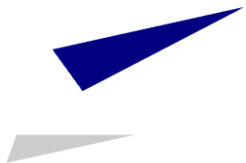


Neurodiversity: Autism Spectrum and Other Disorders DIR/ Floortime Approach in Early Intervention

Joshua D. Feder, MD
Fresno, CA, April 4, 2013

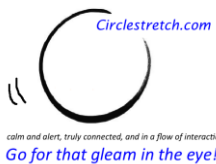
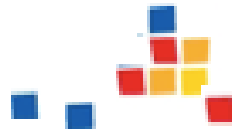
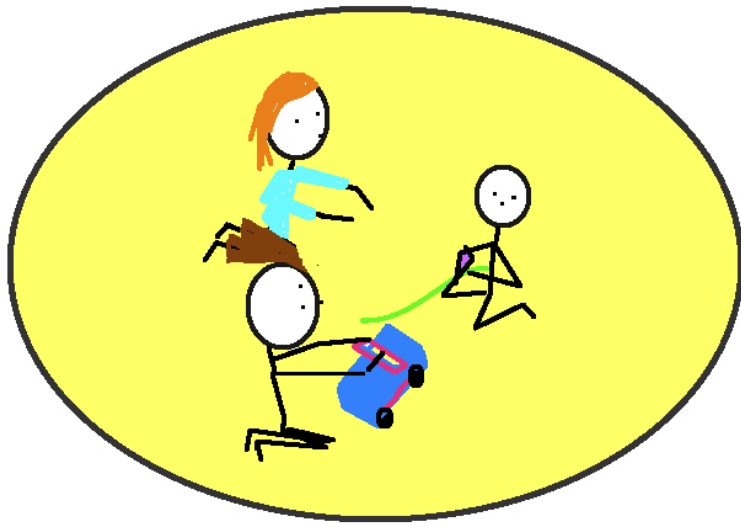


Josh Feder MD

Director of Research, Graduate School,
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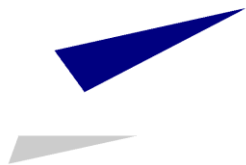
Assistant Clinical Professor, Voluntary
Department of Psychiatry, University of California at
San Diego School of Medicine

Disclosures 2103



Learning Objectives

- * Symptoms and Neurodiversity
- * Functional Emotional aspects of development
- * Scope of individual differences with ASDs
- * Relationship factors in assessment and intervention
- * Rubric: biopsychosocial assessment
- * Principles and Techniques: DIR/Floortime
- * Reflective, Evidence Based Practice



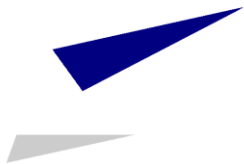
Meeting Certification Objectives

Domain I: Knowledge

- * 1A - 1.0 Parenting, Caregiving, Family Functioning and Child-Parent Relationships
- * 1B - 1.0 Infant, Toddler and Preschool Development
- * 1C - 1.0 Biological and Psychosocial Factors Impacting Outcomes
- * 1D - 0.25 Risk and Resiliency
- * 1E - 0.25 Observation, Screening, and Assessment
- * 1F - 1.0 Diagnosis and Intervention
- * 1G - 0.25 Interdisciplinary/Multidisciplinary Collaboration
- * 1H - 0.25 Ethics

Domain II - Clinical Experience/ Reflective Practice Facilitation - 1 hour

Total: 6 hours



Schedule

8:30 - 10:00 am: Defining Autism and Introduction to the DIR Model and It's Developmental Approach

- a. Defining ASD and Understanding Neurodiversity (0.5 hr, I-1F)
- b. Functional Emotional Developmental Levels (1.0 hr, I-1B)

10:15 - 11:45: Individual Differences and Relationships

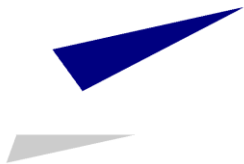
- c. Individual Differences (0.5 hr, I-1C)
- d. Relationship Factors (1.0 hr, I-1A)

12:45 - 2:45: Doing DIR/Floortime as a Comprehensive Bio-Psycho-Social Evidence Based Practice

- e. Screening and Assessment (0.25 hr, I-1E)
- f. Floortime! (1.0 hr, I-1F, I-1C)
- g. Building Resiliency (0.25 hr, I-1D)
- h. Interdisciplinary/Multidisciplinary Collaboration (0.25 hr, I-1G)
- i. Securing Parent Choice in Informed Consent with DIR/Floortime as an Evidence Based Practice (0.25 hr, I-1H)

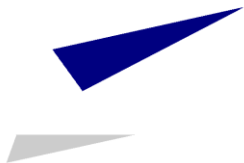
3:00 - 4:00: Reflective Practice Pods

- a. Guidelines for Reflective Practice (brief reminders)
- b. Small group reflective experience (bulk of the hour)
 planning for follow up (brief)



Try not to peek!

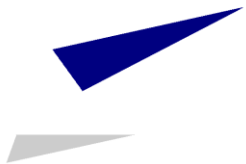
- * We will be talking a lot about YOUR observations and experiences through the day
- * When we are brainstorming together, it might help if you refrain from looking ahead to allow you the freedom of your own ideas
- * If you do peek, try to let the ideas spark specific examples that you might remember



Defining Autism

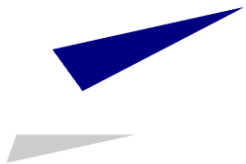
Understanding Neurodiversity

- * What do you already know? (next slide)
- * Neurodiversity
- * DSM IV and DSM V
- * Infants and young children: early identification and intervention efforts
- * Other Disorders



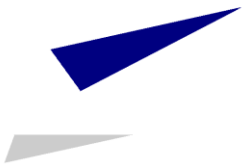
What do you already know? (*GROUP PARTICIPATION HERE*)

- * Symptoms
- * Numbers
- * Range of the Spectrum
- * Range of Interventions
- * Range of Outcomes



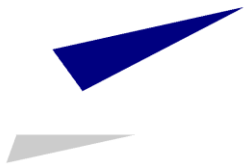
Neurodiversity

* What do you think that means?

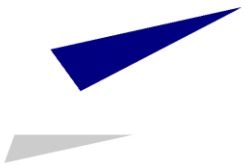
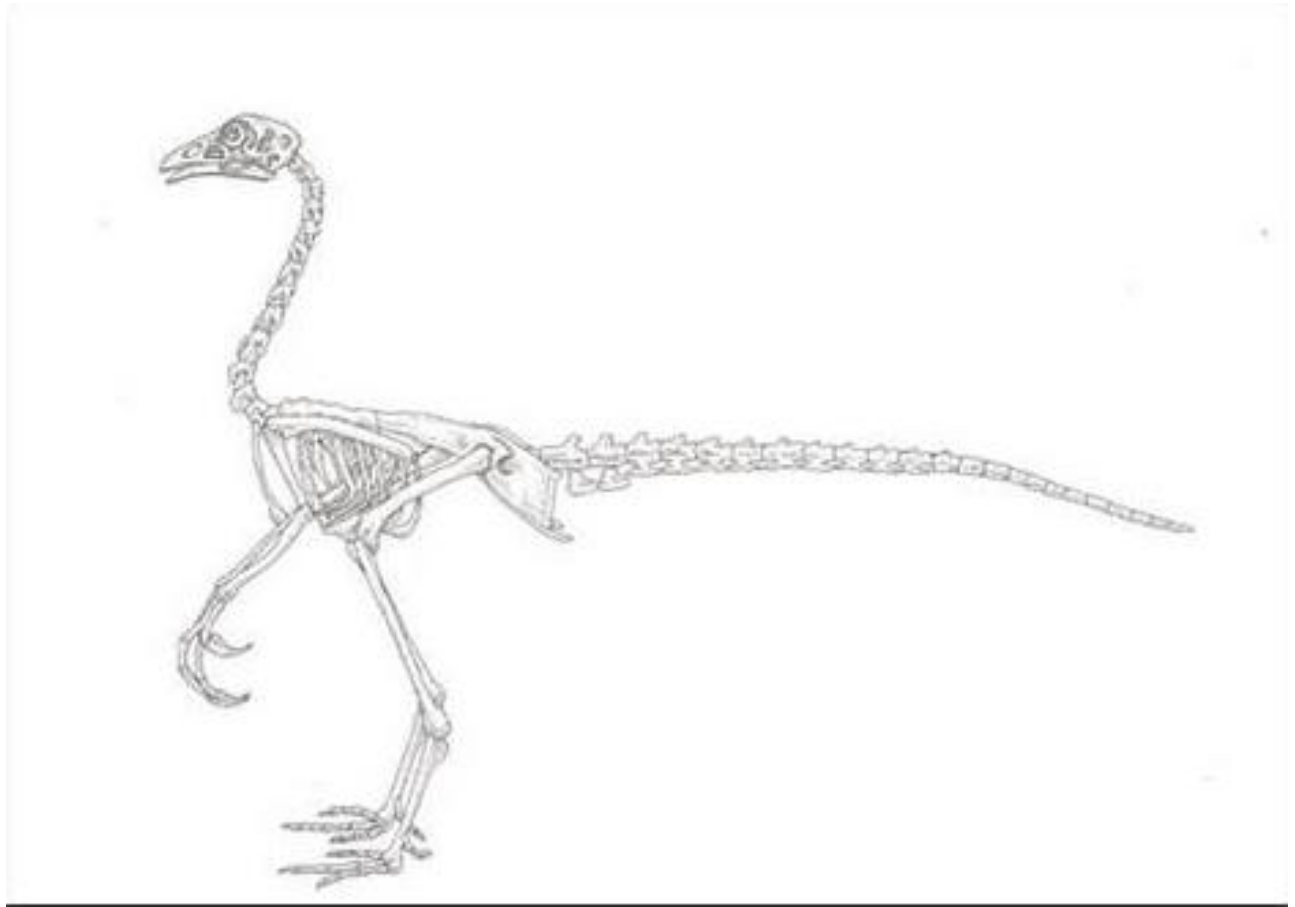


Neurodiversity as Human Necessity: What Make Us Human?

- Diversity in thinking is built into communal problem solving.
- It is actually built into our genetic code.
- Anthropogeny is the study of how we come to be human (CARTA at UCSD – free webinars)
- A difference only in gene expression: Human vs. Chimps; dino-chickens in development
- Close enough cousins: mouse models in medicine, testing fruit flies for medication for Fragile X

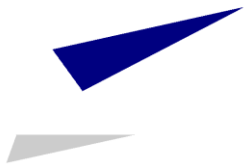


dino-chicken

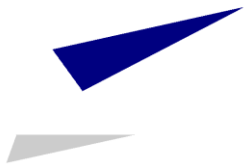


Anthropogeny: Genetic Coding for Social-Emotional Development

- Genes code for mirror neurons that track what other people do and allow us to imitate.
- Imitation leads to affiliation: as we see and we do like those around us, we tend to group with those people
- Affiliation leads to identification – an extremely potent psychological force in which we take on the characteristics of the powerful people around us (parents, teachers, mentors, even oppressors – Stockholm Syndrome & Patty Hearst)
- Identification leads to empathy and social knowledge (right sided) and communication and language (left sided).

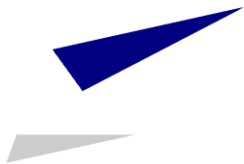


identification



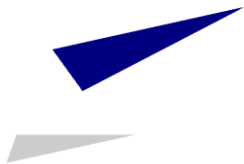
Natural Genetic Variation in Social-Emotional Development

- So we have these genes that code for social emotional function.
- And we know that genes vary in their transmission and character from generation to generation.
- Some genes vary more than others, e.g., hair color varies more than whether or not you will grow a heart. Back to Middle Earth: the heights of Hobbits, while all short, presumably vary in a normal distribution about a mean or average height. However, there is less variation in whether they have hairy feet –they all have hairy feet.
- Back to, anthropogeny, i.e., what is unique to actual humans: large brain size; intense drive to imitate, which allows our species to learn from others; sophisticated social abilities; sophisticated technical abilities.
- These areas make us human and as it happens they are all extremely variable in their genetic allelic construction.



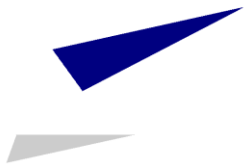
Patterns of Genetic Variation

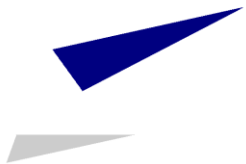
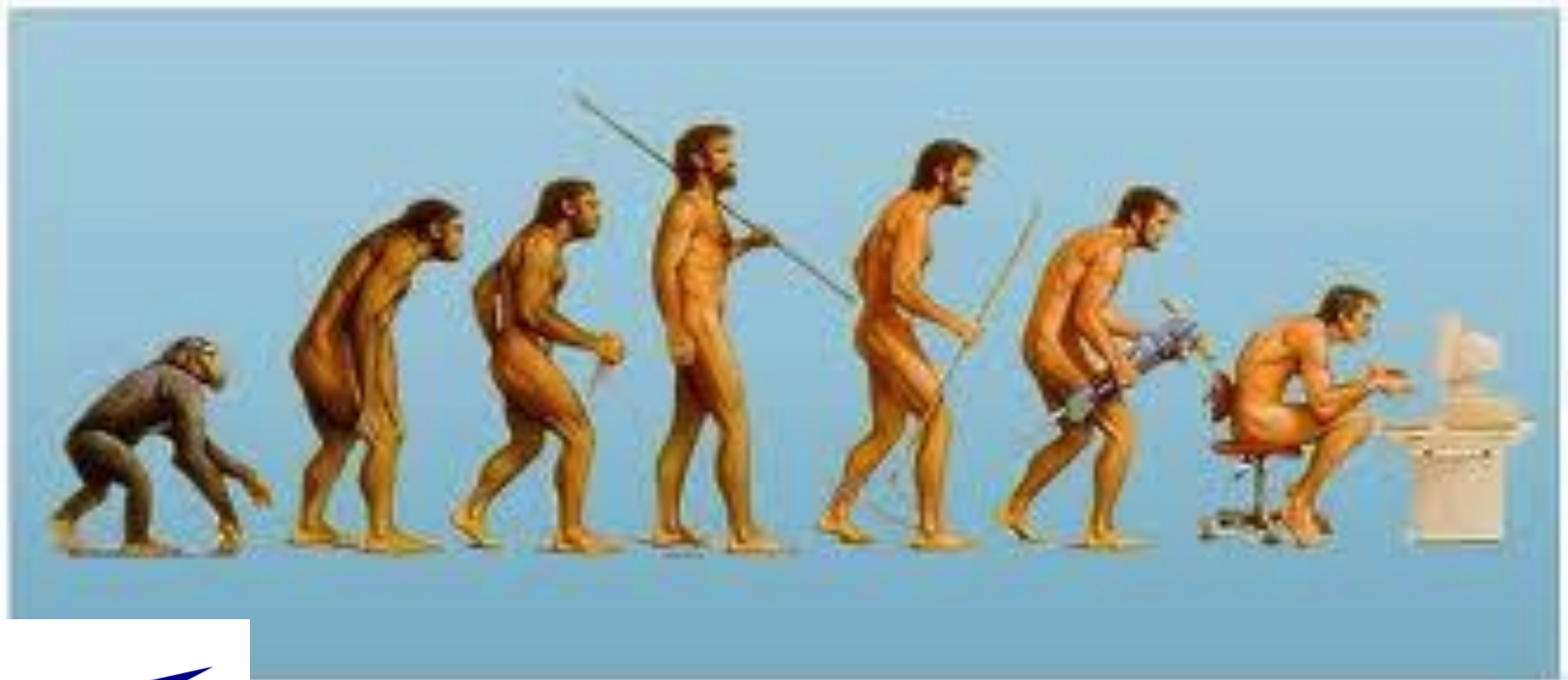
- Numbers of genes: too many CGG repeats in Fragile X; Down's Syndrome trisomy 21. Too few genes in deletion syndromes.
- Single specific spontaneous changes can create ASD. Usually severe and the person does not have kids and pass on that change.
- More often ASDs involve a number of genes that affect those highly human qualities.
- Some people have more trouble reading social cues but are more able to focus on detail, range in severity along the ASD spectrum.
- For others the same genes vary in opposite directions, toward manic, psychotic, and borderline personality symptoms.
- We typically see both poles of symptoms and syndromes running in families, with the easy variability of those genetic alleles leading to natural neurodiversity.



Neurodiversity is Necessary

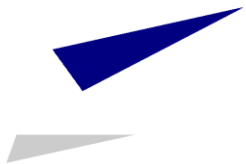
- This may explain the growing number of studies showing the same rates of broadly defined ASDs in older people as in children, roughly 1/100. Our ASD 'epidemic' is more and more seen as a recognition of the true rate of this kind of natural genetic variation.
- Temple Grandin says it best when she talks about how if we were all the same we would still be chatting at each other in caves with no technology.
- This variability has evolutionary value or it would have been dropped over the 6 million or so years that hominids have been developing
- (Dawn of Humankind).





Highly Evolved? DSM IV & DSM V

- * 3 & out
- * 2 & others (e.g. ADHD ok)
- * associated symptoms

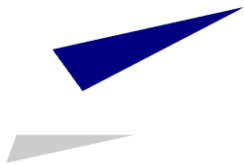


Infants and young children: early identification and intervention

- * Screening: CSBS, SEGC, etc.
- * How many different interventions for ASD in young children do you know about?

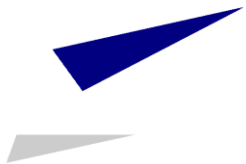
(GROUP PARTICIPATION HERE)

- * Scattered Ideas and the need for a comprehensive framework for understanding and assessing and intervention



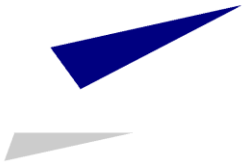
The DIR/Floortime Model

- * Developmental
 - * Individual Differences
 - * Relationship Based
-
- * A biopsychosocial framework & philosophy
 - * Universal: can be used for all ages and situations



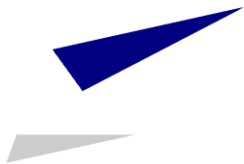
Why DIR? because it's...

- * Broad – whole child, supports family
- * Welcoming – all about building love
- * Enriching – closeness brings progress in relating, communicating, and thinking



Taking Notes?

- * One word: **ENGAGEMENT**
- * Engagement goes beyond compliance
- * Connection before correction
- * Central Goal: Figure out how to help caregivers create and repair engagement

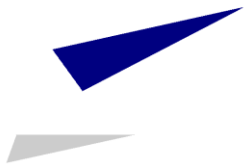


DIR ‘quick guide’ ...

- * Developmental - regulation, warm trust, then a flow of enriching interactions
- * Individual Differences— sensory, motor, communication, visual-spatial, cognitive
- * Relationship Based – connecting and supporting at many levels

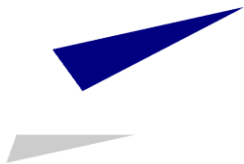
Affect = Emotional Connection

- * The “glue” that organizes all of the jobs of the brain
- * Coordinates the nervous system from the brain outward
- * Lends purpose and meaning to the information we take in through our senses
- * Emotional based learning experiences become an internal reinforcement that motivates



Theory Behind DIR

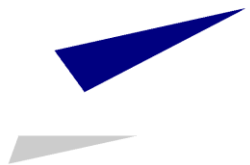
- * Affect is the central organizer of experience in all developmental domains
- * Experience is dual coded in the sensory system and the affect cueing system
- * Individual differences in processing sensory motor information impact how parents and children make meaning from their interactions and from expectations about their relationships



More to the point:

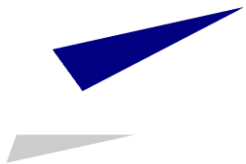
- * Joint attention – responsive (cured), initiated (when we wait for it)
- * Intent
- * Engagement
- * Repair (Tronick)

These are at the core of the moment to moment affective reciprocity that supports the developing relationship.



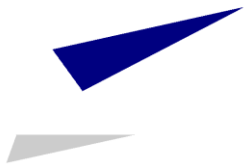
Functional Emotional Developmental Levels

- * Let's develop this together
- * What is the first thing you need to be doing to be able to interact with another person?
- * Then what?
- * And after that?

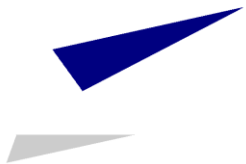


Functional Emotional Developmental Levels

I	co-regulation, ability to attend, interest in the world
II	engagement, attachment, gleam in the eye, warmth
III	circles of interaction, purposive two way communication
IV	flow, social problem solving, behavior organization
V	symbolic thinking (critical shift)
VI	logical connections between ideas (what, when, how, and why questions)
VII	multicausal thinking
VIII	grey area thinking
IX	reflective thinking, stable sense of self, and an internal standard



Break

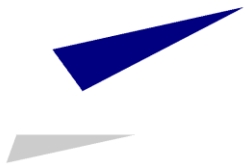


Individual Differences

- * To even get started at helping someone regulate, you need to understand the person

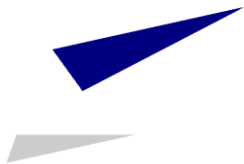
Group participation: examples of individual differences

- * Developing categories of areas to look at



Individual Differences: areas to look at

- * Sensory modulation and processing
- * Postural control and motor planning
- * Receptive communication
- * Expressive communication
- * Visual-spatial function
- * Praxis: knowing how to do things to solve the social problem of the moment



Things to Keep in Mind

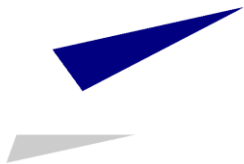
Hypo-reactive (decreased sensitivity)

- * Sensory seeking
- * Does not register input or has delayed responsiveness to sensory input

Hyper-reactive (increased sensitivity)

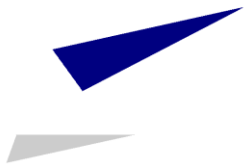
- * Sensory avoiding
- * Associated with increased reactivity to sensory input (fight/flight/fright responses)

Mixed Hypo/Hyper-Sensitivity: **common**



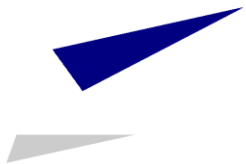
Quality of Caregiver-Baby Relationship Matters

- * D.W. Winnicott
 - There is no such thing as a baby.....
 - A baby cannot exist alone, but is essentially part of a relationship
- * Relationships are central to development



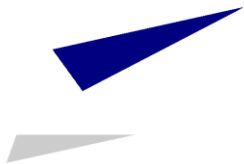
Relationships

- * What have you seen?
- * What are we looking for?
- * What might worry us if we see it?



Caregiver Patterns and Child Development

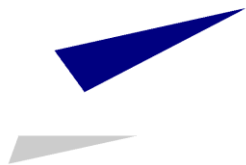
- * Mutually confirming interactions
 - Mirroring, Matching, Expanding
- * Attachment
 - Secure, Anxious, Avoidant, Chaotic, Aloof
- * Sensitive responsiveness
- * Attunement
- * Repair



Repair:

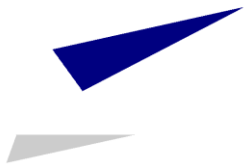
Tronick & messy interactions

- from infancy there is a natural, messy process of break and repair [of engagement]
- founded on the real differences in perspective between infant and parent
- there is a break, and then there is repair, over and over
- this is necessary for emergence of a sense of self and for resilience
- confidence in one's own competence to repair the breaks in engagement (Georgia's case showed this with an adult yesterday)
- *Differences are necessary for development*
- Clinical work: in the course of life differences also cause pain

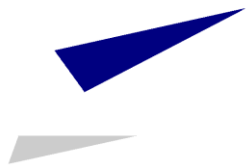


Family /Caregiver Patterns: Parameters to Think About

- * Comforting
- * Finds appropriate level of stimulation
- * Engages in relationship
- * Reads cues and signals
- * Maintains affective flow (for co-regulation)
- * Encourages development



Lunch!



Screening & Assessment

- * SEGC: Social Emotional Growth Curve (next slide)
- * FEAS: Functional Emotional Assessment Scale
- * Office Assessment and Tracking

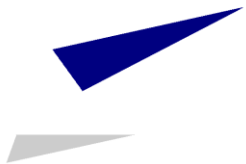
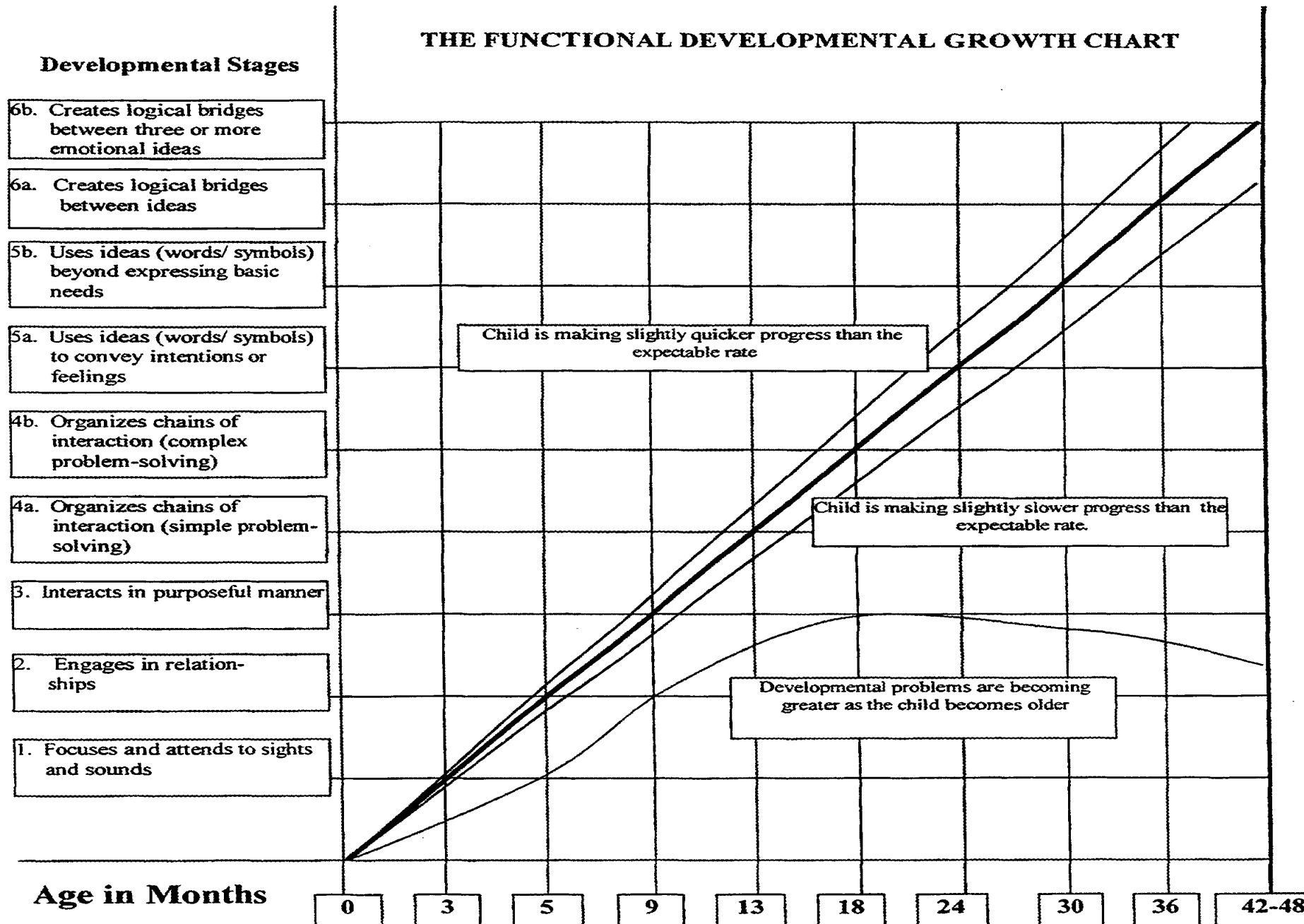


Figure 1



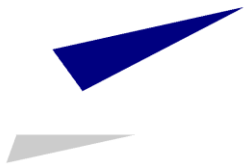
NDRC – NEURO-DEVELOPMENTAL DISORDERS OF RELATING & COMMUNICATION - FUNCTIONAL EMOTIONAL DEVELOPMENTAL LEVELS

Child:	Caregiver:		Examiner:		Date:	Diagnosis:	
	1	2	3	4	5	6	7
Draw line through To highest level (1-6) child has reached The more robust and qualitative, the higher the rating.	Not reached	Barely even with support-very intermittent (very in and out)	With persistent and/or predictable support has islands of this capacity	With structure and scaffolding, given high affect, gestural, language, sensorimotor support can expand	Not at age-expected level, immature-fragmented; may be cyclical but comes back for more	Age-appropriate level but vulnerable to stress and/or with constricted range of affects	Age-appropriate level with full range of affect states.
Functional Capacities							
I. Self-Regulation And Attention Take in sights and sounds and maintain shared attention							
II. Engagement And Relating Woo another or be wooed, stay engaged through emotions							
III. Use Affect to Convey Intent - Two Way Communication For requests, emerging back and forth interactions							
IV. Behavioral Organization Problem Solving Continuous flow of affective interactions with people for shared social problem solving							
V. Creates and Elaborates With Symbols .Represents ideas and emotional themes .							
VI. Emotional Thinking Logical –Abstract Bridges ideas, elaborates and can reflect on actions, motives, aware of time and space							

1-> 4: Child requires caregiver support; 5-> 6: Child attains developmental level independently but constricted; 7: Age appropriate

Likert Scale for Each Level

1. Not doing it
2. Barely able to do it
3. Islands of time where the child can do it
4. Can expand those islands with our help
5. Comes back for more with little or no support
6. Pretty normal unless under stress
7. Age appropriate



Sample Full FEDL (Charlie)

	Not there	Barely	Islands	Expands	Comes back	Ok if not stressed	Ok for age
Co-regulate		3/06	3/07	3/08	3/09		
Engage		3/06	3/07	3/08	3/09		
Circles		3/06, 3/07	3/08	3/09			
Flow	3/06	3/07	3/08, 3/09				
Symbolic	3/06	3/07, 3/08	3/09				
Logical	3/06	3/07, 3/08	3/09				
Multicausal	3/06, 3/07	3/08	3/09				
Grey area	3/06, 3/07,	3/08, 3/09					
Reflective	3/06, 3/07	3/08, 3/09	44				

INDIVIDUAL DIFFERENCES

Regulatory Capacities (reactivity)	Postural Control for Functions	Response to the Sounds, Gestures and Verbal Communication (in back and forth reciprocal interactions for communication)	Use of Vocalizations, Gestures, Words and Language for Communication (in back and forth reciprocal interactions for communication)	Response to Visual Environment	Praxis - Executive Function - Prefrontal cortex orchestrating information for function. Praxis is the moment from which one faces the future with the resources gained from the past experiences.
<p>Indicate +1 = hyper -1 = hypo ± = both responsivity in each sensory domain</p> <p>___ auditory ___ visual ___ tactile ___ vestibular ___ proprioceptive ___ tastes ___ odors</p> <p>Dominant Functional Profile (Describe):</p>	<p>Can sequence purposeful gestures and actions, to obtain desires, to -</p> <ol style="list-style-type: none"> 1. Simple physical actions to indicate desires (gaze, reach) 2. Physically mirror gestures 3. Physically imitate gesture 4. Imitate physical actions with purpose. 5. Obtain desires 6. Problem solve steps with body to move in space to interact with people & objects in environment <ul style="list-style-type: none"> - for exploration. - for function and purposeful use of toys - for self help - for back and forth interactions with family and peers. <p>(# ___ steps recorded)</p>	<p>Observations of the child's ability to attune and orient to the auditory environment, to affect and gestures and to comprehend words (w) (with benefit of signs/gestures (s) and/or visual (v) strategies.</p> <ol style="list-style-type: none"> 1. Orient to the auditory source in the environment (auditory figure ground). 2. Attune to key tones in another's vocalizations. 3. Respond to key gestures in another interaction. 4. Respond to key words in another interaction. 5. Switch auditory attention back and forth between self and others (self monitor, other monitor & integration) 6. Follow directions (record # ___). 7. Understand questions (how, who, what, where, when, what if, if then). 8. Engage in conversations with abstract ideas. 	<p>. The child uses -</p> <ol style="list-style-type: none"> 1. Mirror vocalizations with the intention to communicate 2.. Mirroring gestures with intention to communicate. 3. Intentional use of unique non-verbal gestures to convey intentions. 4. Intentional use of affective tones and sounds to convey intentions. 5. Uses single meaningful words to convey intentions, actions and desires. 6. Uses two word phrases meaningfully. 7. Uses sentences meaningfully. 8. Uses phrases and sentences in back and forth exchanges with a logical flow. 	<p>The child uses visual spatial strategies systematically to explore and discriminate desired objects. The child can -</p> <ol style="list-style-type: none"> 1. Observe and focus on desired object 2. Alternate gaze (initiate joint attention visually) 3. Follow another's gaze to determine the object of their attention and their intent. (respond visually) 3. Switch visual attention back and forth between self and other (self monitor, other monitor & integration) 4. Differentiate salient visual stimuli from background stimuli (visual figure ground) 5. Actively search for object she sees hidden 6. Can explore two areas of room and search for desired object 7. Can explore more than two areas with active visual assessment of space, shape and materials. 	<p>Praxis encompasses all of these individual processing differences as it depends on the child's -</p> <ul style="list-style-type: none"> - Ideation - Planning - Sequencing - Execution - Adaptation <ol style="list-style-type: none"> 1. Initiates ideas in play with clear goals and purpose. 2. Is able to associate sensory perceptions from the body, visual system, auditory system to develop a plan. 3. Develop the steps of the sequence (# steps - 1, 2, 3, 4) 4. Execute the steps and persist. 5. Adapt plan if it does not work or is interfered with by another's action.

Instructions: Identify child's functional capacities based on observations (o) and parent reports using operational criteria.

Match operational criteria with "algorithms" for each NDRC subtype I-IV. (validate with FEAS)

Individual Differences – Charlie – Preschool 5/05 & Kindergarten 9/05

<i>Sensory</i>	<i>Postural</i>	<i>Response to Communication</i>	<i>Intent to Communicate</i>	<i>Visual Exploration</i>	<i>Praxis -</i>
Sensory seeking, distractible ... Auditory Visual Tactile Vestibular Proprio-ceptive Taste Odor	Low tone; A bit clumsy - impedes rapid reciprocity in the moment 1 indicate desires 2. mirror gestures 3. imitate gesture ---- 05/05---- 4. Imitate with purpose. 5. Obtain desires 6. interact: - exploration - purposeful -self help -interactions	Trouble managing more than one thing at a time 1. Orient 2. key tones 3. key gestures 4. key words ---- 05/05---- 5. Switch auditory attention back and forth 6. Follow directions 7. Understand W ?' s 8.abstract conversation.	Dysarthric – Logical discourse is Difficult 1. Mirror vocalizations 2.. Mirror gestures 3. gestures 4. sounds 5.Words ---- 05/05--- 6. two –word 7. Sentences 8. logical flow.	Distractible. 1.focus on object ---- 05/05---- 2. Alternate gaze 3. Follow another' s gaze to determine intent. 3. Switch visual attention 4. visual figure ground 5. search for object 6. search two areas of room 7. assess space, shape and materials. -	Easily frustrated Ideation -- 05/05--- Planning (including sensory knowledge to do this) Sequencing Execution Adaptation

Individual Differences – Charley – First Grade

<i>Sensory</i>	<i>Postural</i>	<i>Response to Communication</i>	<i>Intent to Communicate</i>	<i>Visual Exploration</i>	<i>Praxis -</i>
<p>Sensory seeking, distractible ...</p> <p>Auditory</p> <p>Visual</p> <p>Tactile</p> <p>Vestibular</p> <p>Proprioceptive</p> <p>Taste</p> <p>Odor</p> <p>Taste and odor are better</p>	<p>Low tone; A bit clumsy - impedes rapid reciprocity in the moment</p> <p>1 indicate desires</p> <p>2. mirror gestures</p> <p>3. imitate gesture</p> <p>4. Imitate with purpose.</p> <p>----3/07----</p> <p>5. Obtain desires</p> <p>6. interact: - exploration - purposeful -self help</p> <p>-interactions</p> <p>Much better postural control – not flopping on floor</p>	<p>Trouble managing more than one thing at a time</p> <p>1. Orient</p> <p>2. key tones</p> <p>3. key gestures</p> <p>4. key words</p> <p>----3/07----</p> <p>5. Switch auditory attention back and forth</p> <p>6. Follow directions</p> <p>7. Understand W ?'s</p> <p>8.abstract conversation.</p> <p>Stronger foundation</p>	<p>Dysarthric – Logical discourse is Difficult</p> <p>1. Mirror vocalizations</p> <p>2.. Mirror gestures</p> <p>3. gestures</p> <p>4. sounds</p> <p>5.words</p> <p>----3/07----</p> <p>6. two –word</p> <p>7. Sentences</p> <p>8. logical flow.</p> <p>NOT CHANGED</p>	<p>Distractible.</p> <p>1.focus on object</p> <p>2.----3/07----</p> <p>2. Alternate gaze</p> <p>3. Follow another's gaze to determine intent.</p> <p>3. Switch visual attention</p> <p>4. visual figure ground</p> <p>5. search for object</p> <p>6. search two areas of room</p> <p>7. assess space, shape and materials.</p> <p>Can focus pretty well on an object now</p>	<p>Easily frustrated</p> <p>Ideation</p> <p>Planning (including sensory knowledge to do this)</p> <p>----3/07----</p> <p>Sequencing</p> <p>Execution</p> <p>Adaptation</p> <p>A step forward..</p>

Relationships - Caregiver Profiles:

	Not yet able to support	Just starting to support	Islands of support	Moderately effective in supporting '50%'	Becoming consistent in ability to support	Effective except when stressed	Very Effective in supporting
Comforting the child							
Finding appropriate level of stimulation							
Pleasurably engages the child							
Reads child's emotional signals							
Responds to child's emotional signals							
Tends to encourage the child		1					

Relationships - Caregiver Profiles: first grade teacher, aide

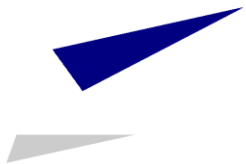
	Not yet able to support	Just starting to support	Islands of support	Moderately effective in supporting ' 50%'	Becoming consistent in ability to support	Effective except when stressed	Very Effective in supporting
Comforting the child			Not fuzzy, but not reactive		mellow		
Finding appropriate level of stimulation			directive	unflappable			
Pleasurably engages the child		directive		Persistent attempts to engage him			
Reads child's emotional signals		Sees when he is upset	Can predict when he will become upset				
Responds to child's emotional signals	Unsure what to do	Interested in the flow of activity, not interaction					
Tends to encourage the child		directive	Wants him regulated so he can learn (not interact per se)				

Relationships - Caregiver Profiles: **second grade teacher, resource teacher, aide**

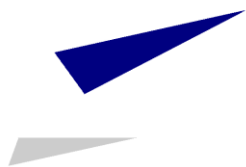
	Not yet able to support	Just starting to support	Islands of support	Moderately effective in supporting ' 50%'	Becoming consistent in ability to support	Effective except when stressed	Very Effective in supporting
Comforting the child					Kind and clear mellow	Really there for him, can help him settle	
Finding appropriate level of stimulation			directive	Pretty good with him		Calm and positive, able to flexibly shift level of stimulation	
Pleasurably engages the child		directive		Learning to engage	Some nice non-verbal flow		
Reads child's emotional signals			Predict when he is upset	Tries hard to do this in the moment		Naturally reads his cues	
Responds to child's emotional signals		Still unsure what to do		Interested in the flow of interaction		Naturally responds	
Tends to encourage the child		Still directive			Strong desire to see him regulated and engaged	Regulated for interaction; coaches aides, staff	

Doing Floortime

- * Principles
- * Techniques
- * Managing specific challenges

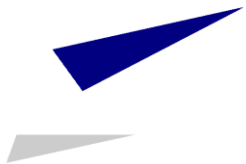


DIR Principles



Contrast of DIR vs. Behavioral Approaches

- * Prompt vs woo – top down vs. building relationships and learning together
- * Compliance vs. engagement
- * Imitation, limits, facts vs. autonomous thinking, negotiation, & exploration

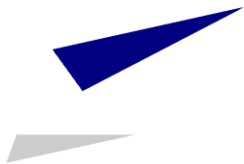


Rough Comparison of DIR/Floortime (Developmental Individual differences Relationship based) with other approaches:

DTT	Prompts	Compliance	Do/learn what is expected from trainer	Top-down autocratic
PRT	Prompts	Compliance	Choices – trainer, then parent	Top-down, yet democratic
RDI	Prompt	Compliance	Do what's expected – trainer, then parent	Top-down, autocratic
MM	Super-Prompt with elements of 'gentle teasing'	Compliance through action and engagement in rituals	Mostly do what's expected – trainer, then parent	Mostly top-down, with elements of co-created interactions
DIR	Woo	Engage (joint attention)	Build shared meaning – parent focused	Bottom-up, democratic

Comparison of DIR® with behavioral approaches – I

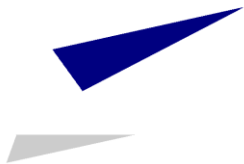
- * Goals of a behavioral programs: appropriate behaviors, learning facts, learning ‘what to do’ in a top-down approach (we teach, child learns and complies).
- * Goals of a relationship based interventions: connect with others to promote social and cognitive development and problem solving with flexible adaptation to a changing world. This is a ‘bottom up’ approach.
- * NB: RDI is a social–cognitive behavioral program whose aim is to create the ability to have relationships by training the child in ‘what to do’ with ideas that reflect natural relating but with methods that are top-down and do not reflect natural relating.



Comparison of DIR with behavioral approaches - II

Prompt vs. Woo

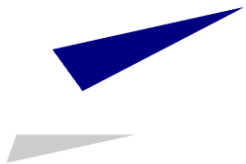
Prompt	Woo
Greater power difference between people	Humility – more equality
Control	Respect for ideas of other person
Specific expectation	Open ended, hopeful for growth
Belief in the material	Belief in the process



Comparison of DIR with behavioral approaches – III

Compliance vs. Engagement

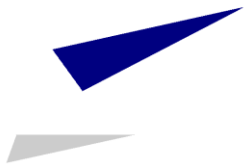
Compliance	Engagement
Do/think what I want you to do/think	Think for yourself and with me
Drills will create skills	Shared emotional signaling creates a relationship that inspires learning and problem solving
Schemes to cover new situations	Relationships, available and internalized, give self-assurance to respond to new situations
Limited sense of competence, self-esteem: “I can do it. I learned how.”	More full sense of competence, self-esteem: “I can figure it out.”



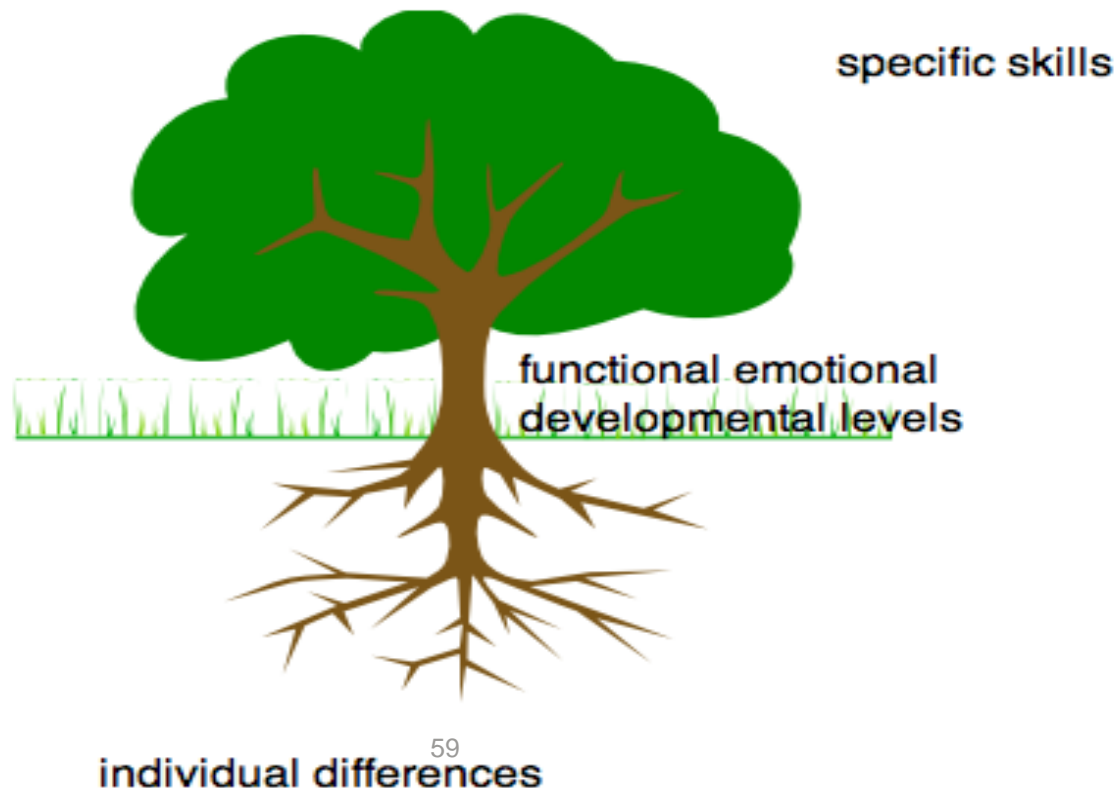
Comparison of DIR with behavioral approaches – IV

A Complementary Relationship

Behavioral based contributes...	Relationship-based expands...
Imitation	Autonomous thinking
Limits	Negotiation
Facts	Exploration

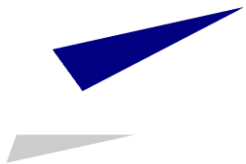


Integrating the full range of interventions: The Learning Tree



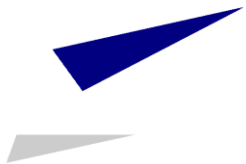
Specific Techniques

- * At each FEDL level



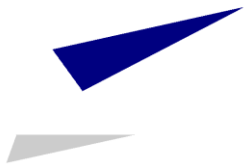
What does DIR Look Like?

- * Floortime sessions
- * Floortime all the time: always engaging the child in a flow of interaction
- * DIR is for all ages and all levels of challenge
- * Always includes reflection: time away from the situation for thinking and reflecting with others about what works and what to try next



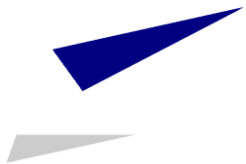
I - Calm enough: (Co-regulation)

- * Know the person: individual differences
- * We do this together –
- * Not a ‘sensory break’ (= escape)
- * Reach with 80% intensity to help the person calm down *with* you.
- * ‘Calm enough’ might mean active enough.
- * Think about what works and what doesn’t



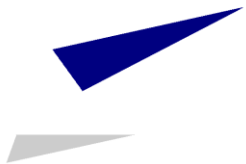
II - Truly Connected to Others (Engagement)

- * That gleam in the eye...
- * Mostly fun and feels good for everyone
- * creates the bond that will leads to learning
- * Joint attention, but joyful



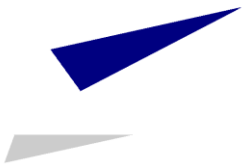
III – Circles: back and forth interaction

- * The person is always doing something
- * Follow the child's lead - Join in - be part of the activity
- * Improv = 'yes'
- * If you can't just join in, gently and playfully get in the way
- * If he wants something, he has to get it from you



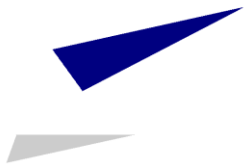
FEDL Level IV: FLOW

- * The 'engine' of relating you need to be able to expand
- * It might look like 'baby games', but it is what we all do every day, constantly, with each other
- * Chains of 20-40 circles
- * Expanding complexity



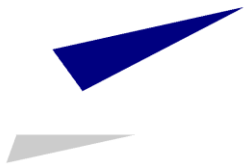
Avoiding Questions

- * Questions make people close up or act mad
- * Statements create social 'problems' that the other person can 'solve'
- * Try to maintain a 'one-down' power position
- * Try it out. It's hard, but worth the work



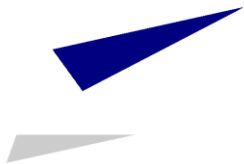
Things to Avoid

- * Don't just entertain, quiz, or direct the child with your games, demands, or ideas
- * Don't merely follow the child around – use the child 'lead' to start off
- * Every idea is a good one to play with – don't say 'no' to the idea - connect and play with it. You can set limits as needed.



FEDL Level V: Symbols

- * Words, when they really say something – more than labels
- * Play, when it really ‘says’ something – more than trained actions or turn taking
- * Gestures, when they ‘talk’ about things or ideas that can replace actions – more than pointing
- * *Try to treat everything as having meaning – you might be wrong and that’s ok, the person will correct you*



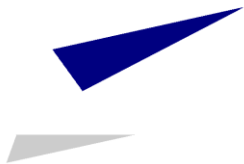


All Kinds of Symbols

From playing with dollies when the child really means it
or crashing cars when it really expresses something
to

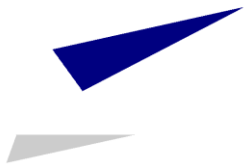
Fantastical stories of castles and kings, princes, armies,
unicorns, spies, heroines and every kind of complex
human motivation

(think of the 7 virtues and 7 vices)



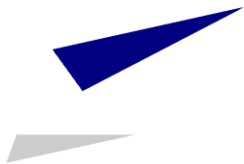
FEDL Level VI: Logical Thinking

- * Building logical bridges between ideas
- * Makes for powerful collaborative thinking
- * Far beyond 'Aspergian Logic'
- * Might ask why you feel that way
- * Can separate his internal world from your world, and still feel concerned



FEDL Level VII: Multicausal Thinking

- * There is more than one reason for why something is the way it is
- * Ex: Mom's mad, after bad day at work, but asks if there are other reasons
- * There is more than one feeling one might have about things
- * Ex: Mom's sad that I am going to school, but happy that I'll be with other kids



FEDL Level VIII - Gray-Area Thinking (6-10 yr)

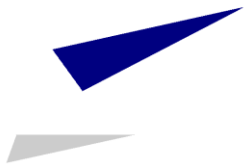
- * Hierarchies, playground politics
- * The best time for disappointment – better to lose now and have mom's support than to lose as an adult and have no experience to fall back on.
- * Emotional experiences define, expand, and deepen the boundaries for the self. Without anger we don't know what annoys us, without joy we don't know what makes us happy.
- * Refining the gradations of these emotions
- * This expanded and deepened appreciation for emotional experience makes us more able to appreciate it in others.

FEDL Level IX: Reflective Thinking, (9-12 yr and beyond)

- * A Stable Sense of Self, and an Internal Standard
- * Empathize in a truly reflective manner
- * Understand a range of feeling in others and compare it to one's self
- * Helps one be truly a great friend or partner.
- * Expanding sense of empathy, more and more inclusive: other kids, groups, school, country, ... the world (other races, religions, etc.).

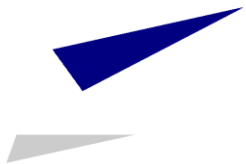
What about other kids?

- * Start with adults
- * Build some skills
- * Semi-structured activities with peers
- * Limiting numbers of kids
- * Mediate the process – slow it down
- * Statements more than questions
- * Democratic decision making



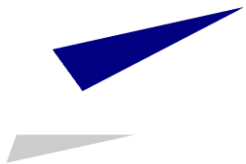
Things you might say or do:

- * “We need to figure out what to do...”
- * “I need help with...”
- * “Wait - I didn’t hear you...”
- * “We can vote on whether he was out..”
- * Semi-structured: at times you direct things, but work toward less of it.
- * In free play, you join the person in a way that attracts other kids, then facilitate the mix



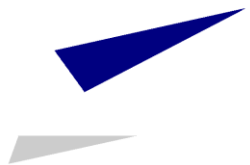
DIR at School

- * Maintaining non-verbal contact with a child in a class
- * Supervision and facilitation of interactions with vulnerable children
- * Empathy first in any difficult situation
- * Measuring progress: can track % time regulated and % time engaged, count circles too



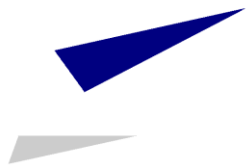
Interlude: Medications

- * Potions for preschoolers?
- * Rationale: last resort vs. covering all bases
- * Bottom line: medication might help a good plan work well but it can't make up for a bad plan



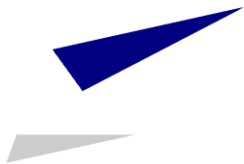
Examples of kids at different places on the FEDL

- * FEDL I-IV: manage vigilance, support interaction
- * FEDL V-VI: stepping back from the moment
- * FEDL VII-IX: critical thinking



Regulating Vigilance and Supporting Interaction: Functional Emotional Developmental Levels

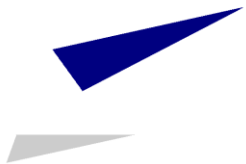
- * **I – co-regulation, ability to attend**
- * **II – engagement, gleam in the eye, warmth**
- * **III – circles of interaction**
- * **IV – flow/ behavioral organization in social problem solving**
- * V – symbolic thinking (critical to tolerating affect)
- * VI – logical connections between ideas
- * VII – multicausal thinking
- * VIII – grey area thinking
- * IX – reflective thinking, stable sense of self, and an internal standard



Abstract Ability and Vigilance

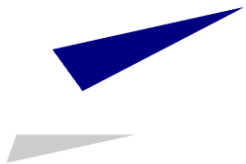
try to think when you are stressed inside...

- * Grossberg
- * Hippocampal cells
- * iSTART
- * The importance of regulating vigilance



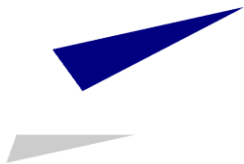
Remember:

- * 'Behavior' means WE need to do better
- * Wooing, not prompting
- * Avoid mere sensory breaks
- * Avoid questions



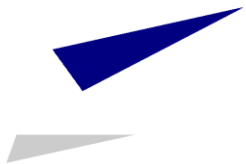
Example (2) FEDL Levels I-IV: Jack

- * Not so verbal, poorly regulated, perseverative Kindergartener
- * Seen in SDC PK – wandering, adrift
- * Allies: District rep – we pushed for .. K teacher (bends down to child instead of greeting me)
- * Family: helping mom see the magic (video: co-regulation and engagement, circles in tongue game DIR F2F Nov 2008 feder presentation – tongue game)



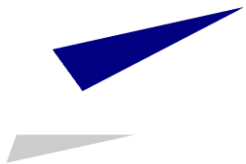
FEDL - Jack

	1 (not there)	2 (barely)	3 (islands)	4 (ok w/ support)	5 (comes back)	6 (ok unless stress)	7 (ok)
Regulate	4	8	10				
Engage	4	8	10				
Circles	4	8	10				
Flow	4 8	10					
Symbols	4 8	10					
Logic	4 8 10						



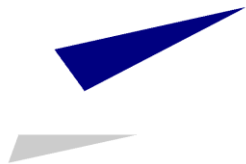
FEDL - descriptions

4/08	Bouncing about, somewhat interested in us
8/08	Starting modeling circles, vs. discrete trial type interactions
10/08	Mom does a warm, spontaneous game, based on his lead



Individual Differences - Jack

<i>Sensor y</i>	<i>Postural</i>	<i>Response to Communication</i>	<i>Intent to Communicat e</i>	<i>Visual Exploration</i>	<i>Praxis -</i>
Auditory Visual Tactile Vestibular Proprio- ceptive Taste Odor	1 indicate desires 2. mirror gestures 3. imitate gesture 4. Imitate with purpose. 5. Obtain desires 6. interact: - exploration - purposeful - self help -interactions	1. Orient 2. key tones 3. key gestures 4. key words 5. Switch auditory attention back and forth 6. Follow directions 7. Understand W ?'s 8.abstract conversation.	1. Mirror vocalizations 2.. Mirror gestures 3. gestures 4. sounds 5.words 6. two –word 7. sentences 8. logical flow.	1. focus on object 2. Alternate gaze 3. Follow another's gaze to determine intent. 3. Switch visual attention 4. visual figure ground 5. search for object 6. search two areas of room 7. assess space, shape and materials.	Ideation Planning Sequencing Execution Adaptation



‘Marilee Sheet’ for Jack and Mom

Following his lead:

- Interest in mom’s spontaneous affectively rich nyah nyah tongue on video

Circles:

- waiting for him to respond
- affective gestural hesitation

Expanding the concept:

- tongue
- splutter
- noises

Individual Differences:

- sensitive to overstimulation
- postural instability
- receptive communication
- expressive communication
- Visual spatial
- praxis (planning)

Joining:

- mom goes along with his desire to have her do it again
- not worrying about whether it is ‘appropriate’

Set the environment:

- keep it simple
- no special toys
- not a didactic task

Broadening Emotional themes:

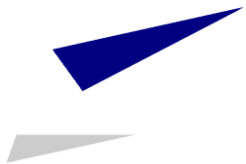
- anticipation
- excitement
- joy

Working Multiple Levels:

- co-regulation: stretching capacity to tolerate excitement
- engagement: strengthening bond with mom
- circles: waiting and working on closing more circles
- flow: behavioral organization – keeping the circles going even if the game changes

The bottom line: Engagement over compliance

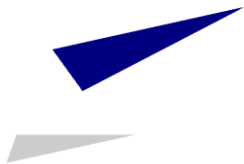
- * Compliance won't teach you to think
- * Co-regulation supports abstract thinking



Stepping back from the moment itself:

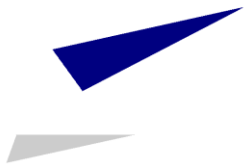
Functional Emotional Developmental Levels

- * I – co-regulation, ability to attend
- * II – engagement, gleam in the eye, warmth
- * III – circles of interaction
- * IV – flow/ behavioral organization in social problem solving
- * **V – symbolic thinking (critical to tolerating affect)**
- * **VI – logical connections between ideas**
- * VII – multicausal thinking
- * VIII – grey area thinking
- * IX – reflective thinking, stable sense of self, and an internal standard



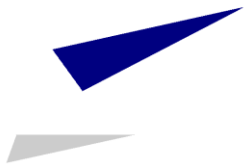
Stepping Back from the Moment: Symbolic thinking and Logical social social problem solving

- Makes it possible to solve problems without being caught in the moment
- Shrug well, shrug often, and shrug where he can see you shrug: Non-verbal gestural emotional symbols must always be present
- Verbal balance – our comedy shows and their diatribes: don't be fooled by our entertaining or by their logic without real engagement



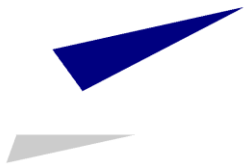
Example (3) FEDL Levels V-VI: Jon

Aggression and Rigid Aggressive Play Themes



About Jon:

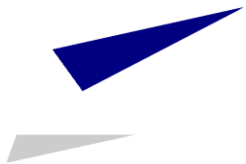
- * *Why he came to me:* aggression toward peers in private kindergarten. Removed anyway and placed in public setting.
- * *Main symptoms:* Receptive language, difficult to understand speech, reactive to busy environments, low tone, active, impulsive, sensory seeking, rigid, controlling, aggressive



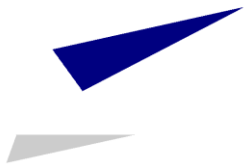
Video

(Dec F2F demo nov, jon 112508)

- * Fill out FEDL grid while watching:

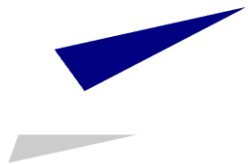


FEDL



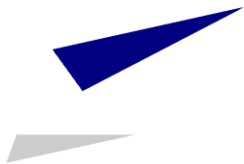
FEDL – Jon

	1 (not there)	2 (barely)	3 (islands)	4 (ok w/ support)	5 (comes back)	6 (ok unless stress)	7 (ok)
Regulate		11/05	11/06	11/07	11/08, 5/09		
Engage		11/05	11/06	11/07	11/08, 5/09		
Circles		11/05, 11/06	11/07	11/08	5/09		
Flow	11/05	11/06, 11/07	11/08	5/09			
Symbols	11/05	11/06, 11/07	11/08	5/09			
Logic	11/05, 11/06	11/07, 11/08	5/09				

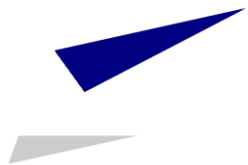


FEDL – descriptions: Jon

11/05	Rigid, aggressive, hits in 'play', not really symbolic
11/06	Allows me to join his aggressive play on his team
11/07	Increased complexity of aggressive themes; able to play with cousin and brother in water fights, facilitated by dad
11/08	Racing 'battle', controlling, but can be torn between me and dad, and nurturing, creative & symbolic with me; able to play with cousin and brother in games that are competitive but not overtly aggressive
5/09	Talking with me and parents about problems at school



Individual Differences

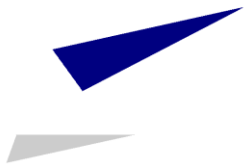


Individual Differences - Jon

<i>Sensor y</i>	<i>Postural</i>	<i>Response to Communicatio n</i>	<i>Intent to Communica te</i>	<i>Visual Exploration</i>	<i>Praxis -</i>
Sensory seeking... Auditory Visual Tactile Vestibular Proprio- ceptive Taste Odor	A relative strength; A bit clumsy - impedes rapid reciprocity in the moment 1 indicate desires 2. mirror gestures 3. imitate gesture 4. Imitate with purpose. 5. Obtain desires 6. interact: - exploration - purposeful - self help -interactions	Trouble managing more than one thing at a time Can barely tell 'why' we fight or what we fight about Can't track conceptual discussion of the reasoning behind events and play 1. Orient 2. key tones 3. key gestures 4. key words 5. Switch auditory attention back and forth 6. Follow directions 7. Understand W ?'s 8.abstract conversation.	Dysarthric – unintelligible Logical discourse is difficult (e.g. at best hedonistic: cheating gets you disqualified) 1. Mirror vocalizations 2.. Mirror gestures 3. gestures 4. sounds 5.words 6. two –word 7. sentences 8. logical flow.	A relative strength; Frustrated looking for things Some ability to work with shapes and objects to solve problems in play. 1. focus on object 2. Alternate gaze 3. Follow another's gaze to determine intent. 3. Switch visual attention 4. visual figure ground 5. search for object 6. search two areas of room 7. assess space, shape and	Ideas becoming more complex with support Adapting to problems that come up (e.g. when my character is injured, faints, etc.) Ideation Planning Sequencing Execution Adaptation

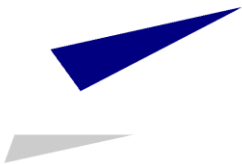
Family:

- * Dad works hard. Can facilitate kids when available.
- * Mom can set up playdates, engage cousin. Has to work hard to manage environment at home so that Jon is not in continuing conflict with older brother.
- * Brother is a good guy, and tries to play with Jon. But no one can really keep up with Jon.
- * Mom and Dad can play in office; however life at home is busy - hard to find time for Floortime.



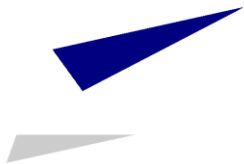
Reflection:

- * *What works:* office play with Jon and his parents to help them see what we can do; play dates with cousin, brother, facilitated by parents. Now we can talk too!
- * *What doesn't work:* videogames, busy environments with many peers.
- * *Why:* Jon is still developing capacities for solid enough symbolic play to be able to engage with peers without becoming aggressive. His language and also his more subtle postural and visual challenges make it hard for him to play with peers.



The bigger picture:

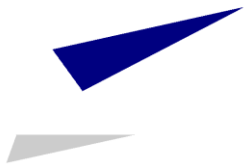
- * Broad goals: Improve Jon's capacity to tolerate and manage his environment, expand his symbolic capacity, and support and expand his parents' ability to support Jon's development and figure out ways to involve peers.
- * Multimodal intervention; get parents to more meetings and help them do more Floortime at home; increase intensity and relationship-based quality of services (speech, OT); facilitated group play; support to school staff to help them be more on board; medication management.



Critical thinking:

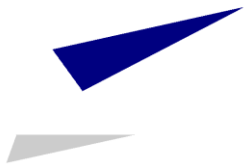
Functional Emotional Developmental Levels

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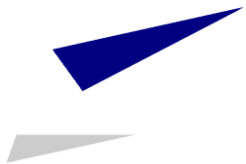
What do teachers mean by ‘Critical Thinking’?

- * Analysis
- * Awareness has to be there
- * Abstract thought
- * Decision making
- * Compare and contrast
- * Fact and opinion
- * Value judgements
- * Values: child's values
- * Self esteem/ self-concept



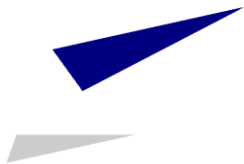
Critical Thinking in the DIR Framework: 'Wheat vs. Bread'

- * Beyond concrete facts & procedures
- * Recognizing abstract categories & patterns
- * Analyzing information & drawing conclusions
- * Stepping back and reflecting on whether the ideas and conclusions make sense



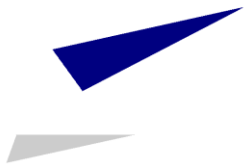
7 ate 9: Toward Critical Thinking

- Multicausal thinking: there is more than one reason, more than one feeling.
- Grey area thinking: there are different intensities of emotion.
- Reflective thinking: we can compare situations to each other, and we can compare ourselves to who we want to be



Example (4) FEDL VII-IX: Tommy

- * 5th grader
- * Lots of sensory and motor planning challenges, irritability
- * School challenges: reluctance to read fiction, difficulty with peers; staff very confident
- * (Video: playing with mom, multiple levels through some beginning reflective thinking Sept 2008 DIR Phone Group Clip)

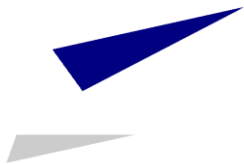


A General Plan for the Management of Difficult Moments *

- * Have a plan ahead of time
- * Adjust the environment
- * Soothe – avoid physical restraint
- * Communicate about it with the child afterward
- * Anticipate – plan with the child what to do next time
- * Make time to reflect about it with others

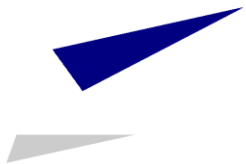
*reference:

A Bioethical Approach to Overcoming Problems with Aggression and Misbehavior in Schools,
Stanley Greenspan, M.D.
ICDL 12th Annual International Conference
November 7-9, 2008 ICDL Fall Conference, Washington, D.C.



DIR/Floortime: an Evidence Based Practice

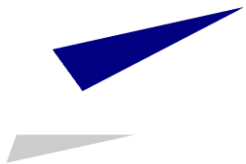
- * Defining Evidence Based Practice
- * Informed Consent
- * Evidence for the DIR/Floortime Model



How Do We Decide What to Do?

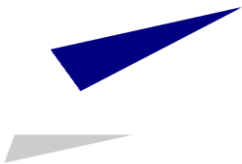
Evidence Based Practice

- From Sackett 1996 to American Academy of Sciences Institute of Medicine 2001 to Buysee 2006 (IMH), and through to today
- The combination of relevant research with clinical judgment and experience to provide families with the information to make truly informed consent decisions based on their own family culture and values.



Balanced thinking:

- Too much reliance on a research paper might not make sense (teaching to point to colored squares), or might not be appropriate for family (e.g. separation of child from parent)
- Too much reliance on clinical experience alone might lead to use of ineffective approaches and poor results (e.g. 'wait and see' for toddlers at risk for disorders of relating and communicating, overuse of antibiotics for ear infections)



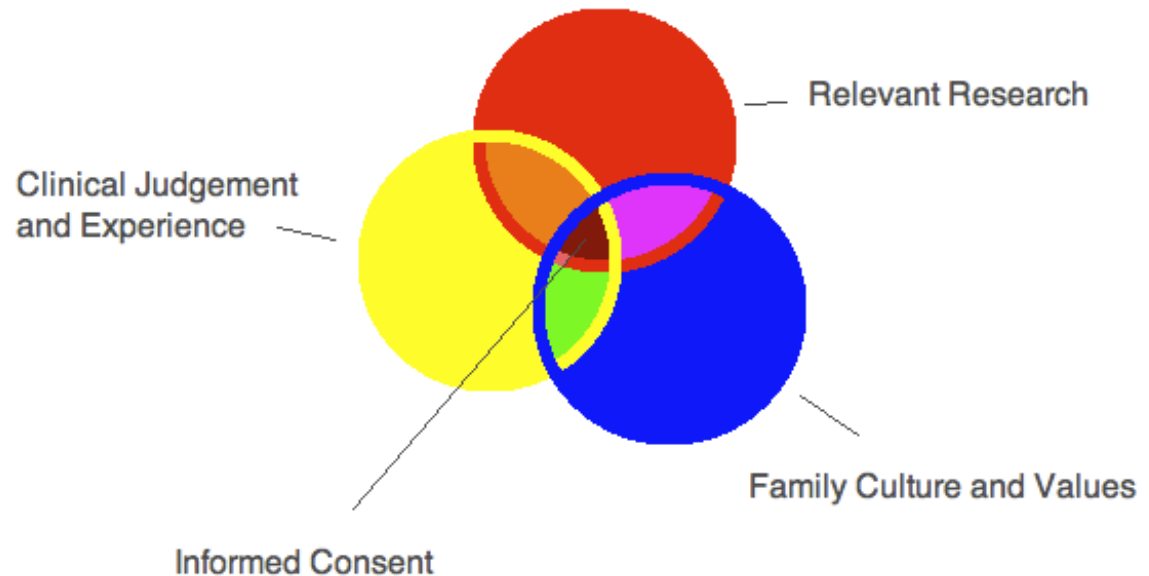
Elements of Informed Consent

- Diagnosis
- Target Symptoms
- Treatment Protocol
- Alternative Treatments
- Results of No Treatment
- Side Effects
- FDA Labeling: *‘experimental’*
- Consent & Assent
- Comments, Questions & Concerns: *‘track closely’*

**INFORMED CONSENT IS A
PROCESS**

Evidence Based Practice and Informed Consent

Evidence Based Practice



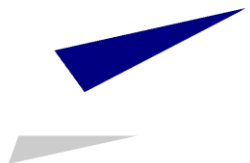
Research Support for DIR/Floortime

Macro: comprehensive interventions

- * Odom, et al. – there is no one ‘winner’..
- * Care reports, single case studies
- * Salt, Mahoney
- * PLAY
- * Pajareya
- * York

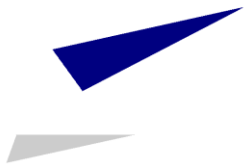
Micro: core concepts

- * Joint attention
- * Parent coaching
- * Repair

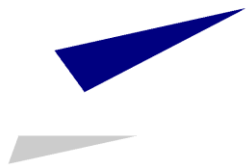


Summary: Why DIR?

- * It is BPS, and BPS is good
- * We can change outcomes despite genetics.
- * **Affect is the key** - this is affect based
- * Beyond behavioral treatments
- * Medication can only *support* treatment
- * DIR is an Evidenced Based Practice



Break!



Reflective Process

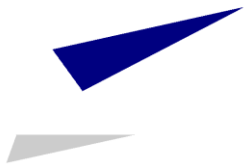
- * There are always new challenges
- * Nothing goes as expected
- * Caregivers rarely have the support and time they need to think
- * Make time – a moment to ***listen.***

Reflective Process: in the moment

- * Humility: you do not have the ‘answer’
- * Facilitate problem solving
- * Wonder about the situation
- * Track the emotion, then and now
- * Statements vs. questions.
- * Empowering vs. dictating.

Reflective Process: regular contact

- * Selling the idea of making another moment
 - can we make an appt to check in later?
- * Set another time to check in.
- * Parallel reflective process: the platinum rule



Reflective Exercise

- * At your tables, take turns
- * Present a situation that you have permission to present
- * Group members practice making non-directive comments to help the person think about the situation more productively
- * Hint: follow the affect

Want to learn more?

- * Take a course at ICDL.com or Profectum.org
- * Read Engaing Autism by Greenspan & Wieder
- * Go to Circlestretch.com or other web resources on DIR/Floortime

