

# RIT

National Technical Institute for the Deaf

# DeafTEC

## Empowering Deaf Learners: Exploring DeafTEC's Critical Resources



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# ABOUT US



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**Funded by:**  The National Science Foundation  
Advanced Technological Education Program

**National Resource Center**  
only one focused on a specific audience

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**Established at:** **RIT** | National Technical  
Institute for the Deaf

One of the nine colleges of Rochester Institute of Technology

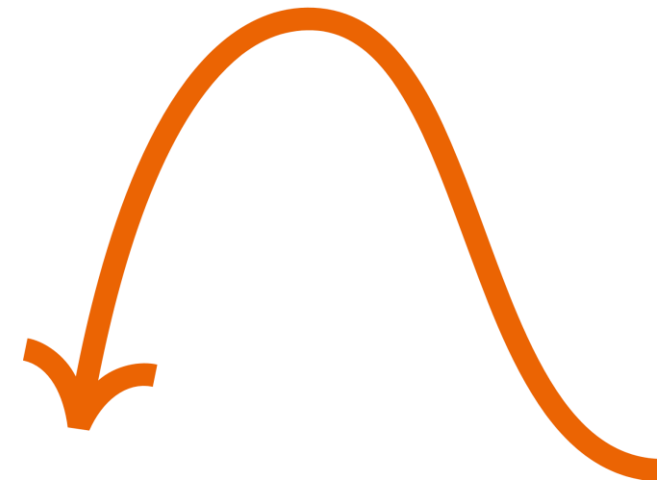
The first and only technical college in the US serving  
Deaf and Hard-of-Hearing students



# GOAL

**UNDERREPRESENTED**

Increase the **number** of deaf and hard-of-hearing individuals in **highly skilled STEM technician jobs**.



**UNDERUTILIZATION**

- **High School**
- **Community College**
- **Employers**



# The Importance of STEM



## Deaf and hard-of-hearing workers in STEM careers:

- Have **lower** unemployment rate
- Have **higher** labor participation rates
- Earn **24%** more than D/HH workers in non-STEM



# Who Can Benefit from DeafTEC Resources

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Teachers

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Teachers of D/HH students

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Counselors

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Student Disability Services professionals

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Speech & Audiology professionals

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Parents of D/HH students

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Interpreters

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Employers

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# DeafTEC Resources



## DeafTEC.org



### 1. Teaching and Learning

2. STEM Sign Video Dictionary

3. Deaf and Hard-of-Hearing STEM Professionals

4. STEM Career Awareness Videos



### 5. Project Access online course

6. Working Together: Deaf and Hearing People online course



# DeafTEC Resources: Teaching & Learning



For Students

For Teachers

For Employers

For Parents

Search...



**RIT** | National Technical Institute for the Deaf  
**DeafTEC**

Teaching & Learning ▾

STEM Employment ▾

Projects & Programs ▾

Online Learning

About DeafTEC ▾

DeafTEC / Teaching & Learning



## TEACHING & LEARNING

Online Teaching and Learning

Best Practices for Teaching

Universal Design for Instruction (UDI)

Access/Support Services

Strategies for Writing in the Disciplines

Strategies for Teaching Math

## Teaching & Learning

### Best Practices for Teaching

The best practices and strategies presented here were developed to support instructors and staff who work with deaf and hard-of-hearing students in mainstream classes. The goal of these resources is to improve teaching practice that will provide greater access to learning for deaf and hard-of-hearing students but will benefit all students in the classroom as well.

*This material originates from the discontinued Class Act website ([www.rit.edu/classact](http://www.rit.edu/classact)) and has been updated and expanded by DeafTEC. Class Act was a project of the National Technical Institute for the Deaf, Rochester Institute of Technology (NTID/RIT), Rochester, New York supported by major funding from the Fund for Improvement of Postsecondary Education (FIPSE) and Demonstration Projects to Ensure Students with Disabilities Receive a Quality Higher Education, US Department of Education.*



# DeafTEC Resources: Best Practices for Teaching



## TEACHING & LEARNING

Online Teaching and Learning

Best Practices for Teaching

First Day of Class

Communication

Pace

Complexity

Visuals/Referencing

Environment

Group Projects

Labs/Studios/Field Work

Incidental Learning

Testing

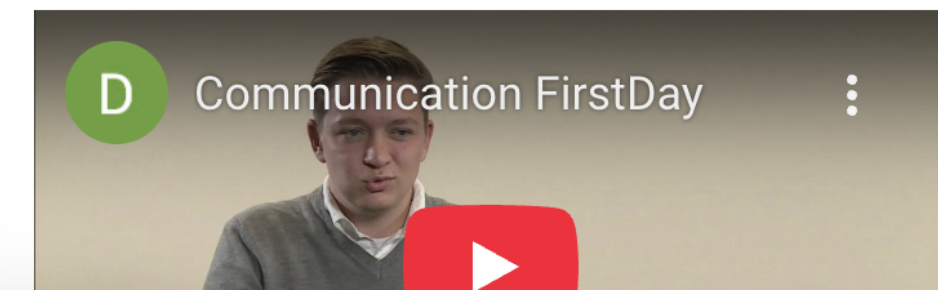
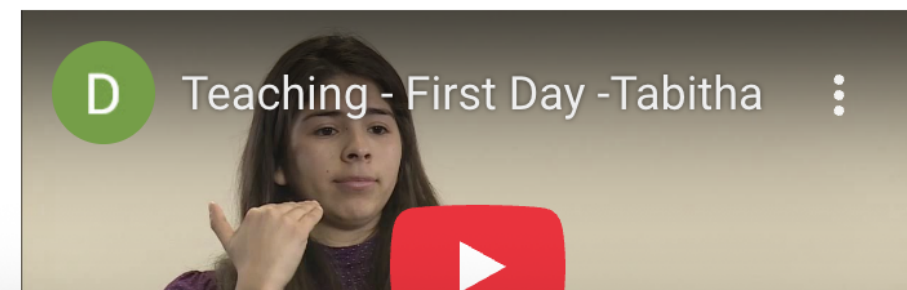
Top Ten Things D/HH Students Would Like Teachers To Do

## First Day of Class

It's the first day of class, and if you have a Deaf/HH student in your class, you may be uncertain of which teaching strategies will be successful. This first day of class is an opportunity to set the tone, and make the deaf or hard-of-hearing students feel welcome and an integral member of the class.

- Provide a detailed written syllabus for the course to share the first day. Include important dates, reading assignments, homework and test details, classroom policies, etc. Having a written syllabus will ensure that the deaf/hh students in particular will have access to this critical information.
- Take the time to clearly define your expectations for acceptable behavior in the classroom, including communication (see the section on Communication) and equal access for all students.
- Introduce yourself to your interpreter and/or captionist, as they can be a valuable resource for issues that may surface.
- If there are issues on the first day of class involving Deaf/HH students, take the time to discuss these issues privately with the students after class with the interpreter.

## Related Videos



# Perils of Lecturing

<https://youtu.be/-1N2isWqoDw>



# DeafTEC Resources: Tips and Tales



## TEACHING & LEARNING

Online Teaching and Learning

Best Practices for Teaching

Universal Design for Instruction (UDI)

Access/Support Services

Strategies for Writing in the Disciplines

Strategies for Teaching Math

Perils of Lecturing

Survival Signs

Teaching Tools

Captioning Media

## Tips and Tales

**An integral component of the DeafTEC outreach effort is to provide a wide variety of educational and experiential opportunities to teachers, students, parents, and community service providers.**

Access strategies and insights to consider when initiating efforts for an event.

We recognize that for those who are responsible for planning, coordinating and/or providing these venues, some degree of understanding of what it means to be a trainer, a venue planner, and an outreach coordinator requires skills sets, knowledge, and understanding of what is required to ensure a successful event, is essential.



Vignettes and stories of challenges that can and have occurred unexpectedly and how trainers have resolved or overcome them are provided as examples as well.

The user of "Tips and Tales" is welcome to use this information in a way that is helpful and is free to modify this information (checklists, for example) as needs demand.



# DeafTEC Resources: Online Learning



For Students For Teachers For Employers For Parents Search...



- Teaching & Learning
- STEM Employment
- Projects & Programs
- Online Learning**
- About DeafTEC

DeafTEC / Online Learning

## ONLINE LEARNING

Job Search Modules

## Online Learning

DeafTEC is working on several projects that will provide online learning to different audiences. They are all in the works, and coming soon:

For Employers: Working Together Online Course +

For Educators: Project Access Online +

For Students: Job Search Strategies +





# Project Access

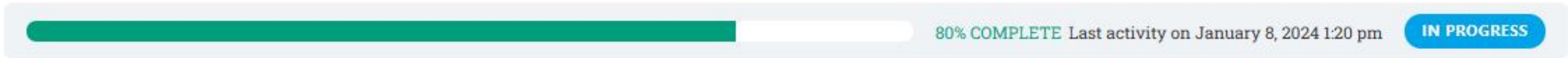
<https://project-access.deaftec.org/>

## PROJECT ACCESS Online Course

BROUGHT TO YOU BY  
**RIT** | National Technical Institute for the Deaf  
**DeafTEC**



## Project Access



Project Access Online explores ways to optimize teaching in the classroom, provides real-life strategies, and provides extensive online resources to help teachers and faculty modify their teaching behaviors to provide greater access to learning for deaf students, which in turn benefits all students.

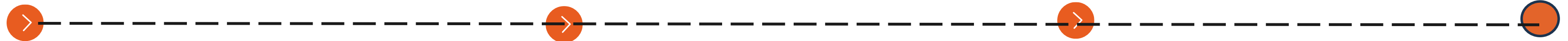
The four self-paced modules in the course will cover the following topics:

1. Understanding Hearing Loss



# Project Access Topics

provide greater access to learning for deaf students, which in turn benefits **all** students.



Understanding  
Hearing Loss

Teaching and Learning:  
Universal Design and  
Best Practices

Teaching and Learning:  
In Different Contexts

Assessment

- Degrees of Hearing Loss
- Listening and Lipreading
- Deaf Culture

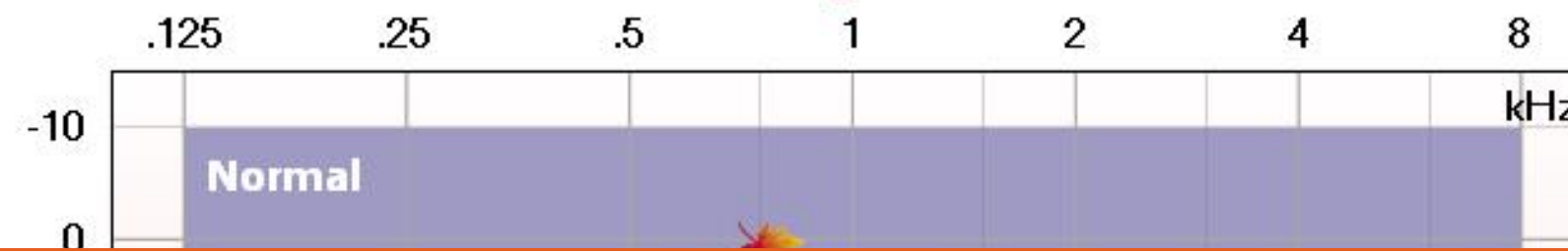
- Universal Design for Learning
- Applying Universal Design for Learning
- First Day of Class
- Pacing and Timing
- Visual Aids
- Incidental Learning

- Lab / Group Work
- Online Learning Best Practices
- Testing
- Accessing Support Services

- Top Ten Tips
- Perils of Lecturing
- Resources



# Understanding Hearing Loss



- Degrees of Hearing Loss
- Listening and Lipreading
- Deaf Culture

**Did you know?**

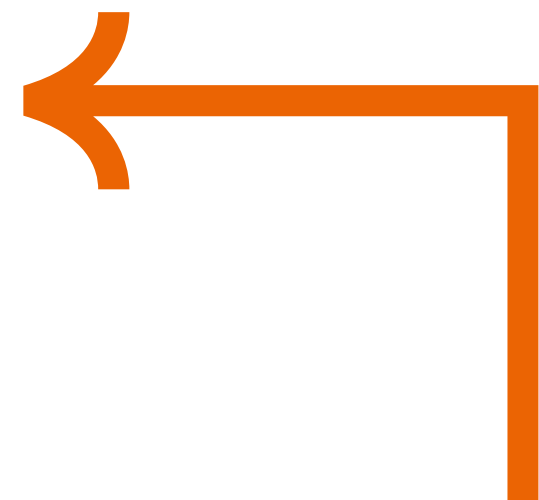
**90% of deaf children are born into a hearing family!**



# Understanding Hearing Loss: Video

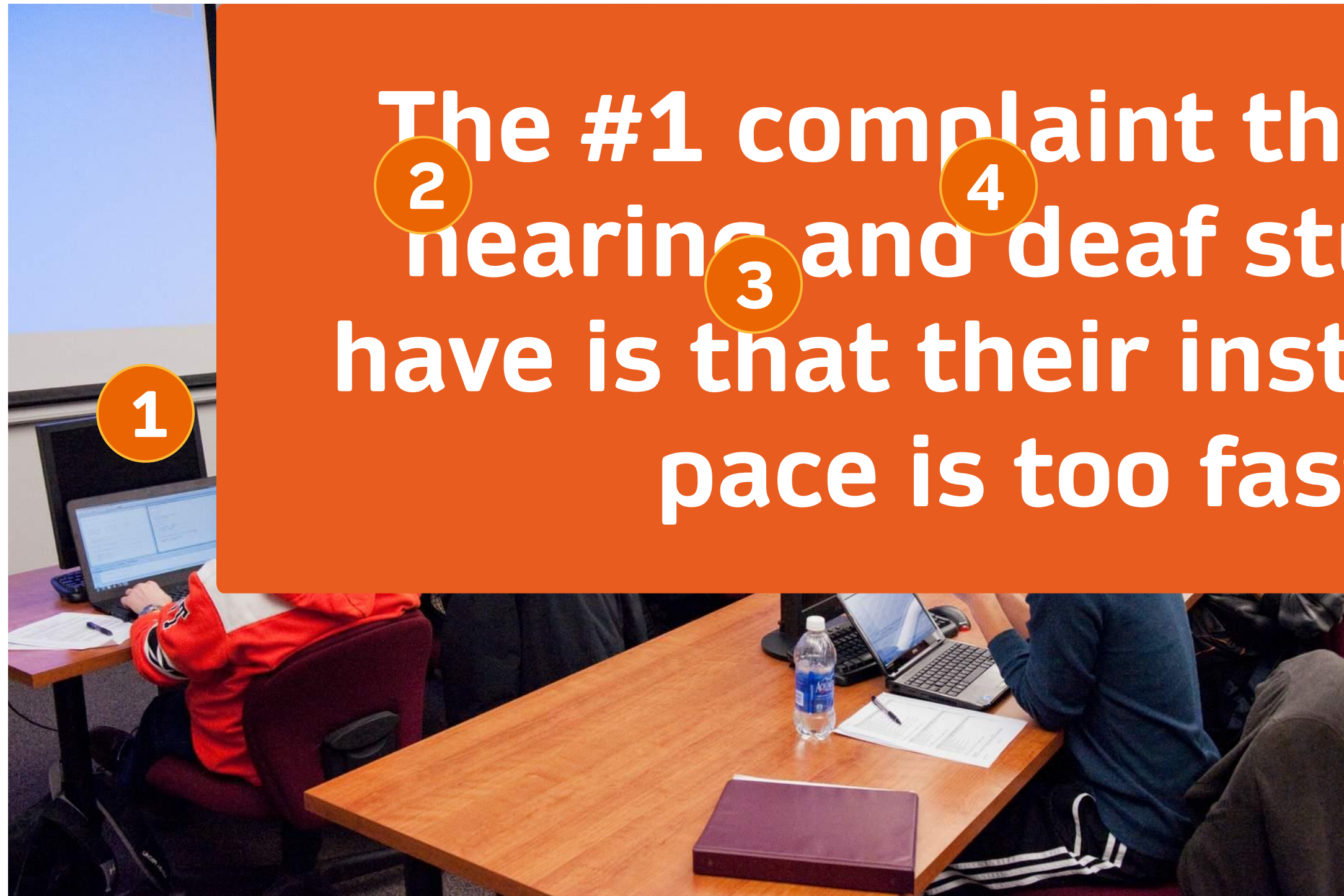
- Degrees of Hearing Loss
- Listening and Lipreading
- Deaf Culture

<https://youtu.be/bHt8ILT0IJ8>



# Teaching and Learning: Universal Design and Best Practices

**The #1 complaint that both  
nearing and deaf students  
have is that their instructor's  
pace is too fast.**



or  
Design for



# Teaching and Learning: In Different Contexts: Video

<https://youtu.be/ai-NNj3kqTs>

- Universal Design for Learning
- Applying Universal Design for Learning
- First Day of Class
- Pacing and Timing
- Visual Aids
- Incidental Learning

# Teaching and Learning: In Different Contexts



- Lab / Group Work
- Online Learning Best Practices
- Testing
- Accessing Support Services



# Assessment



[Download  
Ten Top Tips](#)

## TOP TEN THINGS DEAF AND HARD-OF-HEARING STUDENTS WOULD LIKE TEACHERS TO DO

### 1. DON'T USE WORDS LIKE "THIS" OR "THAT" AS REFERENTS.

Avoid giving vague instructions like "move this" or "divide that," as they can be difficult to understand and lack clear reference points for interpreters and captionists. Instead, be precise and specific. For example, say "Move the small beaker to the table by the window" or "Divide the data by the transfer time".

Being specific enhances understanding for all students, whether they are hearing or deaf.

### 2. MAKE SLIDES AND NOTES AVAILABLE TO STUDENTS BEFORE CLASS.

Providing materials before class helps all students prepare for class and understand the context of class discussions. Ensure that support service providers (such as interpreters, notetakers, tutors, or captionists) have access to these materials by adding them to the class list in your learning management system.

### 3. BE AWARE OF INTERPRETING "LAG TIME" - SLOW DOWN.

A fast teaching pace can be challenging for deaf, hard-of-hearing, and hearing students alike. Keep in mind that there's a 5-10 second delay (lag time) between what you say and when the interpreter signs it or the captionist types it. When you ask a question, pause allowing enough time for the interpreter to sign it or the captionist to type it before calling on a student. This ensures all students have an equal opportunity to participate.

### 4. GIVE STUDENTS TIME TO READ VISUAL MATERIALS BEFORE SPEAKING.

Deaf and hard-of-hearing students cannot look at slides and the interpreter and/or captions at the same time. Allow time for students to read the displayed information before you start explaining. Consider using numbered lists instead of bullets to make it easier for interpreters to reference material and for students to follow along.

Also, think about using an interactive whiteboard or visualizer to display documents. This approach enables students to follow along with the documents while receiving information from their interpreters, helping everyone make clear connections between the documents and the discussion.

- Top Ten Tips
- Perils of Lecturing
- Resources



Explore  
[www.DeafTEC.org](http://www.DeafTEC.org)



Thank You!



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