

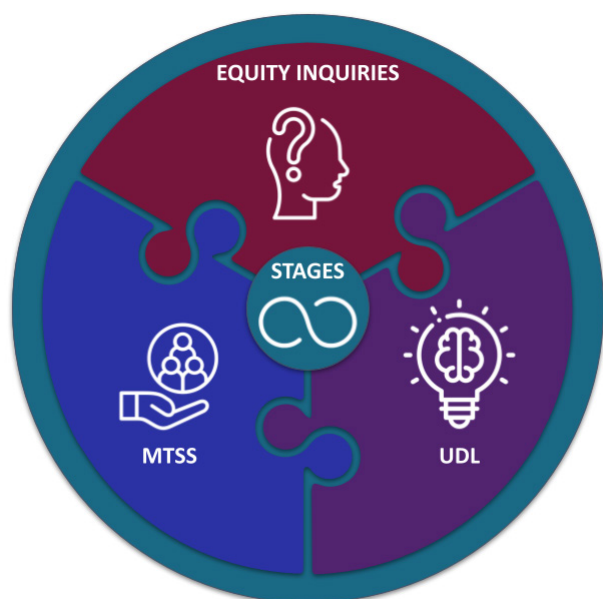
## ***Increasing Equity in Education through Stage-based Implementation of Universal Design for Learning in a Multi-tiered System of Support***

### **Contributors**

Tara Cochraine, Ed.D. - CAST  
 Lindsay E. Jones, J.D. - CAST  
 Amy McCart, Ph.D. - SWIFT  
 Kari Woods - SWIFT  
 Caryn S. Ward, Ph.D. - NIRN  
 Seena Skelton, Ph.D. - Great Lakes Equity Center

### **How can educators make sense of all the system design frameworks they encounter in the field?**

Many times implementation of multiple initiatives looks like “parallel work,” when learners are in the same space, accessing the same resources and tools, but without interaction. Likewise, independent implementation of initiatives have separate teams working in the same educational spaces, and relying on many of the same people, processes, and resources to benefit the same students, with little to no interaction across the initiatives. Instead, when implementation can be like “cooperative work,” that is, when learners are working with each other toward a shared goal and interact by making agreements about how to work together, assuming various roles, taking turns, and negotiating. In adult terms, this kind of implementation is best described as an intentional systematic approach.



This brief explains how four important system design initiatives frequently promoted by state and local education agencies for school improvement can be implemented through an intentional systematic approach for a powerful, positive impact on student outcomes. As technical assistance providers with expertise in four specific frameworks for educational system design, and with great appreciation for one another, we suggest how a coordinated Stage-based Implementation process with embedded, systems level critical Equity Inquiries at every stage can enable schools to establish Universal Design for Learning (UDL) principles and guidelines within a Multi-Tiered System of Support (MTSS) for a designed experience in instructional decision making.

## Start Here - Grounding

Why is it important for schools, as well as local and state educational agencies, to start integrating these frameworks? Research and best practice tell us that when integrated, these frameworks are innately responsive to increase equity and establish a seamless system that sets up educators to be successful in providing what each learner in their school needs, when needed, to achieve the positive learning and social outcomes for which they and their families hope.

**The frameworks share four common foundations that create a fertile soil for such success. Each framework calls for schools to:**



*have a clear vision of what they want to do,*



*form leadership and implementation teams,*

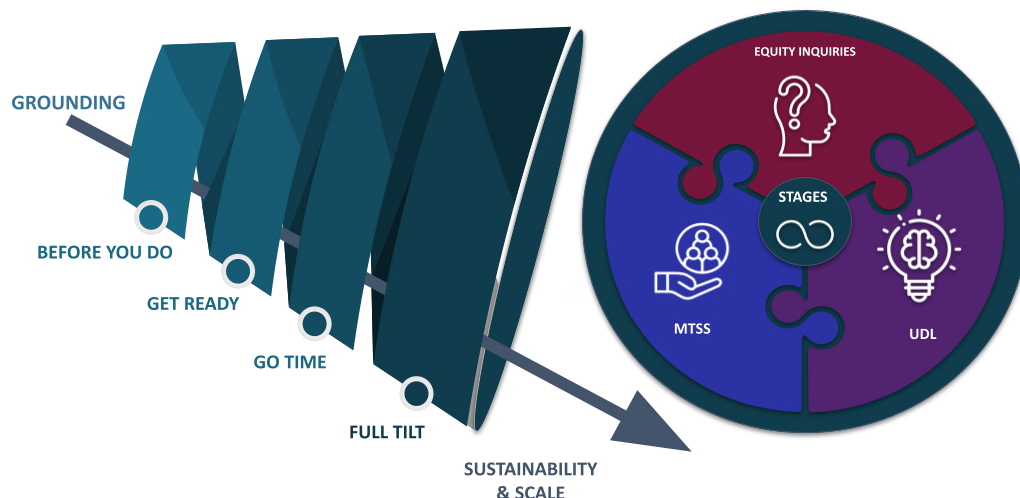


*use data to understand their current relationship to a vision or goals, and*



*elevate leaders who commit to making the necessary improvements or changes.*

Our experience with many schools is that when these foundational components are united across the frameworks, rather than siloed, their implementation makes sense to the people involved (that is, they are coherent) and the initiative-overload burden on educators is reduced. The precise way that foundational structures take shape will necessarily vary because school leaders know their own students, educators, families, communities, and cultures; and so the way they work together with these partners to design their local system will vary within the broad outline of these foundational elements. These ideas are represented at the top of the informational graphic at the end of this document.





Even when logically coherent, simultaneous implementation of multiple programs and practices takes intentional planning and time to achieve. The National Implementation Research Network (NIRN) provides an evidence base for how to set up and move through an intentional system design and implementation. This process involves multiple stages of decision and action ranging from exploring the issues and options; to preparing the people and systems; to initially implementing part or all of each new practice throughout a school; and finally, to ensuring local and state education or management organization support for sustainability and possible scale up to other schools. Implementation science offers tools and techniques for enacting these processes to ensure each aim or initiative is implemented as it was intended and with logical and helpful connections throughout four stages known as: Exploration, Installation, Initial Implementation, and Full Implementation (NIRN, 2020). These stages are shown on the left hand side of the informational graphic at the end of this brief.

## Equity Inquiries

---

Throughout the stages of implementation, schools may embed systems level critical Equity Inquiries. These Inquiries amplify school leaders' focus on who the students in the system are and how well the system serves them. In particular, a systems level critical Equity Inquiries gather multiple perspectives on how well the system is serving historically underserved student groups identified by race, culture, language, ability, and so on (Skelton & Gorman, 2021). Each Inquiry asks whether these student groups have access, representation, participation, and positive outcomes in proportion to other student groups. The Inquiries become an important source of data for leaders to understand their school's current reality in relation to equity aims, and for charting their path forward. When sources of inequities are understood, the system design process can form strategies and actions, as well as monitor and evaluate their impact for any underserved student groups before repeating the Equity Inquiry as later stages of implementation and on a continuous cycle after full implementation. When embedding equity-focused Inquiries into an intentional system design, educators can expect to disrupt entrenched systems and will be challenged to pose strategies and actions that lead to systems designed with and for the previously underserved student groups as well as influence and reflect views of students, families, and surrounding communities. On the infographic at the end of this document the right hand side represents the Equity Inquires in parallel with implementation stages.



In our shared thinking, an equitable system design can be achieved through Stage-based Implementation with embedded Equity Inquires when focused on installing two symbiotic, evidence-based practices: UDL and MTSS. UDL principles and guidelines suggest a wide range of ways to support learning, and MTSS helps educators make decisions about with whom, how much, and for how long to use these various ways of learning. Preparing educators to understand these two frameworks and how they relate to one another and to equity aims is an important part of an intentional systematic approach. Briefly these relationships are described here.



## Universal Design for Learning

---

UDL is about reducing barriers and serving the full range of variability in how human brains learn in different contexts. Variability can be overwhelming for educators who are planning for dozens of learners each day. However, learner variability is predictable and can be organized across three brain networks targeted by the UDL framework: affective (the why of learning found in interest, effort and persistence, and self regulation); recognition (the what of learning exercised through perception, language and symbols, and comprehension); and strategic (the how of learning seen in physical action, expression and communication, and executive function) (CAST, 2018). Thus, UDL guides educators in advance preparation of curricular and instructional resources that allow for this variability among learners. It connects to a school's equity aims by offering ways that educators improve access, representation or other features of teaching and learning that have not been available to some student groups in traditional education systems. With UDL-based curriculum and instructional resources, educators have available the pieces they are likely to need to support learners' different interests, languages, ways of engaging with and expressing knowledge that are prevalent among non-dominant cultures with which many students identify.



## Multi-Tiered System of Support

---

Like UDL, MTSS is a way that grade-level or content-area teams can provide equitable access and participation across the full range of brain variability, race, culture, language, and other student qualities, by understanding data about students and referring to decision guidelines to efficiently make, monitor and adjust instructional matches (McCart & Miller, 2020). MTSS can leverage UDL principles and UDL-based resources for a coherent system of teaching and learning that also minimizes the decision-making load placed on educators. MTSS reorganizes the way adults in a school collectively use their talents, time, space, and resources for the purpose of connecting each student with the type and intensity of curriculum, instruction, and support necessary for them to thrive in school and beyond. Combining the principles of UDL with MTSS can maximize the first instructional choices to be those best suited to students' affective, recognition, and strategic learning (referred to as the universal tier); and can increase likelihood of effectiveness for students who need something more or different to reach their learning goals (referred to as the additional and intensified tiers). These choices are organized within a resource map, and are matched to students through a tiered instruction matrix with guidelines to inform decisions, and deployed within a school's master schedule that is flexible and dynamic based on what students need. In the infographic below, these two frameworks are represented together in the center frames.

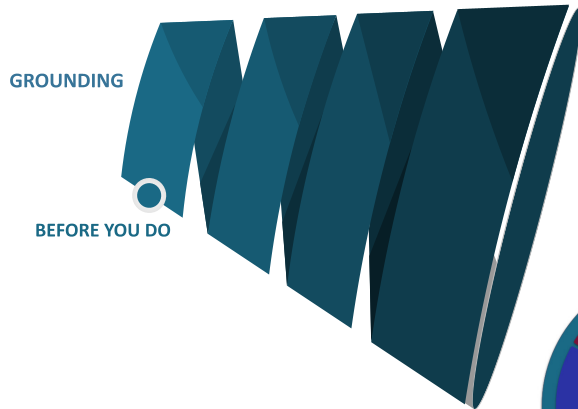
# Exploration

---

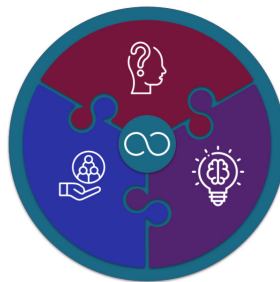


## ***Before you do.***

*Taking this time to plan will be more efficient.*



What are the assets and the needs?  
How does the program or practice fit the local context?  
How feasible is implementation?



# Equity Inquiry

---



Do your exploration activities support team members to investigate and determine how cultural assumptions, frames of references, perspectives, and biases influence the ways in which we have come to understand our current context and system, including identifying needs and assets?

# UDL

---



Does your team understand Universal Design to learning principles, including learner variability and barriers to engagement, representation and action and expression in learning environments?

# MTSS

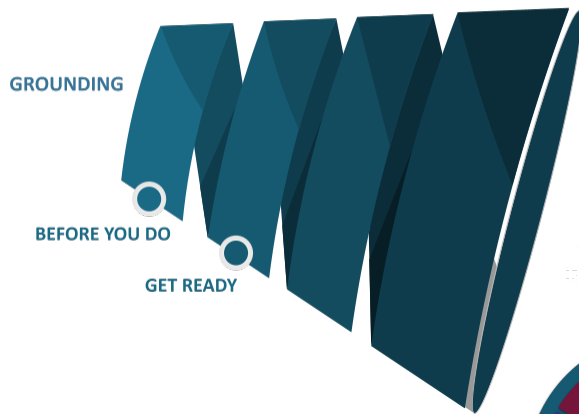
---



Does your team understand the concepts of designed experiences through a tiered system focused on fluid movement of instruction based on student data?

# Installation

---

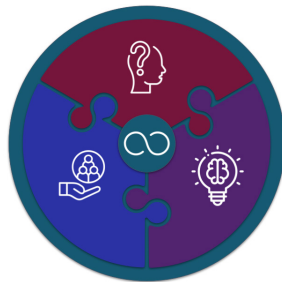


## Get Ready

*Give yourself time to really test out if this approach is going to work in your context.*

How are you going to build the needed implementation supports?

How will you use data and information for making improvements?



# Equity Inquiry

---



How will we ensure content comprising capacity building activities, including professional learning experiences address problematic beliefs, policies, and patterns of practice that may affect effective implementation, for all students, particularly minoritized students, in addition to learning about specific practices associated with MTSS and UDL?

# UDL

---



Do educators understand how to set learning goals and provide options to support learner success in achieving outcomes?

(note: I think teachers would need to know strategies for improving student self-regulation and executive functioning. It's not really about options here.)

# MTSS

---

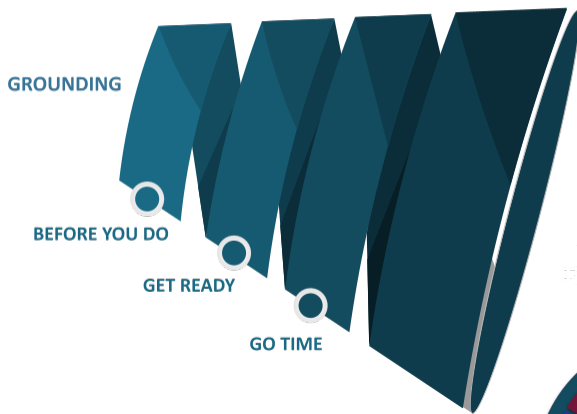


Have your teams constructed a Resource Map of all your available instructional, curricular, facilities, personnel and other resources?



# Initial Implementation

---

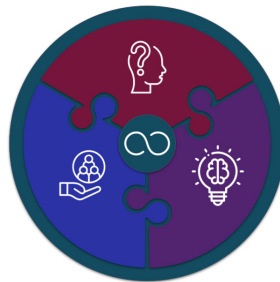


## Go Time

*This stage is the heart of the work, so take time to process how it is going*

How is the initial use of the practice/program going?

How do we get better in our implementation supports and use the practice or program?



# Equity Inquiry

---



How will we collect information about ways implementation across schools may differ in terms of capacity and outcomes in relation to school demographics?

How will we identify contextual factors that may contribute to identified inequities in implementation?

How will we address these inequities so that all students equally benefit?

# UDL

---



Are educators supporting the development of expert learners leading to sustained persistence on tasks and demonstrated success in meeting instructional goals?

# MTSS

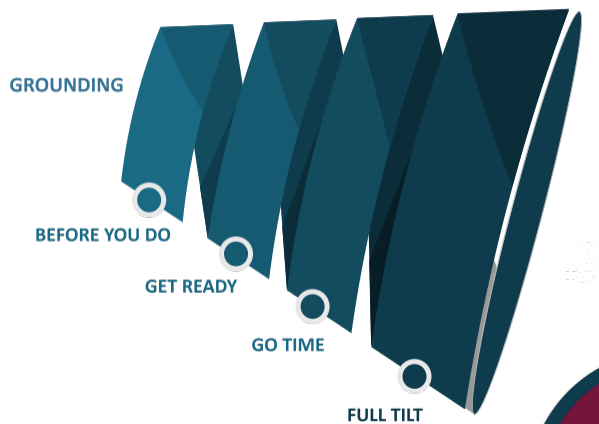
---



Have your teams worked to create tiered instructional matrices across academic, behavioral, social-emotional and mental health aims?

# Full Implementation

---

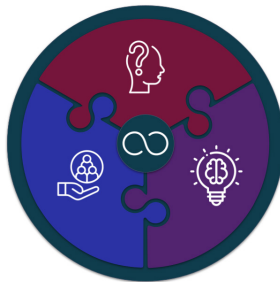


## **Full Tilt**

*This stage is your opportunity to make small adjustments that will help to sustain the system for years.*

Does the whole school community understand and is it invested in full implementation of the intentionally designed system and practices?

Are students achieving the expected outcomes?



# Equity Inquiry

---



Do all students, families and educators, particularly from minoritized communities realize the full benefits of implementation?

# UDL

---



Can all learners access the general education curriculum, and do they have opportunities to demonstrate learner agency and expert learning skills and abilities?

# MTSS

---



Have teams worked to see the Master Schedule fully represent the options outlined in the Resource Map and Tiered Instructional Matrix?

Are opportunities evident in the Master Schedule for fluid movement of resources and instruction to meet student needs?



We hope that the idea of “cooperative work” among these frameworks makes sense to you and you want to start to work at it. We suggest that your first move is a collective walk through the following infographic to deepen your teams’ understanding, and then to form agreements about how you will make this journey in your school.



---

[Schoolwide Integrated Framework for Transformation](#)

---

[Center for Applied Special Technology](#)



---

[National Implementation Research Network](#)

---

[Great Lakes Equity Center](#)

**Suggested Citation:** *Cochrane, T., Jones, L., McCart, A., Skelton, S., Ward, C. & Woods, K. (2022). Increasing equity in education through stage-based implementation of universal design for learning in a multi-tiered system of support. Great Lakes Equity Center, CAST, National Implementation Research Network, and SWIFT Education Center.*

## References

---

CAST (2018). UDL and the learning brain. Wakefield, MA: Author. Retrieved from <https://www.cast.org-products-services/resources/2018/udl-learning-brain-neuroscience>

McCart, A., & Miller, D. (2020). Leading through equity-based MTSS for all students. Corwin.

National Implementation Research Network (2020). Implementation stages planning tool. National Implementation Research Network, FPG Child Development Institute, University of North Carolina at Chapel Hill.

Skelton, S. M. & Gorman, T. (2021). Data system integrity tool for equity-focused decision making. Midwest & Plains Equity Assistance Center.