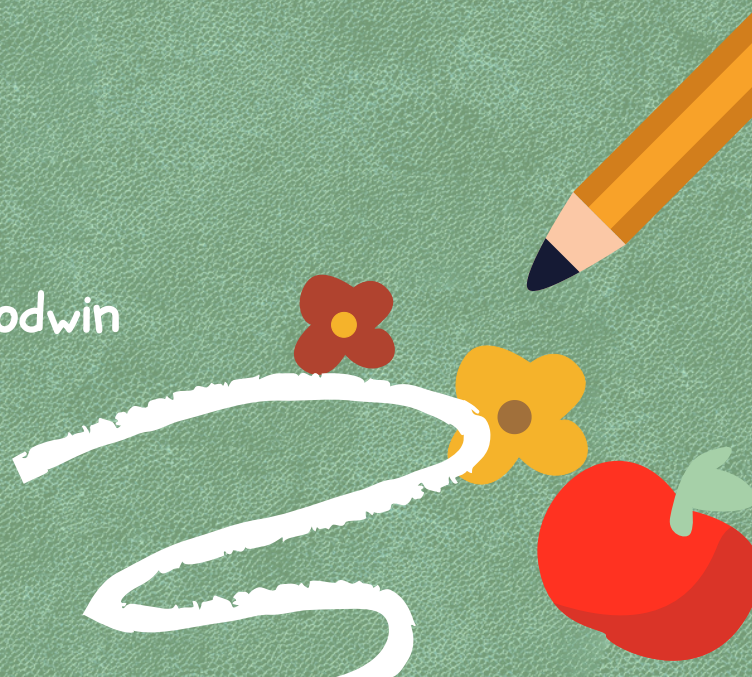



Creating Inclusive Classrooms through UDL



By Sarah Godwin

Background

Classrooms are made up of more than one type of student, and as such, more than one type of learner. Recent research revealed that Ontario SLPs are experiencing a shift towards more inclusive approaches to service delivery, where all students receive some generalized form of intervention (Terreberry et al., 2021).

"How can we ensure that all students have access to knowledge and learning?"

We can start by fostering an inclusive classroom. One way to do this is to implement a **Universal Design for Learning (UDL)**.

UDL is a concept that blends seamlessly with the move towards inclusive service delivery, however, a survey revealed that school board SLPs face barriers (such as time constraints, and the need for effective collaboration) to the implementation of UDL in classrooms (Campbell et al., 2016).

This resource contains an overview of UDL and its guidelines as described by the **Centre for Applied Special Technology (CAST)**, and attempts to minimize barriers that SLPs face in the implementation of UDL in classrooms by providing a starting point for specific strategies that SLPs can bring to the table to effectively collaborate with educators in school settings.

What is Universal Design for Learning (UDL)?

Universal Design for Learning is “a framework to improve and optimize teaching and learning for **all** people based on **scientific insights** into how humans learn.” (CAST, 2018)

Why might UDL Work?


Consider the following Case Scenario:

Lou, a five-year-old girl with developmental language disorder, is receiving school-based SLP intervention. Lou’s teacher asks her SLP how she can support her in the classroom. Based on their knowledge and experience, the SLP asks that the teacher clearly deliver instructions and use multimodal supports where possible (Archibald, 2022).

The SLP’s recommendations are in line with UDL as they provide benefits to *all* students, not just Lou. Lou’s class includes two students who recently immigrated to Canada and are learning English. One of Lou’s classmates didn’t sleep well the night before. They all benefit from hearing clear instructions and being presented with images and videos to support their learning.

The following pages contain suggestions to make both **teaching** and the classroom **environment** more inclusive, based on UDL guidelines and evidence. This tool will empower school board SLPs to bring ideas to the table and **effectively collaborate with educators** to make learning and knowledge accessible to all.

Overview of UDL Guidelines

Click on the underlined terms to explore examples 

1 Provide Multiple Means of Engagement

Provide options for:

- a Recruiting Interest
- b Sustaining Effort & Persistence
- c Self Regulation

2 Provide Multiple Means of Representation



Provide options for:

- a Perception
- b Language & Symbols
- c Comprehension

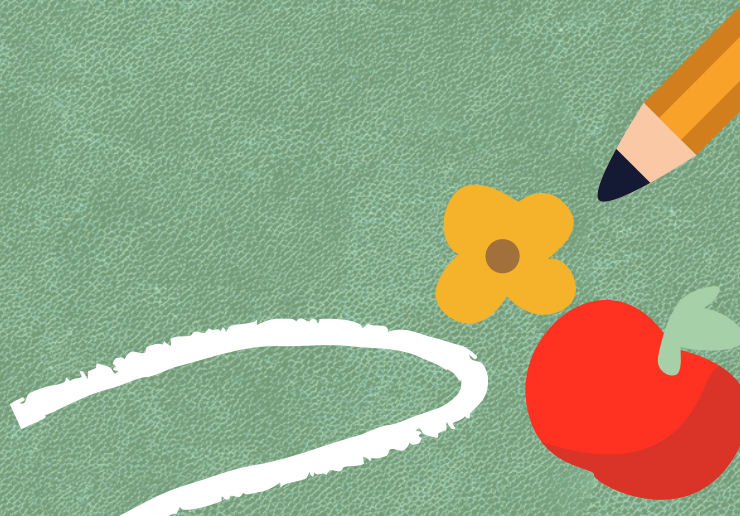
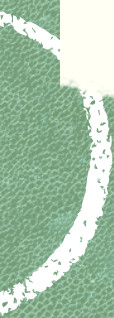
3 Provide Multiple Means of Action & Expression

Provide options for:

- a Physical Action
- b Expression & Communication
- c Executive Functions



1 Multiple Means of Engagement



1 How to Implement Multiple Means of Engagement

The “WHY” of Learning

Click on
Underlined Text
for References



a Recruiting Interest

Optimize Individual Choice and Autonomy

- Allow students to choose what activity to complete first from learning goals for the day
- Encourage students to set their own personal & academic goals at the start of the term
- Allow students to choose the kind of rewards they would like to receive (e.g., for completing their work)
- Encourage students to provide input for what they would like to see in the classroom (e.g., anonymous feedback box, discussion)

Optimize Relevance, Value, and Authenticity

- Choose stories featuring characters that reflect the social and cultural backgrounds of students in class
- Include names in example problems that reflect a variety of cultures
- Consider the ‘appropriateness’ of material in relation to age and social relevance
- Allow students to reflect on learning as appropriate (e.g., journal reflections, rating scales)

Minimize Threats and Distractions

- Implement visual schedules, and regular routines to maximize predictability
- Provide breaks between tasks, and notices for transitions
- Vary the amount of background noise (e.g., implement ‘quiet time,’ and group activities)

1 How to Implement Multiple Means of Engagement

The “WHY” of Learning

Click on
Underlined Text
for References



b Sustaining Effort & Persistence

Heighten Salience of Goals and Objectives

- Present goals in written and verbal contexts (e.g., repeat verbally, have goals written on paper and on the chalkboard)
- Encourage students to write down or repeat goals/objectives for activities
- Explicitly describe and demonstrate that a goal can be achieved by breaking it down into smaller tasks

Vary Demands and Resources to Optimize Challenge

- Allow for varied levels of support for students - more vs. less guidance from peers/teachers, use of additional resources
- Point out resources that students can reach for to support their work (e.g., books, websites, peers)
- Prioritize and emphasize the importance of ‘the process’ rather than the result
- Look for improvement and progress in addition to overall scores

Foster Collaboration and Community

- Implement peer-learning groups so students can support each others’ learning
- Make clear when students may ask for help from teachers and peers
- Clearly describe/outline what meaningful group work should entail (e.g., roles, balancing tasks, listening to one another, etc.)

Increase Mastery-Oriented Feedback

- Provide feedback that highlights improvement and effort
- Offer strategies for improvement, while highlighting successes
- Encourage the use of supports (e.g., asking questions, talking to peers) to solve challenges

1 How to Implement Multiple Means of Engagement

The “WHY” of Learning

Click on Underlined Text for References



Self Regulation

Promote Expectations and Beliefs that Optimize Motivation

- Facilitate a discussion involving scenarios that may elicit strong emotions, and allow students to brainstorm appropriate responses to those scenarios (alternatively, provide video examples)
- Model behaviours that are expected in the classroom, and highlight positive behaviours and strategies used by students

Facilitate Personal Coping Skills and Strategies

- Provide students with specific alternative strategies to manage anger, frustration, and other strong emotions
- Incorporate mindfulness into daily class routines

Develop Self-Assessment and Reflection

- Promote activities that increase self-reflection and self-assessment (e.g., journalling, self-rating scales)
- Provide prompts that guide reflections (e.g., “What is something I did really well today?” “What is something I could have done better today?”)



2 Multiple Means of Representation

2 How to Implement Multiple Means of Representation

The “WHAT” of Learning

Click on Underlined Text for References



Perception

Offer Ways of Customizing the Display of Information

- Consider font choice (clarity), size of font (largeness), text-background contrast (higher contrast) for written/typed classroom material
- Provide visuals (images, videos) to support class texts
- Consider layout of classroom materials - place graphics/posters in locations that are easy to access (not blocked by tables, at varying heights, etc.)

Offer Alternatives for Auditory Information

- Provide written transcripts for videos or audio clips played in class
- Support auditory information with visual supports (e.g., pictures, graphics, charts, posters, etc.)
- Vary facial expressions to support prosody and provide emphasis in speech

Offer Alternatives for Visual Information

- Provide written and spoken descriptions of visually presented information
- Use auditory reminders (e.g., alarm buzz, verbal) for class transitions (e.g., lunchtime, breaks, changing tasks)
- If available, provide access to text-to-speech software

2 How to Implement Multiple Means of Representation

The “WHAT” of Learning

Click on Underlined Text for References



b Language & Symbols

Clarify Vocabulary and Symbols

- Teach new vocabulary and symbols before using them in lessons
- Connect new vocabulary to students' background knowledge
- Support vocab learning with pictures, and symbol learning with text
- Teach strategies and point out resources to get support for learning

Clarify Syntax and Structure

- Make syntactical and structural features explicit
- Make connections to prior learnings
- Use visual supports (e.g., mind maps) to make connections between elements of syntax and structure

Support Decoding of Text, Mathematical Notation, and Symbols

- Provide a list of key words/symbols for a lesson, with definitions
- If available, provide access to text-to-speech software
- Present multiple notations for specific symbols (e.g., accompany symbol with verbal description and written text)

Promote Understanding Across Languages

- Present information in students' first language to the extent possible (e.g., provide written definitions of new vocab learning in both English and the student's first language)
- Supplement teaching with non-linguistic supports, like images, videos, and gestures
- Allow use of translation tools

Illustrate Through Multiple Media

- Present key concepts in more than one format (e.g., textually, verbally, through videos, graphics, posters, etc.) and make links explicit

2 How to Implement Multiple Means of Representation

The “WHAT” of Learning

Comprehension

Click on Underlined Text for References



Activate or Supply Background Knowledge

- Make links to background knowledge from previous lessons
- Ensure that prerequisite knowledge has been taught and learned
- Use organizers like concept maps to promote activation of background knowledge

Highlight Patterns, Critical Features, Big Ideas, and Relationships



- Use a variety of tools (e.g., mind maps, discussion, organizers) to make connections and patterns in learning explicit
- Draw attention to key concepts by providing a list of key terms, engaging in class discussions, providing visual cues, etc.
- Encourage students to recall previously learned skills to solve new problems

Guide Information Processing and Visualization

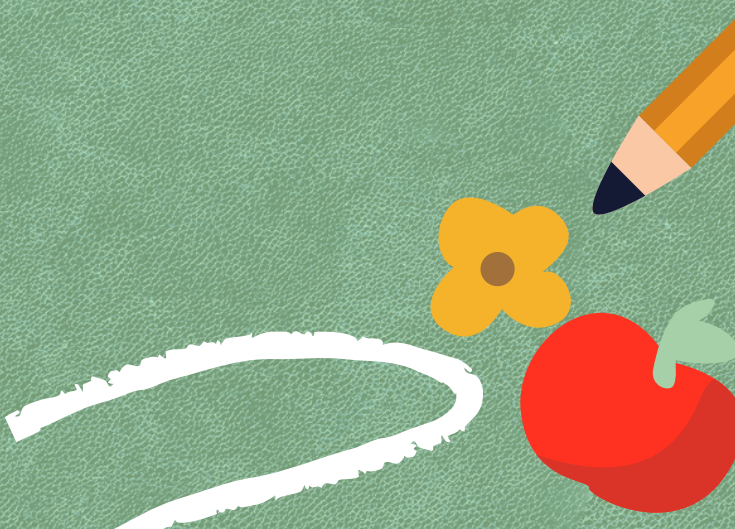

- Model the use of organizational methods like charts, note-taking, mind maps, webs, etc.
- Present information in small chunks, provide prompts for each step
- Conduct ‘exploration’ sessions where students can explore big ideas through a variety of content (e.g., videos, art, music, text, etc.)

Maximize Transfer and Generalization

- Use real-world examples and connections where possible
- Provide tools (e.g., fillable charts, organizers) to support note-taking for learning
- Model learning strategies (e.g., use of mnemonics, connecting with prior knowledge, revisiting old concepts/ideas)



③ Multiple Means of Action & Expression



3 How to Implement Multiple Means of Action & Expression

The “HOW” of Learning

Click on
Underlined Text
for References



a Physical Action

Vary the Methods for Response and Navigation

- Offer flexible timing requirements for submissions and responses
- Provide a variety of options for responding to material (e.g., pen and paper, computer, verbal responses, etc.)
- Modify length of time for breaks and transitions between activities (consider mobility, time needed to use the bathroom, cognitive demand of switching tasks, etc.)

Optimize Access to Tools and Assistive Technologies

- Have a general understanding and awareness of assistive technologies commonly used in classrooms
- Provide students with an ‘info sheet’ about assistive technologies to take home so families have more awareness about how to access supports, should they need them

3 How to Implement Multiple Means of Action & Expression

The “HOW” of Learning

b Expression & Communication

Click on
Underlined Text
for References



Use Multiple Media for Communication

- Teach material using a variety of media (e.g., reading from books, presenting speeches, sharing videos, using physical manipulatives and visual art, etc.)
- Allow students to engage with material using a variety of media (e.g., class discussion, web-based forum, independent journal entries that include written or artistic responses, etc.)

Use Multiple Tools for Construction and Composition

- Model and encourage brainstorming to solve problems using a variety of strategies (e.g., mind maps, diagrams, class discussions)
- Explicitly state and provide the tools required to complete the task (e.g., calculator, websites, graph paper, etc.)
- Provide access to supports for assignments/tasks (e.g., internet sources, dictionaries, images, books, physical manipulatives)

Build Fluencies with Graduated Levels of Support for Practice and Performance

- Model the use of multiple strategies to solve the same problem, and allow students to choose the approach they prefer
- Provide specific, motivating feedback
- Offer a variety of solutions to a presented problem, and highlight the acceptability of unique answers

3 How to Implement Multiple Means of Action & Expression

The “HOW” of Learning

Click on
Underlined Text
for References



Executive Functions

Guide Appropriate Goal Setting

- Ensure goals are conveyed to students in a variety of ways (e.g., posted on the board, verbally presented, provided on paper)
- Provide students with checklists to complete a task
- Model appropriate goal selection, and encourage students to develop their own personal goals

Support Planning and Strategy Development

- Model problem-solving strategies and make strategies explicit (e.g., asking questions aloud to guide thinking)
- Encourage students to demonstrate progress and show their work through a variety of means by embedding prompts to do so
- Provide templates that allow students to create a sequence of strategies to complete a task

Facilitate Managing Information and Resources

- Model strategies to manage information (e.g., drawing images on the chalkboard, talking through information in class discussions, creating lists)
- Provide students with graphic organizers (e.g., maps, checklists, tables, charts) to guide their work

Enhance Capacity for Monitoring Progress

- Encourage self-reflection by keeping a daily class journal
- Utilize visual and text representations of individual student progress (e.g., charts showing growth, written feedback)
- Ask specific prompting questions to guide self-monitoring

References

Archibald, L. (2022, July 18). Supporting a child with DLD in the classroom. DLD and Me. <https://dldandme.org/supporting-a-child-with-dld-in-the-classroom/>

CAST. (2018). *Universal Design for Learning Guidelines Version 2.2*. <http://udlguidelines.cast.org>

Campbell, WN., Selkirk, E., Gaines, R. (2016). Speech-language pathologists' role in inclusive education: A survey of clinicians' perceptions of universal design for learning. *Canadian Journal of Speech-Language Pathology and Audiology*, 40(2), 121-132. https://cjslpa.ca/files/2016_CJSLPA_Vol_40/No_02/CJSLPA_2016_Vol_40_No_2_Campbell_et_al.pdf

Terreberry, S., Dix, L., Cahill, P., Passaretti, B., Campbell, W. (2021) Moving Towards a Tiered Model of Speech and Language Services in Ontario Schools: Perspectives of School Board Speech-Language Pathologists. *Canadian Journal of Speech-Language Pathology and Audiology*, 45(4), 267-282. https://www.cjslpa.ca/files/2021_CJSLPA_Vol_45/No_4/CJSLPA_Vol_45_No_4_2021_1254.pdf

A list of resources used by CAST for the development of UDL guidelines is available on their [website](#), and are presented in clickable links throughout this tool.