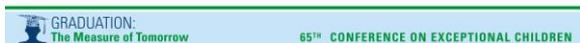


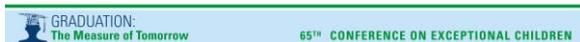
Agenda

- Exploring “Neuro-typical”
 - Are you typical?
 - What is “typical” or “atypical”?
- What is Neuro-diversity?
- Addressing Neuro-diversity in the classroom using Universal Design for Learning
- Multi-tiered Systems of Support (MTSS)



Are you typical?

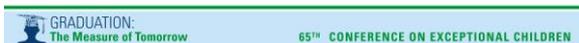
- <https://www.youtube.com/watch?v=4B2xOvKFFz4>



Are you typical?

- How many of us are:
 - Right handed?
 - Make less than \$12,00 per year?
 - Have a cell phone?
 - Have a bank account?
 - Are Male?
 - Are 28 years old?
 - Are Han Chinese?

- How many of us are "typical"?



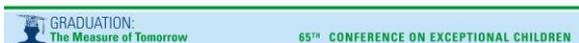
What is "typical" in the US?

- Male:
 - Height: 5'9"
 - Weight: 195 w/39" waist
- Female:
 - Height: 5'4"
 - Weight: 165 w/37" waist

Other factors regardless of gender:

- BMI: 29
- If over 30: Overweight
- White
- Roman Catholic

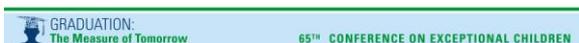
So are you "typical" now?



Maybe you are "Neuro-typical"

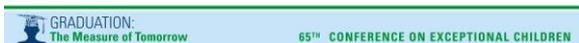
- Neurotypical syndrome is a neurobiological disorder characterized by:
 - delusions of superiority,
 - preoccupation with social concerns;
 - obsession with conformity.
 - often assume that their experience of the world is either the only one, or the only correct one.
 - find it difficult to be alone
 - often intolerant of seemingly minor differences in others.
 - find it difficult to communicate directly, and have a much higher incidence of lying as compared to persons on the autistic spectrum

- When in groups NTs are socially and behaviorally rigid, and frequently insist on the performance of dysfunctional, destructive, and even impossible rituals as a way of maintaining group identity.

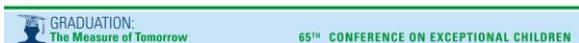


Let's take a little quiz:

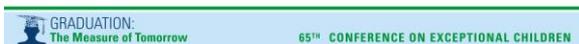
- At your table, score yourself in the following manner for each question:
 - Yes = 3 points
 - Maybe (middle answer) = 2 points
 - No (bottom answer) = 1 point
- After we complete the quiz, total up all your points



- Do you enjoy having set routines?
 - Yes
 - Kind of, sometimes, depends
 - No
- Do you feel unsettled, angry or out of sorts if your routine is interrupted or impacted in some way?
 - Yes
 - Sometimes
 - No



- Do you get angry or frustrated when things don't go your way?
 - Yes
 - Sometimes
 - No

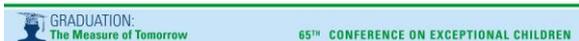


• Can you read and understand the following passage:

"El estudio independiente proporciona a los estudiantes una oportunidad para estudiar un tema de interés especial en detalle y se enfoca en las necesidades específicas y los estilos de aprendizaje del niño."

- Yes, no problema
A little, I can make out a few words
Are you kidding?

Blank lines for writing answers to the first question.

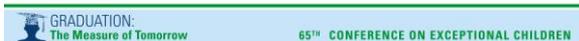


• Can you read and understand the following passage:

One q*(t T*(esday mor(*g I woke up to a pr of br*(ht, dazing @\$%es, ying ri*(ht in frt of y b764oom dor. The sohees wree a ncei shdae of violet ad smlleed lke ctanpi.

- Yes, no problem
No, I can make out a few words though
Are you kidding?

Blank lines for writing answers to the second question.

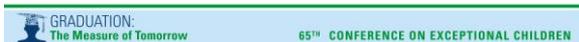


• And how about this passage:

Court of appeals reversed the merits of a lessee's appeal of an order entered in favor of a county in its action to condemn the lessee's leasehold interest in mall property because the order, which determined issues other than damages in a condemnation proceeding, affected a substantial rights; order did not dispose of the entire case, as the issues of damages remains outstanding...

- Yes, No problem....the defense rests!
Uhh, it says something about a lease
No, where's Judge Judy when you need her?

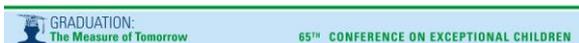
Blank lines for writing answers to the third question.



- If given the appropriate values could you solve the following problem:

$(n+m) X (n+m-1) X \dots X 3 X 2 X 1 / [n x (n-1) X \dots X 3 X 2 X 1] X [m X (m-1) X \dots X 3 X 2 X 1]$ times p to the nth power (1-p) to the mth power.

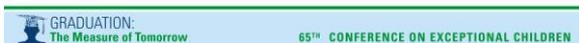
- _____ Yes....I got this!
- _____ Uhh....13?
- _____ Are you kidding ?



- Can you explain this math problem:

If x units are added to each value in a data set, then the mean, median, and mode are all increased by x units; however the range and IQR remain unchanged, though their lowest and highest values are increased by x points. or If y percent of the original value is added to each value in a data set, then mean, median, mode, range, and IQUR are all increased by y percent.

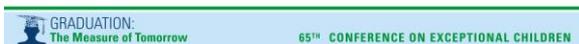
- _____ Yep, got it. I did a problem like this for fun last night
- _____ Uhhh....now what is the median and mode again?
- _____ Just shoot me now.



- Answer this question---

If I walked into your house, office or classroom, I would find it perfectly clean and organized. Everything would be in its place and it would be magazine article ready....at all times.

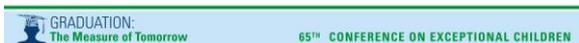
- _____ Yes. I pride myself on my cleanliness and OCD
- _____ Well no, but I give it my best shot
- _____ Ha, ha, ha.....now that's a good one!



• You can do the following:

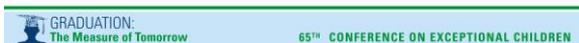
- Run a four minute mile,
- Do 50 sit-ups,
- Do 50 push-ups,
- Climb the rope in the gym and
- Jump both three feet high and five feet in front of you

_____ Yes. Navy Seals look up to me
 _____ Uhhh....I can walk, sit up, push up from a sitting position and am lucky to see three feet above and five feet in front of me.
 _____ No and by the way, you're blocking the TV



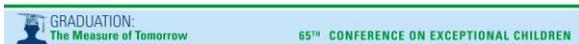
How did you score?

- Gifted and talented: 25-30
- “Typical” or average: 15-25
- Needs remediation: 0-15
 - An evaluation will be forthcoming
 - We may need to provide special services



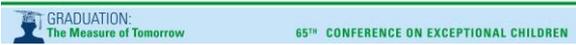
Thoughts? Comments?

- Are you “typical”?
- Are you “Neurotypical” ?
- What does this mean for your class ?
- What does this mean for your teaching?
- What implications does this have on identifying children for special services ?



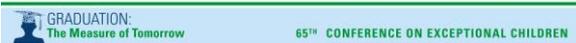
Let's move away from....

- Trying to make everyone "perfect"....
- Using a medical model and trying to "fix" everyone.....
- Using a "shotgun" approach to teaching
- Making any student who is not "typical", "neurotypical" or "perfect" fit into a category



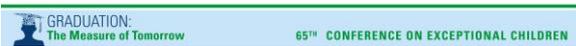
Why?

- Is anybody really "typical" or "neurotypical"?
- You really can't "fix" anyone;
- Every pellet from a shotgun does not hit its mark;
- And

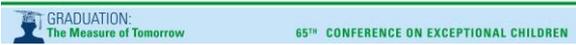


Maybe we are all just....

- Neurodiverse!
 - An approach to learning and disability that suggests that diverse neurological conditions appear as a result of normal variations in the human genome.
 - People experience the world differently based on their neurological attributes.

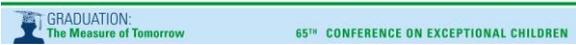


- Neurological differences are not disabilities, but rather are equally valid, unique, and socially beneficial neurological experiences of the world that should be celebrated.
- Neurological differences are authentic forms of human diversity, self-expression, and being.



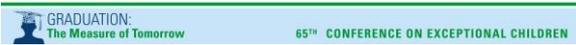
A paradigm shift is needed

- The fundamental beliefs of the Neurodiversity paradigm are
 - 1.) Neurodiversity is a natural and valuable form of human diversity.
 - 2.) There is NOT one "normal" or "healthy" type of brain or mind, or one "right" style of neurocognitive functioning.
 - 3.) The social dynamics that exist within neurodiversity are similar to the social dynamics in regard to other forms of human diversity (e.g., diversity of ethnicity, gender, or culture) and when embraced, act as a source of creative potential.



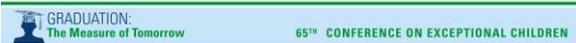
ND and Disability:

- ND includes an understanding of both the challenges faced by disability along with the positive aspects/gifts of a child;
- Disability exists along a continuum;
- Don't or can't and there is no need to fix, cure or repair disability
- There is no "norm"



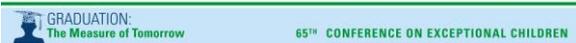
Educators must:

- Step outside the box;
- Display a deep respect for each child's differences;
- Discard disability-based programs and instruction;
- Create a Learning "eco-system" in their class



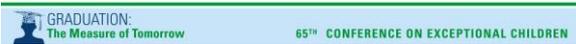
Ways to change

- Class level:
 - Adopt Universal Design for Learning (UDL) strategies for:
 - Lesson planning
 - Instruction
 - Assessment
- School Level:
 - Adopt the use of Multi-Tiered Systems of Support (MTSS)



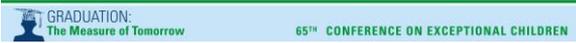
Universal Design for Learning

- Rooted in architectural design;
- Entered education field through technology
- Can be applied on a much larger scale
- <http://www.cast.org/our-work/about-udl.html#.Vc00uU03PIU>



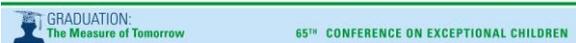
UDL Tenets

- Multiple Means of Representation:
 - The "what" of learning
 - Present information and content in different ways
- Multiple Means of Action and Expression:
 - The "how" of learning
 - Differentiate the ways that students can express what they know
- Multiple Means of Engagement:
 - The "why" of learning
 - Stimulate interest and motivation for learning



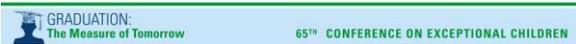
UDL in the class

- Examples:
 - Build a lesson plan that teaches content in multiple ways, assesses students in multiple ways and includes a number of motivators
 - Ex: Typical lesson with accommodations or "differentiation"
- versus
- UDL Lesson Plan



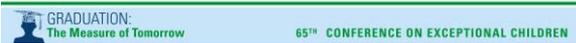
Strategies

- Build accommodations into your lesson, instruction and assessment;
- Plan by considering the neurodiversity of your class—not on delivering content only
- Use assessment strategies such as paper and pencil assessments, projects, etc.



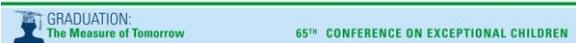
Digging deeper

- <http://www.udlcenter.org/aboutudl/whatisudl>



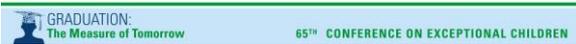
Multi-Tiered Systems of Support MTSS

- A school or district-wide approach to addressing individual learning needs for ALL students;
- Not a pathway to special education;
- Requires three tiers of various interventions provided at different levels of intensity.



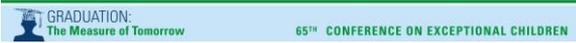
MTSS

- Tier 1: All students in a class
 - Performance standard: 80% at grade level
 - Focus on teacher instruction
- Tier II: Tertiary support for students below 80% proficiency (10-15% of students)
- Tier III. Intensive support for 5-10% of students



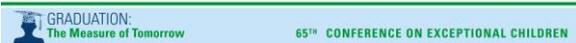
MTSS

- Parent involvement throughout;
- Interventions provided at one level continue when student moves to next level;
- Referral for special education takes place after Tier III interventions are not successful



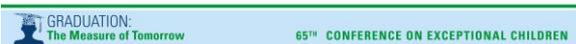
MTSS and Special Education

- Some screenings and assessments used for special education eligibility may be completed during the MTSS process;
- Additional assessments may be completed after referral;
- Placement can be based on MTSS data alone for specific learning disabilities.



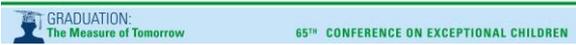
MTSS and Special Education

- All students go through MTSS process prior to referral for special education except for obvious physical or moderate/severe cognitive disabilities:
 - Example:
 - Deaf,
 - Deaf Blind,
 - Visually Impaired,
 - Multiple Disabilities,
 - Intellectually Disabled Moderate,
 - Intellectually Disabled Severe/Profound



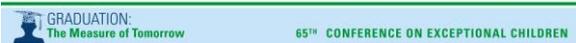
MTSS and Special Education

- Use MTSS as part of the process for:
 - Autism
 - Hearing Impaired
 - Serious Emotional Disability
 - Speech Impaired
 - Other Health Impaired
 - Traumatic Brain Injured (in some cases)
 - Intellectually Disabled Mild
 - Orthopedically Impaired (in some cases)
 - Specific Learning Disabled
- Students continue to receive MTSS interventions in addition to EC services.



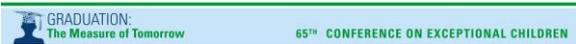
MTSS in NC and WCS

- Four year timeline for all districts to use;
- WCS has district team
 - Trained in Team Initiated Problem Solving
 - Part of NCDPI Cohort 2
 - District team has been “practicing” TIPS
- Goal is for PBIS/Behavior to be part of MTSS in each district



Resources

- cast.org
- Udcenter.org
- Interventioncentral.org
- <http://mtss.ncdpi.wikispaces.net/>
- <https://www.youtube.com/watch?v=ljzTNfwdCU>



Contact

- Mike Marcela
marcelam@watauga.k12.nc.us
828-773-3751 (cell)
828-264-7190 (work)
