students registered with accessibility services will ensure that notes are uploaded consistently throughout the semester.



03 INCREASE FACULTY SUPPORT FOR THE NOTE TAKER PROGRAM BY PROVIDING A LECTURE OUTLINE

A study by the University of Michigan found that “how faculty lecture,” including organization, space, affect, and inflection, and “what faculty do during a lecture,” including giving handouts, writing on the board, emphasizing and/or repeating important material, and summarizing complex information, greatly impacts students' ability to take notes effectively. While this may require some extra effort, we hope that instructors will see the value in providing a lecture outline to ensure that note takers will be able to take notes efficiently, emphasize important sections of the lecture, etc, particularly in classes with a higher need for note takers.



04 IMPLEMENTING A MID-SEMESTER QUALITY ASSURANCE CHECK AND ENSURING THAT NOTE TAKERS FOLLOW ESTABLISHED GUIDELINES

We are not advocating for more work for instructors/faculty. However, there is a clear need for implementing systems to ensure that uploaded notes maintain a certain quality and level of clarity and detail. As the Disability and Access Services at Boston University states, if note takers were paid, they would be required to ensure that notes meet a certain standard, particularly those set by the student.

references

utm.utoronto.ca/accessibility/future-uoft-students/about-accessibility-services

utmsu.ca/about-us/accessibility

studentlife.mit.edu/das/accommodation-procedures/students/information-specific-accommodations

disability.admin.cam.ac.uk/study-and-exams-support/human-support

disability.admin.cam.ac.uk/job-opportunities

ox.ac.uk/sites/files/oxford/field/field_document/Note%2otaker_0.pdf

oae.stanford.edu/students/academic-accommodations/notetaker-services

dsp.berkeley.edu/auxiliary-service-units/note-taking

facultystaff.students.ubc.ca/student-engagement/centre-accessibility/student-assistants/notetakers

utm.utoronto.ca/accessibility/future-uoft-students/about-accessibility-services

facultystaff.students.ubc.ca/sites/facultystaff.students.ubc.ca/files/Notetaking%20Training%20Manual%202021%20-%202022.pdf

students.ok.ubc.ca/academic-success/disability-resources/become-a-notetaker

studentlife.mit.edu/das/accommodation-procedures/students/information-specific-accommodations

dal.ca/campus_life/academic-support/accessibility/accommodations-/classroom-accommodation.html

www2.ocadu.ca/news/ocad-u-student-wellness-centre-is-hiring-note-takers

www2.ocadu.ca/news/csd-faa-note-taking-pilot-program

www2.ocadu.ca/news/ocad-u-student-wellness-centre-is-hiring-note-takers

bu.edu/disability/accommodations/procedures/specific/notetaker-service

crlt.umich.edu/sites/default/files/resource_files/CRLT_no16.pdf



**UTMSU LOBBY DOCUMENT
2023/2024**