University of Denver
Office of Teaching and Learning

Ripple Effects Mapping: Capturing Impact of the Neurodiversity Institute (NDI)

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Butler Institute for Families
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Office of Teaching and Learning Neurodiversity Institute Ripple Effects Mapping Session Report

Overview of the Neurodiversity Institute (NDI)

In 2021 DU received a request from an anonymous donor to "open hearts and minds" to the unique needs of neurodiverse students in the classroom. In response, the Vice Provost for Faculty Affairs, Learning Effectiveness Program, and the Office of Teaching and Learning partnered to develop a faculty development program aimed at increased awareness of Universal Design for Learning (UDL) and accessibility. The result, a two-day Neurodiversity Institute (NDI), has been offered a total of five times as of the writing of this report, with 91 faculty and administrator participants. The institute learning outcomes are: 1) Faculty will be able to explain the following terms to a fellow colleague: Accessibility, Neurodiversity, Universal Design for Learning, 2) Faculty will be able to apply UDL principles to course experiences and design responsive structures to support and collaborate with students, and 3) Faculty will be able to advocate for student needs regarding neurodiversity in home department/program.

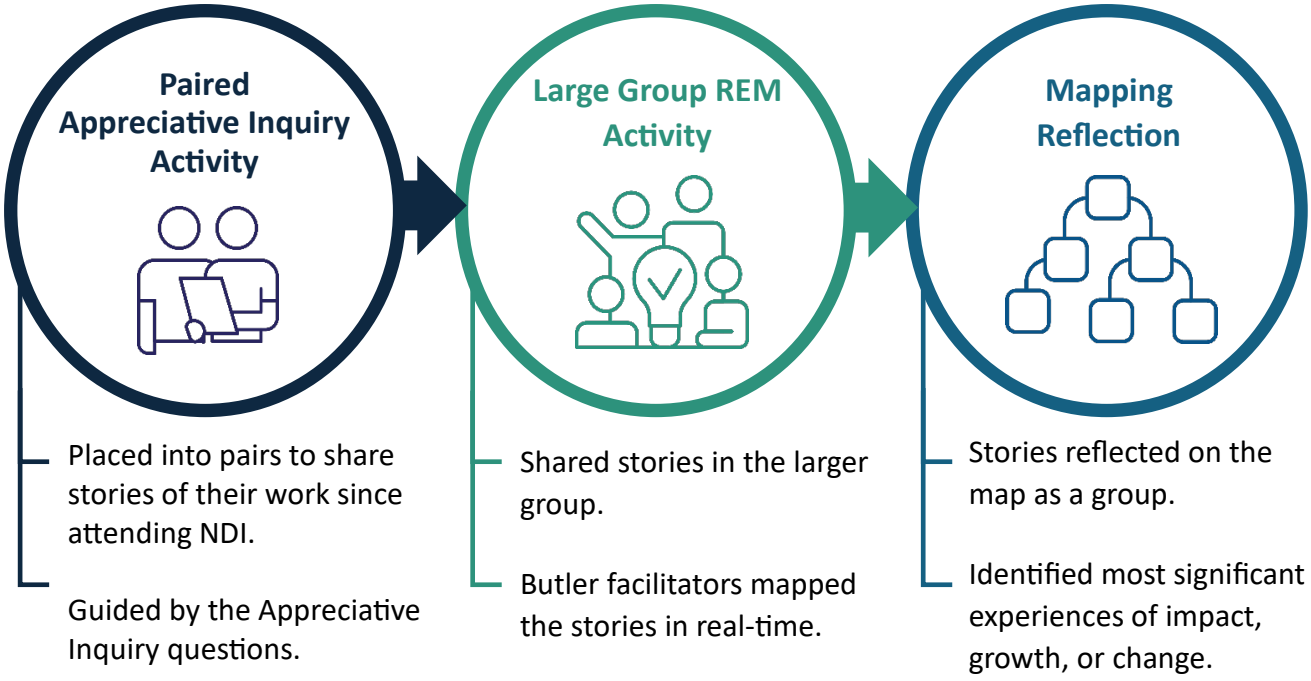
Approach

On February 21, 2024, Butler Institute facilitators conducted an in-person Ripple Effects Mapping (REM) session with participants to capture their experiences and stories of impact since participating in NDI. REM participants were those who attended NDI from August 2021 to August 2023 and represented over ten departments and units across the university.

REM is a participatory and strength-based interactive approach that aims to illuminate diverse perspectives and reveal both anticipated and unanticipated outcomes of an initiative. [1] REM celebrates accomplishments through a process that combines elements of Appreciative Inquiry, mind mapping, group interviewing, and qualitative data analysis to gather stories of impact. Participants' stories and reflections are mapped in real-time to demonstrate connections and relationships. The REM session consists of three components (see Figure 1):

[1] Chazdon, S., Emery, M., Hansen, D., Higgins, L., & Sero, R. (2017). A field guide to Ripple Effects Mapping. Minnesota Evaluation Studies Institute, University of Minnesota Libraries Publishing. Retrieved September 14, 2022, from https://ucanr.edu/sites/CEprogramevaluation/files/317076.pdf

Figure 1. REM Session Process Steps



The following are the **Appreciative Inquiry** questions used during the REM session.

- What does NDI do exceptionally well?
- What are you most proud of doing or accomplishing since attending NDI?
- What have been some highlights for you in efforts related to neurodiversity (e.g., supporting students with learning differences) since NDI?
- What are short or long-term outcomes of NDI-related work that stand out to you?

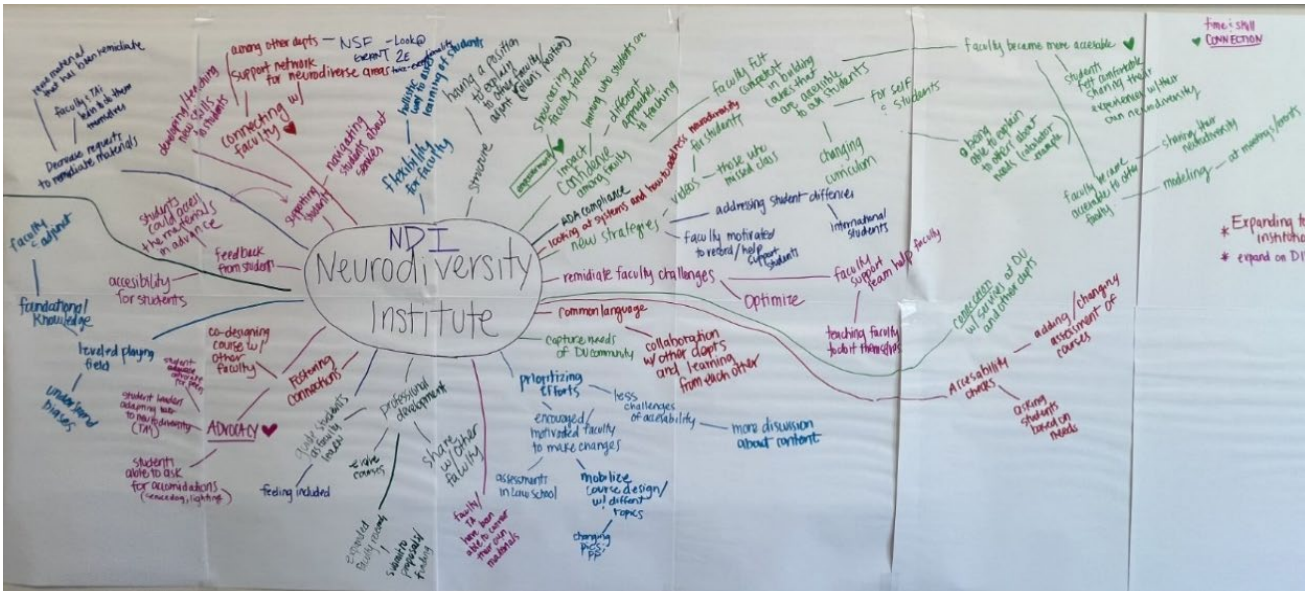
NDI REM Participants

Analysis

Following the in-person REM session, the Butler team used XMind software to create a digital Xmind Ripple Map from the hand-drawn map created during the session. The Butler team then sent the updated digital XMind map to the REM participants so they could review and confirm that the map accurately reflected their group's conversation and make any necessary revisions.

The Butler team then identified themes from the XMind map by grouping the impacts/ripples and stories participants identified into broad, meaningful categories.

NDI REM Session Hand-drawn Map of Participants' Stories

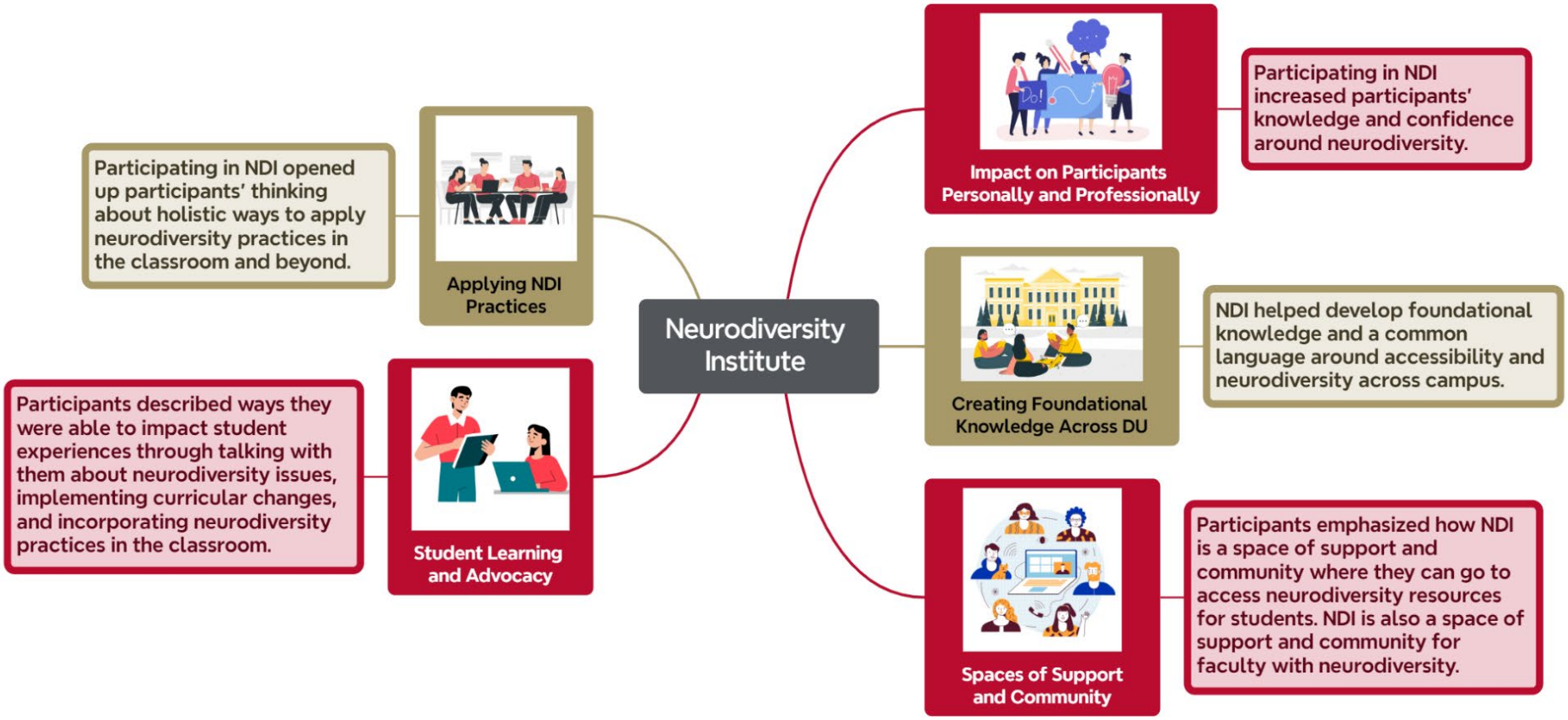


(*The digital version of the map above can be found in Appendix A*.)

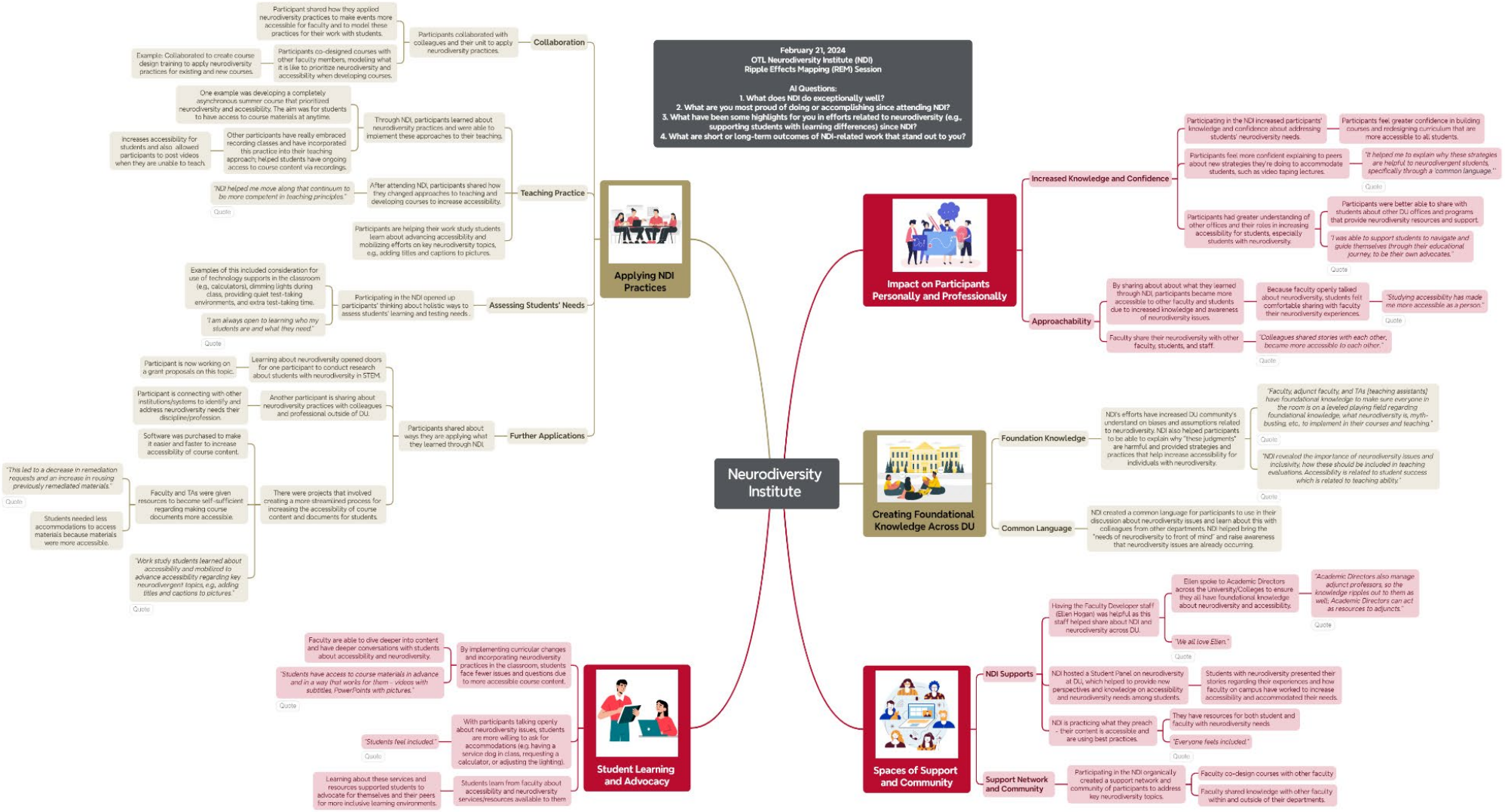
Resulting REM Session Themes

The key themes from the NDI REM session, the full thematic map, and individual-themed branches are provided below.

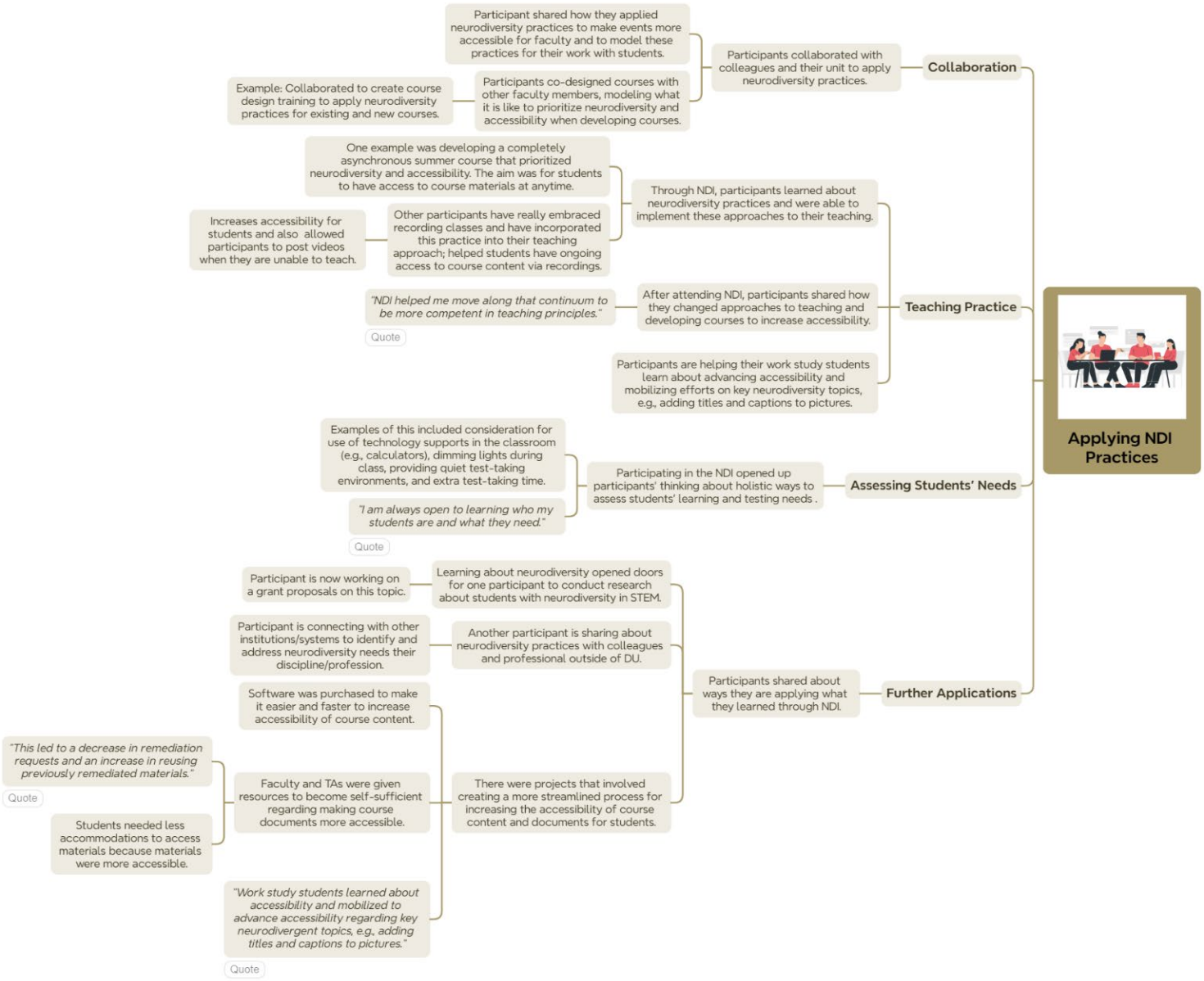
Key Themes from NDI REM Session



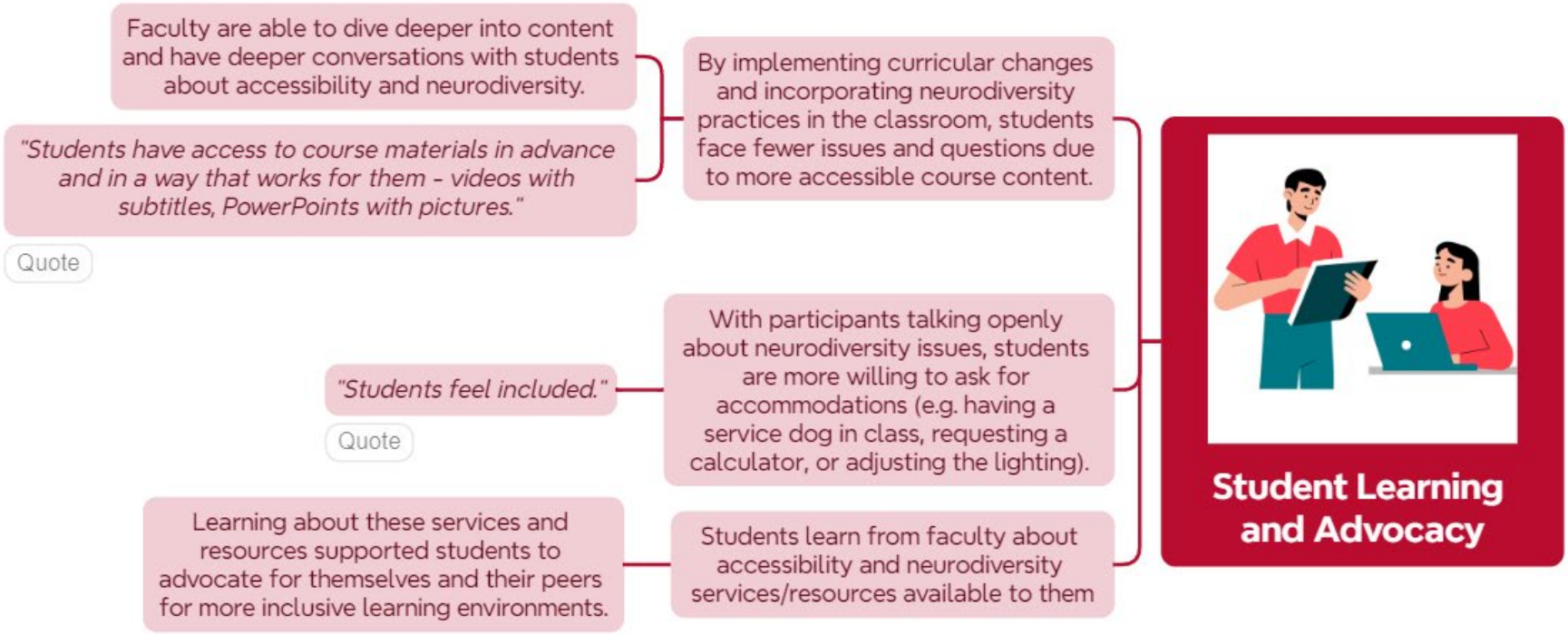
Full Thematic Map from NDI REM Session



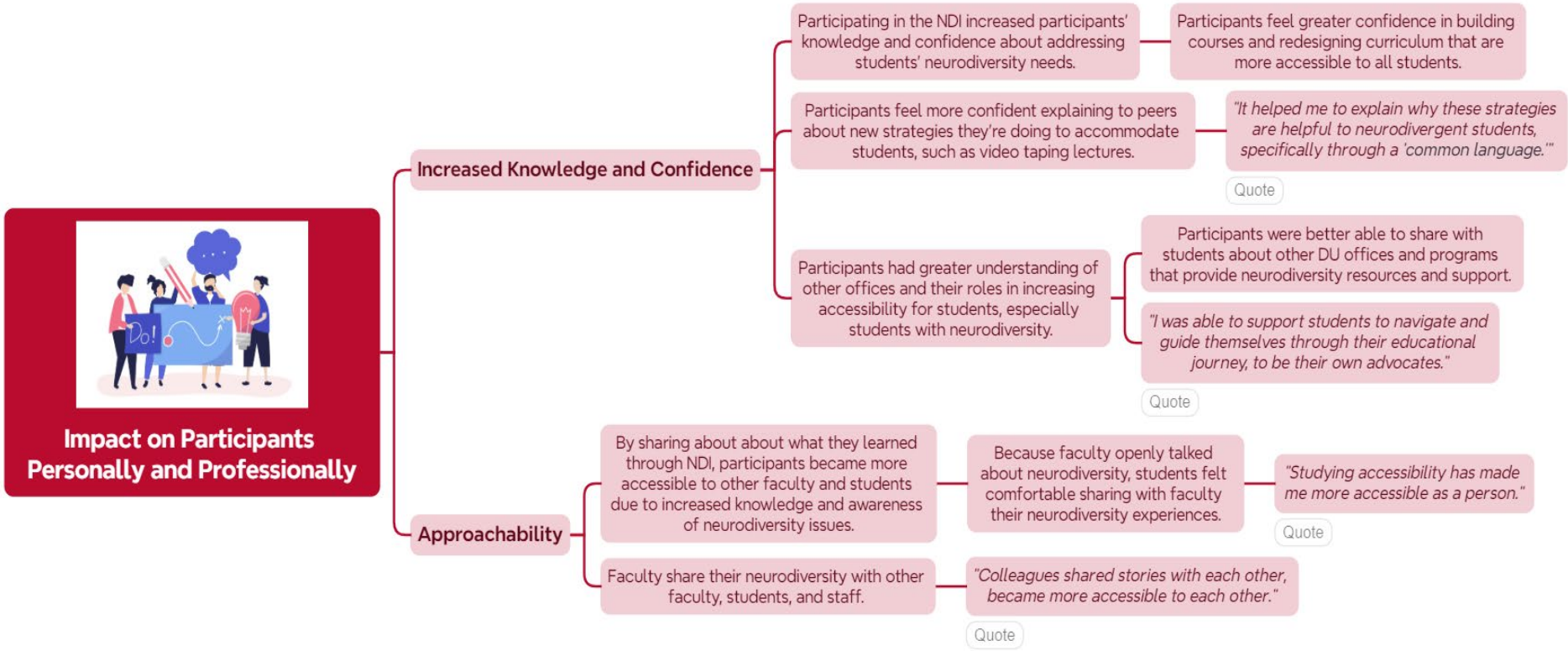
Subtheme: Applying NDI Practices



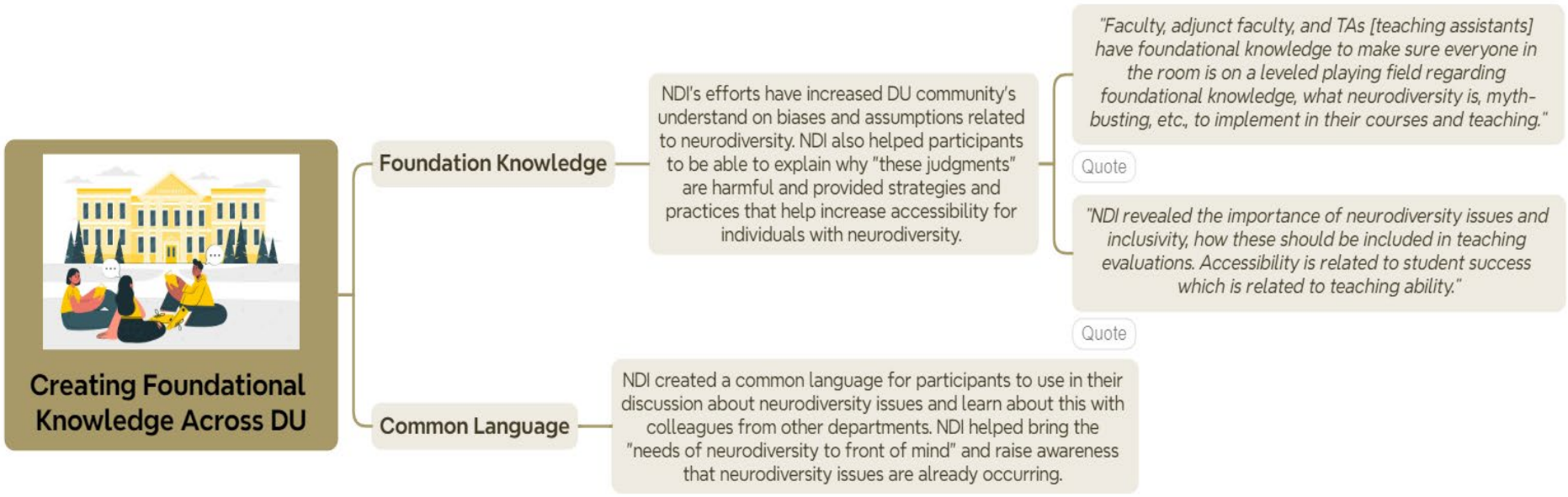
Subtheme: Student Learning and Advocacy



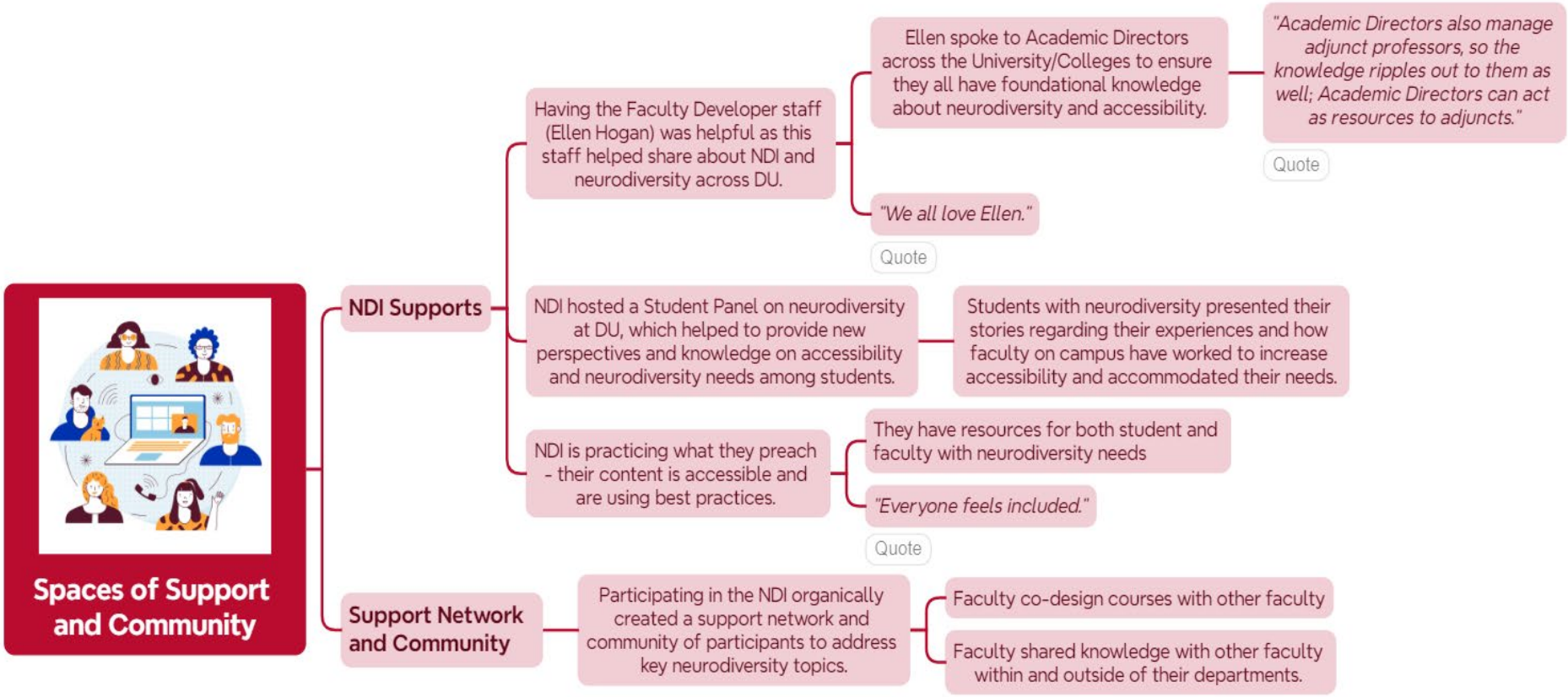
Subtheme: Impact on Participants Personally and Professionally



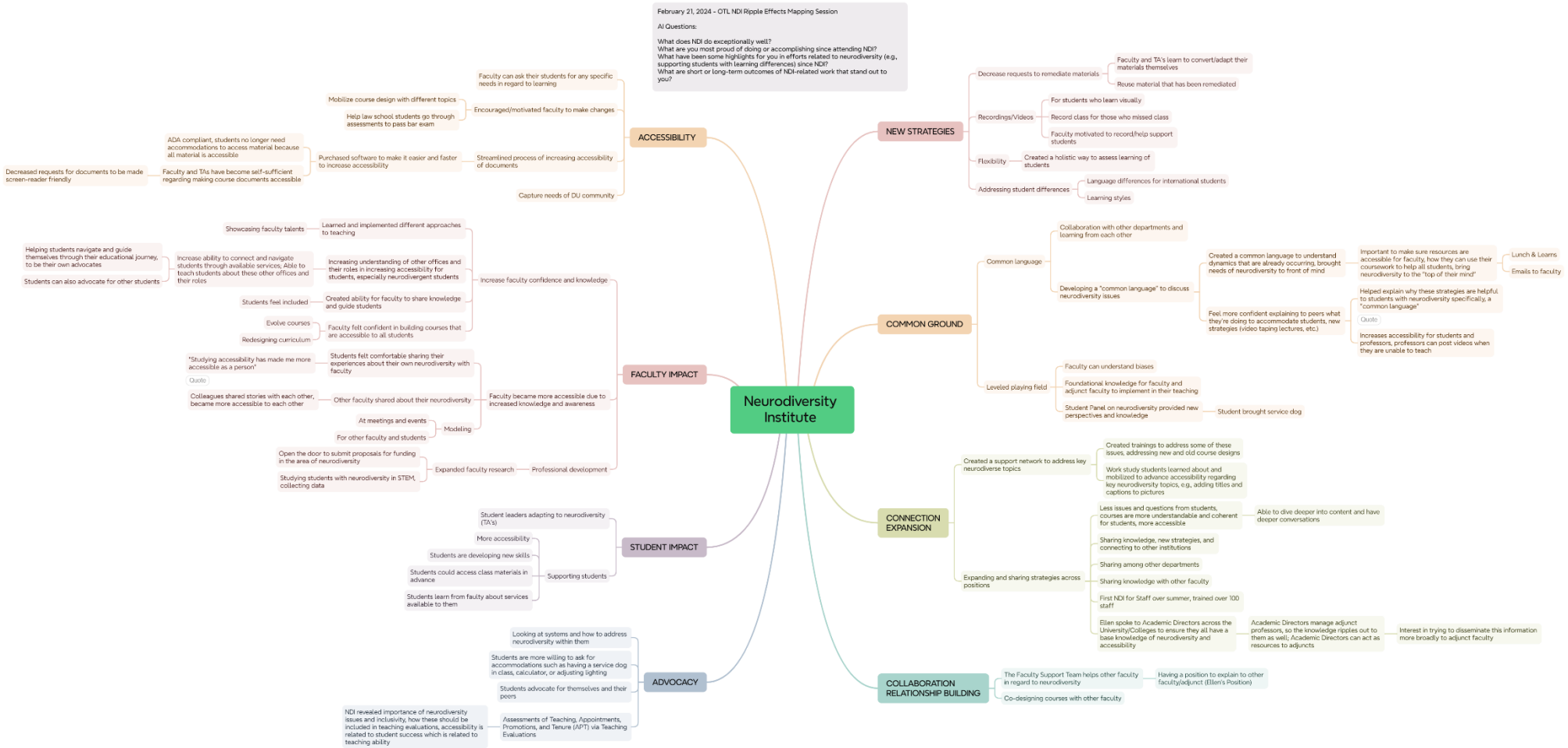
Subtheme: Creating Foundational Knowledge Across DU



Subtheme: Spaces of Support and Community



Appendix A


February 21, 2024 - OTL NDI Ripple Effects Mapping Session
AI Questions:
What does NDI do exceptionally well?
What are you most proud of doing or accomplishing since attending NDI?
What have been some highlights for you in efforts related to neurodiversity (e.g., supporting students with learning differences) since NDI?
What are short or long-term outcomes of NDI-related work that stand out to you?
Neurodiversity Institute
ACCESSIBILITY
Faculty can ask their students for any specific needs in regard to learning
Encouraged/motivated faculty to make changes
Mobilize course design with different topics
Help law school students go through assessments to pass bar exam
Streamlined process of increasing accessibility of documents
Purchased software to make it easier and faster to increase accessibility
ADA compliant, students no longer need accommodations to access material because all material is accessible
Faculty and TAs have become self-sufficient regarding making course documents accessible
Decreased requests for documents to be made screen-reader friendly
Capture needs of DU community
FACULTY IMPACT
increase faculty confidence and knowledge
Showcasing faculty talents
Learned and implemented different approaches to teaching
Increasing understanding of other offices and their roles in increasing accessibility for students, especially neurodivergent students
Increase ability to connect and navigate students through available services; Able to teach students about these other offices and their roles
Helping students navigate and guide themselves through their educational journey, to be their own advocates
Students can also advocate for other students
Created ability for faculty to share knowledge and guide students
Students feel included
Faculty felt confident in building courses that are accessible to all students
Evolve courses
Redesigning curriculum
Faculty became more accessible due to increased knowledge and awareness
Students felt comfortable sharing their experiences about their own neurodiversity with faculty
"Studying accessibility has made me more accessible as a person"
Quote
Other faculty shared about their neurodiversity
Colleagues shared stories with each other, became more accessible to each other
Modeling
At meetings and events
For other faculty and students
Professional development
Expanded faculty research
Open the door to submit proposals for funding in the area of neurodiversity
Studying students with neurodiversity in STEM, collecting data
STUDENT IMPACT
Student leaders adapting to neurodiversity (TA's)
Supporting students
More accessibility
Students are developing new skills
Students could access class materials in advance
Students learn from faulty about services available to them
ADVOCACY
Looking at systems and how to address neurodiversity within them
Students are more willing to ask for accommodations such as having a service dog in class, calculator, or adjusting lighting
Students advocate for themselves and their peers
Assessments of Teaching, Appointments, Promotions, and Tenure (APT) via Teaching Evaluations
NDI revealed importance of neurodiversity issues and inclusivity, how these should be included in teaching evaluations, accessibility is related to student success which is related to teaching ability
NEW STRATEGIES
Decrease requests to remediate materials
Faculty and TA's learn to convert/adapt their materials themselves
Reuse material that has been remediated
Recordings/Videos
For students who learn visually
Record class for those who missed class
Faculty motivated to record/help support students
Flexibility
Created a holistic way to assess learning of students
Addressing student differences
Language differences for international students
Learning styles
COMMON GROUND
Common language
Collaboration with other departments and learning from each other
Developing a "common language" to discuss neurodiversity issues
Created a common language to understand dynamics that are already occurring, brought needs of neurodiversity to front of mind
Important to make sure resources are accessible for faculty, how they can use their coursework to help all students, bring neurodiversity to the "top of their mind"
Lunch & Learns
Emails to faculty
Feel more confident explaining to peers what they're doing to accommodate students, new strategies (video taping lectures, etc.)
Helped explain why these strategies are helpful to students with neurodiversity specifically, a "common language"
Quote
Increases accessibility for students and professors, professors can post videos when they are unable to teach
Leveled playing field
Faculty can understand biases
Foundational knowledge for faculty and adjunct faculty to implement in their teaching
Student Panel on neurodiversity provided new perspectives and knowledge
Student brought service dog
CONNECTION EXPANSION
Created a support network to address key neurodiverse topics
Created trainings to address some of these issues, addressing new and old course designs
Work study students learned about and mobilized to advance accessibility regarding key neurodiversity topics, e.g., adding titles and captions to pictures
Expanding and sharing strategies across positions
Less issues and questions from students, courses are more understandable and coherent for students, more accessible
Able to dive deeper into content and have deeper conversations
Sharing knowledge, new strategies, and connecting to other institutions
Sharing among other departments
Sharing knowledge with other faculty
First NDI for Staff over summer, trained over 100 staff
Ellen spoke to Academic Directors across the University/Colleges to ensure they all have a base knowledge of neurodiversity and accessibility
Academic Directors manage adjunct professors, so the knowledge ripples out to them as well; Academic Directors can act as resources to adjuncts
Interest in trying to disseminate this information more broadly to adjunct faculty
COLLABORATION RELATIONSHIP BUILDING
The Faculty Support Team helps other faculty in regard to neurodiversity
Having a position to explain to other faculty/adjunct (Ellen's Position)
Co-designing courses with other faculty