

# The Universal Design for Learning Academy for Faculty Across Disciplines

Breanne Kirsch, Briar Cliff University

## OVERVIEW

The Universal Design for Learning (UDL) academy is professional development for faculty focused on exploring and implementing the UDL framework with input from other faculty participants, and the academy instructor. The academy occurs over five, half-days (four hours each) in an in-person environment. The main learning outcome of the academy was to teach faculty about UDL and help them implement UDL in one or more courses. The academy includes inclusive design activities, UDL implementation worksheets, and technology-rich presentations. Faculty participants completed the activities and worksheets that led to self-reflection and implementation of UDL in one or more courses.

Topics: Accessibility, Blended Learning, Multiple Means of Engagement, Universal Design for Learning

Time: 5 half-days (4 hours each day)

## MATERIALS

- [UDL Academy Agenda](#)
- [UDL Checklist](#)
- [UDL Glossary](#)
- [UDL Implementation Worksheets](#)
- [Inclusive Design Practice Activities](#)
- [Presentations Slides](#)
- [UDL Academy Website](#) (Briar Cliff University, n.d.b)
- [UDL Guidelines](#) (Center for Applied Special Technology [CAST], 2018)
- [UDL on Campus](#) (CAST, n.d.a)
- Computer Equipment

## CONTEXT-AT-A-GLANCE

### Setting

A multi-day training for faculty at a small, private university in the midwestern United States.

### Modality

In-person

### Class Structure

This training is a five-day, four hours per day, academy for higher education faculty across disciplines. It is provided in a computer lab.

### Organizational Norms

UDL is a requirement for the new general education curriculum to use inclusive design in course development and create a space for all learners. This academy was provided to help train faculty to implement UDL in their courses. Grant funds were used to provide small stipends to participants.

### Learner Characteristics

Higher Education faculty from varied disciplines with limited knowledge of instructional design methods and UDL.

### Instructor Characteristics

The main instructor is the University Librarian, has a Master of Library and Information Science and a Master of Education, focused on educational technology. She is working towards a Ph.D. in instructional design and technology.

### Development Rationale

The UDL Academy was created to provide faculty training in implementing UDL to meet the new general education program requirements.

### Design Framework

Universal Design for Learning Framework

## SETUP

The Universal Design for Learning (UDL) Academy was held in a computer lab where faculty could use provided computers, bring their personal laptops, or work on printed worksheets. Faculty in the academy were paired up randomly with someone from a different discipline and asked to give a 10–15-minute presentation on one UDL guideline and ways to implement it in college courses. This random paired presentation is called Pair Presentation throughout this lesson.

Setup includes having the UDL Academy Agenda, UDL Glossary (attached), and UDL Implementation Worksheets (attached) printed for participants. These are also available electronically on the [UDL Academy Website](#) (Briar Cliff University, n.d.c, UDL Academy Worksheets and Readings). The Presentation Slides (attached) and Inclusive Design Practices Activities (attached) should be ready to use during the academy, along with the [UDL Academy Website](#) (Briar Cliff University, n.d.b) with additional resources. The Inclusive Design Practice Activities will require Internet access, and some require headphones or earbuds to avoid distracting other participants. Activities and worksheets can be submitted within an LMS or via email.

## CONTEXT AND SETTING

Prior to the offering of the UDL Academy, the academy instructor helped lead a faculty book club for the Center for Excellence in Learning and Teaching with the book *Reach Everyone, Teach Everyone* (Tobin & Behling, 2018). This book club introduced the topic of UDL on campus and began discussions among faculty about using UDL to help meet the needs of a diverse student population. This led to the inclusion of UDL as a requirement for the new general education curriculum.

The academy was taught at a private, liberal arts university in the midwestern United States. A diverse student population, comprised of 35% minority students from 36 states and 22 foreign countries, complete a variety of undergraduate, graduate, and professional programs. The new general education curriculum is expected to begin during the 2024-2025 academic year. The UDL Academy was developed to support faculty in implementing the UDL framework in their courses.

The UDL Academy was first offered during Summer 2021 and again during Summer 2022 for both undergraduate and graduate faculty in different disciplines. Seventeen faculty members participated in the first year and another 16 faculty members participated in the second year. The disciplines or departments represented by faculty in the first cohort, Summer 2021, were biology, chemistry, business, social work, education, sociology, media communications, English, music, math, and occupational therapy. The disciplines or departments represented by faculty in the second cohort, Summer 2022, were biology, chemistry, education, media communications, music, occupational therapy, physical therapy, nursing, health sciences, psychology, history, and political science. A third academy is being planned for Summer 2023. While the first two years of the academy were held in-person, the third is planned for a hybrid setting with some faculty attending in-person and others attending virtually, to permit remote faculty who teach online courses the ability to participate.

Small stipends were offered to faculty participants including \$250 for participating in the academy and completing the activities and worksheets, and another \$500 for implementing UDL in one or more courses after the academy. The Department of Education Strengthening Institutions Title III Grant provided funds for the stipends that faculty received.

The UDL Academy is based on one described by Hromalik et al. (2020). The UDL Academy Worksheets were adapted from Hromalik's worksheets with permission. A UDL Academy was designed for five mornings so faculty would have time for discussion or completing worksheets and activities on their own in the afternoons and evenings.

The instructor of the academy helped prepare faculty to implement UDL in their courses. Holding the academy during the beginning or middle of summer, allowed faculty the rest of the summer to design and update their courses by applying the UDL framework in a way that worked best for their course and to meet the needs of their students.

The academy was designed with UDL in mind to model different UDL techniques for faculty participants. For example, faculty could use the computer lab desktop computers, their own laptops, or notebooks when working on activities and

worksheets, which modeled providing options for the Expression and Communication guideline of UDL

(CAST, 2018, Guideline 5). Similarly, presentation slides were provided electronically on the UDL Academy website (Briar Cliff University, n.d.c, UDL Academy Worksheets and Readings), along with the agenda, glossary, inclusive design activities, and implementation worksheets, and this exemplified the providing options for Perception guideline of UDL (CAST, 2018, Representation, Guideline 1). The printed agenda, glossary, and worksheets were also provided if faculty preferred writing responses rather than typing responses, and this teaching strategy reflected the providing options for Physical Action guideline of UDL (CAST, 2018, Guideline 4). Multimedia utilized throughout the academy included several videos, the UDL framework infographic, and images, in addition to verbal presentations by the instructor. These multimedia elements supported the providing options for Perception guideline of UDL (CAST, 2018, Guideline 1). The academy agenda and activities are listed in the next section, Learning Representation.

## LEARNING REPRESENTATION

The UDL Academy introduces the UDL framework and application techniques through five half-days. The five days began with a presentation of direct instruction, utilizing a variety of multimedia resources including YouTube videos, images, and examples. Time was allotted for open discussion and questions, followed by time to work on the academy worksheets (called Project Work). The academy schedule should be adapted to fit schedules for other institutions based on the context and faculty or learners.

## ACADEMY AGENDA

### DAY 1

- 8:35 am - 9:35 am
  - Direct Instruction: UDL Academy, UDL, and learner variability presentation (slides 1-23 in Presentation Slides).
- 9:40 am - 10:40 am
  - Direct Instruction: Accessibility, Accommodations, and Adaptive Technology

Overview by Disability Services Coordinator (see Presentations section for more details).

- 10:45 am - 11:45 am
  - Faculty Panel on UDL Implementation and Open Discussion by previous participants (see Presentations section for more details).
- 11:50 am - 12:30 pm
  - Project Work: Worksheet 1 (page 1 in UDL Implementation Worksheets).

Day one's focus was on providing an overview of the academy and introducing the UDL framework and learner variability. The Disability Services Coordinator provided an overview of accessibility and accommodations on campus. Several faculty that previously participated in the UDL Academy shared their experiences implementing UDL in their courses. Faculty complete Worksheet 1.

### DAY 2

- 8:35 am - 9:35 am
  - Direct Instruction: UDL Syllabus and Multiple Means of Representation presentation (slides 24-34 in Presentation Slides).
- 9:40 am - 10:40 am
  - Pair Presentations (Representation).
- 10:45 am - 11:30 am
  - Time for Questions and Open Discussion.
- 11:30 am - 12:30 pm
  - Project Work: Worksheet 2, Part 1, and Syllabus Updates (pages 2-3 in UDL Implementation Worksheets).

On the second day, the focus was on multiple means of engagement with an instructor presentation, followed by Pair Presentations on implementation techniques on the Provide Multiple Means of Representation (see Pair Presentations Prompt section for more details; Cast, 2018). Then time was provided for questions and open discussion, and for project work including Worksheet 2 and updating a course syllabus.

### DAY 3

- 8:35 am - 9:35 am
  - Direct Instruction: UDL Assessment and Multiple Means of Action & Expression presentation (slides 35-45 in Presentation Slides).
- 9:40 am - 10:40 am

- Pair Presentations (Action & Expression).
- 10:45 am - 11:30 am
  - Time for Questions and Open Discussion.
- 11:30 am - 12:30 pm
  - Project Work: Worksheet 2, Part 2 (pages 4-5 in UDL Implementation Worksheets).

The third day began with a presentation assessment and providing multiple means of action and expression, followed by more pair presentations on the implementation techniques on the Provide Multiple Means of Action & Expression (see Pair Presentations Prompt section for more details; CAST, 2018). Time was again allocated for questions, open discussion, and project work for Worksheet 2, Part 2.

## DAY 4

- 8:35 am - 9:35 am
  - Direct Instruction: Blended Courses, Case Studies, and Multiple Means of Engagement presentation (slides 46-55 in Presentation Slides).
- 9:40 am - 10:40 am
  - Pair Presentations (Engagement).
- 10:45 am - 11:30 am
  - Time for Questions and Open Discussion.
- 11:30 am - 12:30 pm
  - Project Work: Worksheets 3-4 (pages 6-8 in UDL Implementation Worksheets).

The fourth day of the academy began with a presentation on blended courses, case studies, and engagement. This was followed by the last of the Pair Presentations on the Provide Multiple Means of Engagement (see Pair Presentations Prompt section for more details; CAST, 2018), time for questions, discussion, and project work including Worksheets 3 and 4.

## DAY 5

- 8:35 am - 9:35 am
  - Direct Instruction: Making Digital Learning Resources More Accessible presentation (slides 56-64 in Presentation Slides).
    - Alt-tags for images, auto captioning and editing in YouTube.
    - Using PowerPoint presentation captions and Word headings.

- PowerPoint and Word accessibility checking tools, Web Accessibility in Mind [WebAIM] (n.d.) tools.

- 9:40 am - 10:35 am
  - Activity: Alt-tags, YouTube auto captioning, and Word headings practice activities (Inclusive Design Practice Activities attachment).
- 10:40 am - 11:45 am
  - Project Work: Worksheets 5-6, updates to syllabus (pages 9-10 in UDL Implementation Worksheets).
  - Worksheet 7 (page 11 in UDL Implementation Worksheets) is due after UDL implementation.
- 11:50 am - 12:30 pm
  - Evaluate the Academy and Celebration.

The final day of the academy began with a presentation on inclusive design recommendations. Faculty practiced inclusive design with the Inclusive Design Practice Activities (attached) and completed Worksheets 5 and 6. After the participants evaluated the academy, followed by a pizza party celebration.

## OFFERING THE ACADEMY

The academy was offered in person in Summer 2021 and Summer 2022 with two iterations. The first was offered July 12-16, 2021. Faculty input suggested that they would prefer the academy directly after the spring semester so they would have more time to plan their UDL implementation efforts over the summer. As a result, the second academy was offered directly after Spring 2022 grades were due, May 19-20 and 23-25, 2022. A hybrid iteration is planned for 2023.

## PRESENTATIONS

Each day began with the main academy instructor offering a one-hour presentation for that day's topics (UDL, multiple means of representation, multiple means of action and expression, multiple means of engagement, and making digital learning resources more accessible) utilizing the provided Presentation Slides. The slides for each of these days was included in one slideshow and provided to participants electronically via the [UDL Academy Website](#) (Briar Cliff University, n.d.c, Academy Slides, Bree's Slides). The slides for each day are:

- Day 1: Slides 1-23.

- Day 2: Slides 24-34.
- Day 3: Slides 35-45.
- Day 4: Slides 46-55.
- Day 5: Slides 56-65.

On the first day, an additional presentation was given by the Disability Services Coordinator about accessibility, accommodations, and adaptive technology at the institution. This presentation introduced faculty to demographics of the student population with accessibility needs, including hidden disabilities. Since this academy is held at a small, liberal arts institution, there are not many resources available to students in terms of accommodations other than lengthened time for tests. This helped highlight the importance of considering students' needs when planning courses and how UDL could help diminish learning barriers for students. This presentation is not provided with this lesson, as it should be created by the Disability Services Coordinator, or the appropriate faculty/staff, to reflect the institution this academy is being implemented.

For the second iteration, Summer 2022, there was a group of faculty that participated in the Summer 2021 academy cohort and implemented some aspects of UDL in their courses. On Day 1, these faculty sat on a panel and were asked questions about their experiences implementing UDL. Some of these questions were pre-prepared and some were asked by the current academy participants. This panel provided the Summer 2022 participants ideas of what they could do in their own courses. The pre-prepared questions asked during the panel were:

1. In what ways have you implemented UDL in your courses?
2. What, if any, benefits have you noticed from implementing UDL in your classes?
3. What has been the most challenging part of trying to implement UDL in your courses?
4. What would you recommend for faculty beginning the process of applying UDL techniques?
5. Is there anything else you would like to share about UDL?

On Day 1, faculty were paired with a faculty member from a different discipline and asked to choose a UDL guideline from the three main categories (Engagement, Representation, and Action & Expression; CAST, 2018) to give a short presentation

on Days 2, 3, and 4 on how that guideline could be implemented in the college classroom.

Days 2, 3, and 4 focused on a specific UDL principle for the direct instruction presentations, along with a section of the [UDL on Campus website](#) (CAST, n.d.d):

- [UDL syllabus](#) (CAST, n.d.e),
- [UDL assessment](#) (CAST, n.d.c),
- [blended courses](#) (CAST, n.d.a), and
- [case studies](#) (CAST, n.d.b).

Day 5 of the academy focused on inclusive design techniques and making digital learning resources more accessible. The presentation this day covered alternative text, video captions, headings, accessibility checker tools, and [WebAIM \(n.d.\) tools](#).

During Days 2, 3, and 4, faculty presented in pairs of two. Each presentation was 10-15 minutes and covered one UDL guideline (e.g., the first pair presented on provide options for Perception; CAST, 2018, Guideline 1) out of the nine guidelines in the UDL framework. Since there were 15 participants, the ninth guideline was presented by the academy instructor. The pair presentations could be in any format. Faculty were given a prompt on the first day about the pair presentations, included in the next section, Pair Presentation Prompt.

### **PAIR PRESENTATIONS PROMPT**

The following represents what the participants receive:

You will partner with another faculty member and sign up for one UDL Guideline. Try to step out of your comfort zone and work with a faculty member you do not know very well to get to know them a little better (don't pair up with someone from your own department please). Pair presentations will occur during the next three days of the academy.

Each pair will give a short 10-15-minute presentation on how to implement that guideline in the college classroom. You do NOT have to go over the guideline and individual checkpoints, instead focus on implementation techniques for the college classroom. Try to provide 2-3 techniques for each checkpoint.

For example, if I had Provide Options for Comprehension (CAST, 2018, Guideline 3), I would

come up with 2-3 ideas of how to meet each of the checkpoints in college courses. Specifically, for the first bullet, “activate or supplying background knowledge” (CAST, 2018, Guideline 3), I could recommend the following three techniques:

1. A [Kahoot!](#) quiz at the beginning of class that asks questions about previous content related to the content I’ll be discussing that week to refresh students’ memories of background knowledge.
2. A small group activity where students write what they remember on a topic on a large sheet of paper and then share with the class.
3. A class discussion on what the students remember by asking a series of questions and having students respond.

You can work with your pair however you want (divide up by bullet, or each come up with 1-2 techniques for each bullet, etc.). You can also present your recommended techniques in whatever format you choose, such as:

- Oral presentation with PowerPoint slides.
- Model the techniques you are recommending with us.
- Record a video of your presentation.
- Provide infographics of the techniques.
- Write a 2-3 page paper describing the techniques with links or citations to more information and resources on each technique.
- Another format that shares 2-3 techniques for each checkpoint for your principle (see attached UDL Checklist for all checkpoints).

You can be as creative as you would like!

This concludes the information provided to participants.

## WORKSHEETS

As part of the academy, faculty were asked to complete UDL Implementation Worksheets to help them plan and brainstorm their UDL implementation efforts. Faculty were given time during each day of the academy to complete the worksheets either individually or share ideas with other faculty. Dr. Christopher Hromalik shared worksheets from his UDL Academy and gave permission to adapt and reuse them for this UDL Academy (Hromalik et al., 2020). Hromalik’s worksheets included 10 different activities. During the first, Summer 2021 UDL Academy, the ten worksheets were utilized. After

feedback from faculty participants, the worksheets were adapted and condensed into seven worksheets for the second, Summer 2022 iteration of the academy. This is described below in the Changes to The Academy section.

## REVISED WORKSHEETS

Worksheet 1 was completed on Day 1 of the academy and focused on high level design questions and learner analysis. Worksheet 2, Part 1 completed on Day 2 of the academy, focused on analyzing existing course materials. Worksheet 2, Part 2, completed on Day 3 of the academy, focused on analyzing existing materials through a UDL lens. On Day 4, participants completed Worksheets 3 and 4 focusing on instructor objectives for the UDL redesign and brainstorming UDL solutions. For Day 5 of the academy, faculty completed Worksheets 5 and 6 on selecting or designing materials for development and completing a lesson plan using UDL techniques. Worksheet 7 was a list of questions for faculty to answer after they implemented UDL in their courses, to evaluate their implementation efforts. Faculty were asked to complete and share their responses with the academy instructor at the end of the semester, after faculty had implemented UDL in one or more courses.

While faculty were encouraged to brainstorm and work together on their worksheets, they also had the option to go back to their offices on campus and work individually on the worksheets if they preferred. Most faculty chose to work in the larger group, but a few did choose to either work in their offices or from home on the worksheets. Faculty were given until the end of the summer (the semester the academy occurred) to complete Worksheets 1 to 6, though most faculty chose to submit them directly after the academy. Some did take longer to complete the worksheets and a few faculty chose not to complete the worksheets due to other obligations. The faculty who did not complete the worksheets did not receive the stipend.

## DAY 5 INCLUSIVE DESIGN ACTIVITIES

Based on input from the first academy cohort (Summer 2021), several inclusive design activities were created for faculty to practice different inclusive design recommendations. The Inclusive Design Practice Activities (attached) was utilized for the

second, Summer 2022 academy cohort on Day 5. Faculty were given the option to complete two of five activities during the final day of the academy. These activities were just for practice and were not turned in or graded. As faculty worked on these activities, the instructor answered questions, supported any technical needs, and supported the faculty.

In Activity 1, faculty could practice creating alternative text (alt-text) for three images, including one infographic (pages 1-3 of the Inclusive Design Practice Activities). Activity 2 (page 3 of the Inclusive Design Practice Activities) involved watching a YouTube video with automatic captions. Faculty considered how the captions could be improved. Faculty were encouraged to create a YouTube account and upload a short video to edit the auto captions, though this was not required due to time limitations. Activity 3 (page 3 of the Inclusive Design Practice Activities) involved using the [color contrast checker tool](#) from WebAIM (n.d.). Faculty were encouraged to play with the color contrast checker tool to better understand contrasting colors. For Activity 4 (page 4 of the Inclusive Design Practice Activities), faculty were given sample PowerPoint and Word files to practice using the accessibility checkers within those programs to make corrections based on accessibility issues discovered in the sample files. Activity 5 (page 4 of the Inclusive Design Practice Activities) was to use the [WebAIM \(n.d.\) WAVE tool](#) to assess a website's accessibility. WAVE is a suite of evaluation tools that helps people make web content more accessible to individuals with accessibility needs by identifying accessibility and Web Content Accessibility Guideline (WCAG) errors.

## ADDITIONAL ACADEMY RESOURCES

The main academy resources included the Presentations Slides, UDL Implementation Worksheets, and Inclusive Design Practice Activities (attached). There was one additional resource provided to faculty participants: the [UDL Academy Website](#) (Briar Cliff University, n.d.b). This website was created on the library's website platform of LibGuides. The Home page provides general information about the UDL framework with UDL Guides, a UDL Syllabus Template resources, and examples, and slides from prior UDL presentations (Briar Cliff University, n.d.b, UDL Slides from CELT Session on 11-6-2020; UDL Slides from Fall Faculty Institute 2020).

The Accessible Materials page (Briar Cliff University, n.d.a) has tips for creating accessible materials including PowerPoint slides, speeches and presentations, Word documents, and PDFs. The UDL Academy page (Briar Cliff University, n.d.c) includes all the UDL Academy documentation including the slides, UDL assignment examples and rubrics, worksheets and recommended optional readings, a UDL Glossary (UDL Academy Worksheets and Readings), a collaborative notetaking document, resources for pair presentations, edtech tools and resources, and inclusive design activities.

The final two pages (UDL Academy 2021 Videos and UDL Academy 2022 Videos; Briar Cliff University, n.d.b) include video recordings and slides shared by other presenters or during the pair presentations. Each presentation was recorded using a video camera and tripod so that faculty could refer back to presentations if they desired or if they had to miss one of the days of the academy. Faculty gave permission to have their pair presentations recorded and shared on the UDL Academy website. It is not necessary to record the presentations, but it does help in case faculty have to miss a day of the academy or want to refer to anything presented during the academy.

## IMPLEMENTING UDL IN PRACTICE

Faculty were asked to implement UDL in at least one course during the fall semester (the semester directly following the academy). Faculty could choose how much of their course they wanted to implement UDL. It was recommended that they choose one week's worth of content to redesign based on the UDL framework, though many faculty chose to implement UDL throughout the entire course. Broadly, faculty were encouraged to use a plus one mentality when redesigning their course with UDL in mind, based on what Tobin and Behling recommend in *Reach Everyone, Teach Everyone* (2020). This plus one mentality focuses on the idea that UDL implementation is a process that occurs over time, rather than a one-time intervention. This approach emphasizes using a new UDL technique each semester.

## ASSESSMENT

The main goal of the academy was to teach faculty about UDL and help them implement UDL in one or

more courses. The worksheets, inclusive design activities, and pair presentations were all meant to help faculty practice UDL techniques and brainstorm about how they could implement UDL in their courses. Worksheets were collected and if they were completed, faculty received “credit” for completing the academy and then received the initial. Faculty did not receive specific feedback on their completed worksheets unless they requested advice or

recommendations from the academy instructor, which some faculty did. Course syllabi were collected prior to the academy and after the academy since faculty were asked to update their syllabi as part of the academy using the UDL syllabus template available on the UDL Academy website (Briar Cliff University, n.d.b, UDL Syllabus Template).

To assess the UDL implementation efforts, the academy instructor observed one class session of the faculty’s course where they implemented UDL. The academy instructor utilized a UDL Checklist (attached) and checked off which UDL techniques were observed during the class session. The UDL Checklist was created by using the UDL Guidelines on the CAST website (CAST, 2018) and copying and pasting each of the bullets under each checkpoint for each guideline of the framework into one document. Most of the faculty who have gone through the academy have face-to-face courses. Two faculty chose online courses to implement UDL. For these online courses, the faculty member either added the academy instructor to the LMS course page or met with the academy instructor to show how UDL had been implemented in the online course.

After the course observation, the faculty member received the second stipend for implementing UDL in their courses. While no formal feedback was provided to faculty members about their UDL implementation efforts, several faculty asked for the academy instructor’s thoughts on their implementation efforts. When this happened, the instructor met with the faculty member to share their thoughts, reactions, and recommendations based on the UDL implementation efforts.

## CRITICAL REFLECTION

The UDL Academy has been held twice during Summer 2021 and Summer 2022 and is currently being planned for a third iteration for Summer 2023.

The academy was updated after the first iteration and will be updated again for the third iteration. UDL was the content focus of the UDL Academy. The instructor also attempted to model several UDL techniques during the academy. Multiple Checkpoints from the UDL Checklist (attached) were modeled during the academy. For example:

Several videos and visuals were used in addition to spoken lecture during the direct instruction each day. Captions were used and presentations

- were recorded, which supports Checkpoints 1.2, 1.3, and 2.5.
- Real-world, relevant, and authentic examples were provided, supporting Checkpoint 7.2 (see attached UDL Checklist).
- For the pair presentations, faculty could choose which day to present and the guideline they wanted to present, and worked with a faculty member they did not know from a different discipline to foster collaboration and apply what they learned through reflection and sharing. The faculty had choice in the format for the presentation, and in how they could apply that guideline and checkpoints. These options support Checkpoints 3.4, 4.1, 7.1, 8.2, and 8.3.
- PowerPoint presentation subtitles were shared with faculty so they could see how to change the language and use subtitles from different languages, supporting Checkpoints 2.4 and 4.2.
- During discussions, faculty talked about challenges of different UDL techniques and how to overcome them, which supports Checkpoint 9.2.
- The worksheets were provided electronically and in print, which support Checkpoints 1.1, 5.2, 5.3, 6.1, 6.4, 7.2, 8.2, and 9.3.

## ACADEMY ITERATIONS

The first iteration, Summer 2021, was planned similarly to the UDL Academy described by Hromalik et al. (2020) and utilized the same worksheets with only minor wording changes to improve clarity for faculty participants. The updates to the worksheets for the first academy included replacing unfamiliar terminology used primarily by instructional designers or UDL specialists with equivalent terminology more relatable to faculty. The academy instructor created the agenda, slides, and presentations, purposely utilizing multimedia examples and videos throughout

to model multiple means of representation. Hromalik's worksheets were meant to take faculty through an instructional design process, focused on one of their courses, utilizing the UDL framework. When the Summer 2021 academy was prepared, faculty were invited via email to participate voluntarily.

A total of 17 faculty from different disciplines originally registered to participate in the Summer 2021 academy, but one had to withdraw. The other 16 faculty completed the academy. Of those initial 16 faculty, 15 implemented UDL in one or more courses.

Faculty were asked to complete a survey about their experience with the academy and based on these results, several changes were made to the academy prior to the second iteration in Summer 2022. The updates made were condensed worksheets, a UDL glossary, optional readings, inclusive design activities, and updated slides. Broadly, faculty shared positive reactions to the UDL Academy and their UDL implementations (see Faculty Experiences section).

During the Summer 2022 UDL Academy, 15 faculty from different disciplines registered to participate in the academy. One faculty member had to withdraw after two days. Another faculty member was also not able to complete the academy. One final faculty member chose not to complete the worksheets though they stated that they appreciated attending the presentations and days of the academy. This resulted in 12 faculty members that completed the academy and implemented UDL in one or more of their courses. Like the first academy, faculty generally shared positive responses to the academy. Additional changes are being planned for the third iteration, which will be offered in a hybrid format in Summer 2023, so that distance faculty will be able to participate in addition to faculty on campus.

## CHANGES TO THE ACADEMY

### CONDENSED WORKSHEETS

Since several faculty members from the initial, Summer 2021 academy described the worksheets as repetitive, the worksheets were condensed from the initial 10 to seven. For example, worksheets 1 and 3 were combined so faculty considered high-level design along with learner analysis on Day 1. Questions were taken off Worksheet 1 that focused

on the physical classrooms their courses are taught in and the deadlines for revising their courses as faculty do not have control over these institutional items. The second worksheet from the original 10 was taken out completely since it was an overview of changes faculty might make to the course, and there were similar questions in Worksheet 4 when describing strengths and challenges. Worksheet 9 was combined with Worksheet 7 since both related to selecting and designing or developing materials. The worksheets were also adapted to include less instructional design related terminology with which faculty may not be familiar. After the second, Summer 2022 academy, there were still some faculty that did not enjoy completing the worksheets, but most felt them to be helpful in brainstorming and redesigning their course with UDL in mind.

### UDL GLOSSARY

After the Summer 2021 academy, a UDL Glossary and Aid (attached) was created for the Summer 2022 academy. Faculty from the Summer 2021 academy expressed confusion over some of the terminology in the UDL framework because they did not have a background in education. The academy instructor chose words and made operational definitions of those words from the UDL framework and content discussed during the academy. The UDL Glossary and Aid was developed with language that higher education faculty would know, rather than language from other educational contexts. Faculty in the Summer 2022 academy shared that they appreciated having access to the UDL Glossary and Aid, and several faculty members mentioned that they referred to it several times during the academy and when completing the worksheets.

### OPTIONAL READINGS

Some faculty members from Summer 2021 academy mentioned that they would have liked to read more about UDL and how it has been implemented in higher education. In response to this desire, several articles related to UDL implementation in higher education were shared with faculty as optional readings each day of the academy. Links to the articles within library databases that the library subscribed to were offered on the UDL Academy Website (Briar Cliff University, n.d.c). Faculty could choose to read them during the academy, after the academy, or not at all as they felt inclined. These

articles were each accessed by up to four faculty members during the academy. While most faculty chose not to view the articles, the fact that a fourth of the Summer 2022 academy chose to view each shared article suggests that it was beneficial to share the optional readings.

### **INCLUSIVE DESIGN ACTIVITIES**

During the Summer 2021 academy, alternative-text, captions, headings, and the accessibility checkers were discussed during the final presentation. Several faculty members stated that they wished they had time to practice using the accessibility tools and techniques discussed so that they would not forget it after the academy. Due to these comments, several

inclusive design activities were planned for the Summer 2022 academy (see attached Inclusive Design Practice Activities).

These activities were referred to 22 times during the Summer 2022 academy and all faculty were observed exploring one or more of the activities and accessibility tools during the allotted time of the academy. Several faculty members stated that they appreciated the hands-on practice with the inclusive design activities since they never used some of these techniques previously. While some faculty were already familiar with providing alt-text or using the headings in Word, most were unfamiliar with other aspects of the inclusive design activities. It was beneficial to include a variety of activities, allowing faculty to choose the activities that they were most interested in or least familiar with already.

### **UPDATED SLIDES**

The presentations slides were updated based on comments from the Summer 2021 academy. For example, if there was something they found confusing, the related slide was edited for clarity. Additional implementation examples were also added for the Summer 2022 academy, such as the Possible Design Strategies listed on slides 30-32, 42-44, and 53-55 (see attached Presentations Slides). The presentation slides will continue to be updated for future iterations of the academy for further clarity and examples.

### **HYBRID FORMAT**

The Summer 2021 and Summer 2022 academies were held in-person in a library computer lab so attendees would have access to computers to work on the worksheets and inclusive design activities. Faculty could also bring their own laptops to work from, or they could work on printed worksheets with a pen or pencil. In addition to the computer workstations, there was a large central table in the room where faculty could work on their laptops or printed handouts. Presentations were recorded with a video camera and recordings were uploaded to YouTube and shared with an unlisted link and embedded on the UDL Academy website (UDL Academy 2021 Videos and UDL Academy 2022 Videos; Briar Cliff University, n.d.b). Since several faculty had to miss one of the days of the academy, this proved to be beneficial for them to be able to review what was missed and still complete the academy.

Since there are several online programs with remote faculty across different departments in the university, a hybrid format is being planned for the Summer 2023 academy. Faculty can register to participate in-person or virtually. Presentations will be given and recorded in Zoom utilizing a newly purchased [Meeting Owl](#) (360° camera, mic, and speaker). This will allow distance faculty to participate as well as faculty that prefer to participate virtually. This will likely create other challenges in communication both in person and virtually and further updates to resources, but will allow more faculty to participate, expanding access to the academy.

### **FACULTY EXPERIENCES**

Overall, faculty participants expressed positive responses to participating in the academy and implementing UDL in their courses. Some faculty already utilized multiple means of representation within the UDL framework but did not realize it. These faculty felt overwhelmed because they were unaware that they were already implementing UDL techniques. Connecting faculty members' prior teaching practices to the UDL framework could be made more explicit for faculty in future iterations of the academy to help make UDL adoption less overwhelming.

In a post-academy survey, the Summer 2021 cohort expressed appreciation for the accessibility tools, UDL framework, different options shared that they

had previously not considered, and applying UDL in their courses. During the Summer 2021 academy, faculty felt that additional time for discussions and removing redundancy in the worksheets would be beneficial for future academies. Faculty felt most challenged by the feeling of being overwhelmed and not knowing where to start with UDL implementations. They were also challenged with finding time to implement UDL.

The Summer 2022 academy had similar positive responses in the post-academy survey and were most challenged by finding the time to implement UDL. This group was concerned about grading different formats for assignments. Future updates for the academy should consider including strategies for time management of implementing UDL and creating rubrics to support multiple formats for the same assignment.

Both cohorts unanimously agreed that they would recommend that other faculty should participate in the academy. A couple faculty stated that they felt

the UDL Academy should be mandatory for all faculty.

The collected syllabi showed an increase (syllabi were compared from the start of the academy with syllabi after the academy) in UDL recommendations such as including a picture of the professor, linking to student support services, and using headings for different parts of the syllabus.

The academy instructor observed one class session after each faculty member implemented UDL and used a UDL Checklist (attached) to record how many different UDL checkpoints were witnessed during the observation. An average of 23 checkpoints were observed during the classroom observations out of a possible total of 31 checkpoints (74.19%). An average of 74.19% of the checkpoints is high for one class session observation for each of the UDL implemented courses. Faculty were aware of when they would be observed, which could have influenced what they did that day. Other iterations may consider including more observations and reflections of UDL implementation in classes to determine the UDL inclusion beyond the one observation.

In general, faculty appeared to appreciate participating in the academy and understood the benefits of implementing UDL in higher education after participating in the academy. This was

witnessed during the classroom observations in the number of UDL checkpoints utilized. While there were one or two faculty from each academy that decided not to complete the worksheets or have the academy instructor observe their class session, they may have still chosen to implement aspects of UDL in their courses.

A few quotes from the post-academy survey from faculty can summarize faculty's experiences with the UDL Academy:

One participant from the Summer 2021 academy stated, "The content I learned is relevant and should be required for ALL higher education institutions and professors." A second faculty member from the Summer 2021 academy said, "Long term, I want to incorporate UDL into all my instruction, assignments, and assessments."

During the Summer 2022 academy, faculty stated, "I enjoyed gaining new insight into UDL along with sharing the experience with other faculty." Another faculty stated, "the realization that UDL gives students more tools to learn and helping them build skills and personal understanding of the ways they learn best that they can take with them in the future. I was operating under the impression that UDL was just more accommodations." Similar to what Hromalik et al. (2020) found, some faculty expressed their appreciation by stating, "I certainly think that, at some point, all faculty should participate in the academy."

## TIPS FOR OFFERING A UDL ACADEMY

There are several tips for offering a UDL Academy that are based on the two iterations of the UDL Academy and plans for the third iteration for Summer 2023.

- Keep presentations concise and include videos as examples.
- Include several examples of how each UDL guideline could be implemented in the postsecondary classroom.
- Include active learning opportunities for faculty, such as the pair presentations and inclusive design practice activities.
- Adapt the worksheets for your faculty and context.

- Share resources with faculty that they can refer to after the academy while planning their UDL implementation efforts.
- Utilize UDL materials that are already available from CAST and others.
- Include opportunities for discussion and for faculty to work together since several faculty really appreciated hearing other faculty members' implementation ideas.
- Give time during the academy for faculty to complete the worksheets so they don't have homework unless they want more time to complete the worksheets.

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## ABOUT THE AUTHOR

**Breanne Kirsch** is the University Librarian at Briar Cliff University in Sioux City, Iowa. She has a master's in library and information science and a master's in educational technology. She is a PhD candidate at Old Dominion University in instructional design and technology.

## DISCLOSURES

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