

The background of the slide features a faint, light blue image of several hands raised in the air, symbolizing participation or a group activity. The text is overlaid on this background.

# Deaf and Hearing Teams: Including Students in the Faculty Development Process

Sara Schley, Scot Atkins, Carol  
Marchetti

Rochester Institute of Technology

*PI:* Sara Schley  
*coPI:* Scot Atkins



R·I·T | NATIONAL TECHNICAL  
INSTITUTE FOR THE DEAF

*coPI:* Stephanie Cawthon



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And to date 21 faculty participants and cofacilitators, 9 student mentors, and 5 project assistants.

# End Goal of our project: develop Accessibility ToolKit

- Website
- Resources
- Strategies
- Case studies
- <https://www.rit.edu/academicaffairs/tls/accessibility-tool-kit-atk-10>

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About **TLS** Course **Design** Course **Development** Course **Delivery** Faculty **Connections**

**Blog » Accessibility Tool Kit (ATK) 1.0**

**Rebecca Johnson**—Welcome to the Accessibility Tool Kit (ATK) 1.0. This resource was created as part of an NSF IUse grant intended to support instructors teaching STEM classes at RIT who have one or more deaf or hard of hearing students. In addition to providing resources for faculty teaching deaf and hard of hearing students, we thought it worthwhile to consider accessibility from a universal design for learning perspective. How can we design courses and course materials to take into account the full range of variability of learners in our classrooms? What you'll find in this first version of the ATK are resources for creating accessible materials within a Universal Design for Learning approach to instruction.

The **first section** of this tool kit provides checklists, templates, and other resources for ensuring that course materials are accessible to most types of disability.

The **second section** of the tool kit provides resources on Universal Design for Learning.

The **third section** of the tool kit provides information on student motivation.

The **fourth section** of the tool kit provides information on how to introduce gradual change in your class, and how to measure whether that change is effective.

The fifth section of the tool kit will contain case studies from the first generation of ATK instructors. (currently being developed)

The **sixth section** gathers materials and strategies that have been developed at NTID and RIT and elsewhere.

**RECENT POSTS**

- Resilience--What's Your Angle?
- Engaging with Student Motivation
- What We Know about Teaching with Universal Design for Learning
- High-Impact Accessibility Practices
- Changing Your STEM Teaching Practice

**ARCHIVES**

- March 2017 (1)
- February 2017 (1)
- January 2017 (1)
- December 2016 (8)
- November 2016 (2)
- September 2016 (1)

Purpose of this project: Support faculty in the design of course components - to maximize accessibility to a diverse group of students – and improve experience for everyone.

Collaborative approach: Partner students with faculty.

# Universal Design for Learning: A Hook into Designing Strategies for Inclusion and Access

AFFECTIVE NETWORKS:  
THE **WHY** OF LEARNING



## Engagement

For purposeful, motivated learners, stimulate interest and motivation for

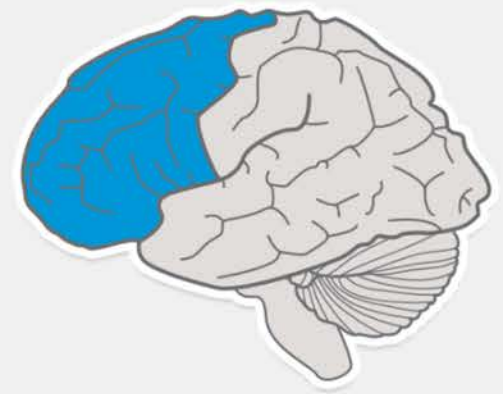
RECOGNITION NETWORKS:  
THE **WHAT** OF LEARNING



## Representation

For resourceful, knowledgeable learners, present information and content in

STRATEGIC NETWORKS:  
THE **HOW** OF LEARNING



## Action & Expression

For strategic, goal-directed learners, differentiate the ways that students can

# COGNITIVE LOAD THEORY (SWELLER)

Intrinsic

Germane

Extraneous



$2 \times 4 = 8$

If I can't get the online textbook to load this time, I'm going to *punch* the computer.

<b>Cog. Load</b>	<b>Description</b>	<b>Examples</b>
Intrinsic	imposed by the learning task	
Germane	devoted to processing information, constructing and automating schemas	
Extraneous	imposed by the how information is presented to learners	

## The Infographic Designer's Task

**+** Increase  
Germane  
Load



**—** Decrease  
Extraneous  
Load

**Cannot Influence Intrinsic Load**



21 faculty in four semester long learning communities

We asked WHY they joined project....



# Our Project: Faculty Learning Communities

## Collaboration – Each Faculty Learning Community:

- Pair of faculty facilitators with expertise in classroom access and diverse students
  - One d/Dhh, one hearing - both with same content area background,
- 4-6 faculty participants
- ~5 d/Dhh student mentors



# Faculty Participants

- Agree to participate in groups for at least one semester to learn new practices and skills.
- Learn access practices and how to respond to diverse classroom communication needs
- Explore challenges and solutions, UDL
- Develop and implement strategies
  - ▶ Safe place to explore new ideas

# Deaf and Hard of Hearing Student Mentors

- Students observe classrooms – every other week
- Meet 1:1 with faculty after observation
- Give immediate feedback to faculty on challenges they see in the classroom, and on implementation of the accessibility strategies
- **They become part of the solution.**



# d/Dhh Student Mentors

- 9 students, from 5 colleges at RIT
- Majors: Biotechnology, Criminal Justice, Independent Study, Business, Biomedical Science, Psychology
- Mainstreamed and Deaf school background
- Some prefer ASL/English interpreters and some prefer speech-to-text real-time captioning.

# Case Studies: Two Faculty Cases

- Faculty 1

- Teaches Mechanical Engineering in the College of Science and Technology.
- 1 year of experience at RIT with 6 years of total teaching experience.

- Faculty 2

- Teaches Software Programming at the College of Computer Science.
- 3 years of experience in teaching.



# Case #1: The Challenge

- Student production of high-quality written and oral deliverables.
- Goal: Increase student engagement during presentations, and increase quality of communication.

# Case #1: Strategy

- Typically, professor required a 20 minute oral presentation at the end of the semester
- This time, developed strategy to hold a poster session instead of an oral presentation to improve engagement in class.

# Case #1 Process and Results

- Employed peer editing as part of the process. Increased the quality of the project and grades improved.
- One written assignment occurred before the poster session.
- Results: Students were highly engaged in the poster session. In the past, students would have to listen to 300 minutes worth of oral presentations.
- This was a benefit for all students, hearing, deaf and hard of hearing.
- Led to further exploration of strategies by the professor and the student mentor, including the applying for an RIT internal grant.

## Case #2: The Challenge

- Challenge: There is a lack of verbal communication between students of varying communication preferences. Also, hard to get students to verbally communicate with one another for group work because it is a software class.
- Professor's Goal: To see more interaction between students. Note: interaction between the faculty and his students was great.

## Case #2: Strategy

Explore the use of a platform or software solution to help promote interaction between students for team projects.

## Case #2: Process and Results

- Assigned the use of Slack and Trello platforms for computer coding and project management for teams. Both platforms employ the use of chat boxes for communication.
- Student mentor notes that “I think FLC is a great influence on (Professor)’s teachings. FLC clearly has taught him a lot and made him more of an effective teacher. “
- Professor reports that students were highly engaged on their group projects and more communication occurred. He plans to use this for future classes.

**“Solution” strategies from faculty we  
have worked with:**

**Changing assignments**  
**Changing physical space**  
**Adding tools**

# References

- Cawthon, S., Schley, S. & Davidson, S. Assessment as a Tool to Improve Accessibility in Postsecondary Education. Submitted to the *Journal of Faculty Development*.
- Marchetti, C., Schley, S., Cawthon, S., O'Neil, J., & Elglaly, Y. Developing Strategies to Increase Postsecondary Access and Inclusion: Faculty Perspectives. Submitted to *Journal on Excellence in College Teaching*.
- Zuchegno, A. & Schley, S. 2017 (Nov. 3). Universal Design for Learning – How to Create Accessible and Inclusive Learning Environments. Educational Support Service Personnel Annual Conference. Rochester, NY.



Thank You!