THE ASD NEST MODEL

A Framework for the Inclusive Education of Higher-Functioning Children with Autism Spectrum Disorders

Presenters:
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Shirley Cohen
Susan Brennan
Aaron Lanou

OCALICON 2012
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2:45-5:45

steinhardt.nyu.edu/asdnest

AGENDA

☐ • History and program elements

☐ • The ASD Nest classroom

☐ • Social Development Intervention

☐ • Understanding academics

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HISTORY & ELEMENTS OF THE ASD NEST PROGRAM

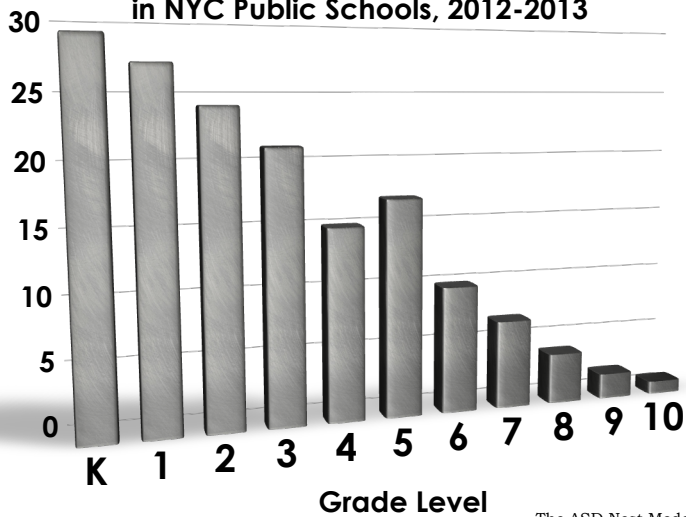Dorothy Siegel
Project Director

THE BASICS

- Begun in 2003 in PS 32 in Brooklyn, NY

- In 2012-13, serves close to 650 higher functioning children with autism and more than 2,000 children in general education

- 157 inclusive Nest classrooms from Kindergarten through 10th grade

- 27 schools in every borough of New York City

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Number of Nest Classes per Grade in NYC Public Schools, 2012-2013

(Bar chart showing number of Nest classes by grade level)

Grade Level	K	1	2	3	4	5	6	7	8	9	10
Number of classes (approx.)	29	27	24	21	15	17	10	8	5	3	2

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OUR GOAL

- To create a *therapeutic educational model* that is:

  - both inclusive and challenging

  - a vehicle for therapeutic change

  - based on evidenced-based and promising practices

  - responsive to the unique combination of strengths and deficits these students possess

  - able to be implemented by diverse schools and districts

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SOME ELEMENTS OF A PROGRAM TO SUPPORT STUDENTS WITH AUTISM

- *therapeutic services/supports* to address challenges
- *educational setting* consisting of a small inclusive classroom with adequate supports
- *consistent therapeutic and instructional approach* from one setting to another, one service to another, and one year to the next
- *training and on-site support* for both therapists and teachers
- *professional collaboration* opportunities
- *support for children's social interactions* with typically developing peers
- *school and district support*
- *home-school collaboration*

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THE ASD NEST PROGRAM & THE RUBBER BAND BALL

- each rubber band corresponds to a different element of the ASD Nest Program
- each program element is necessary in creating the ball
- AND, all elements must be present and working together synergistically for "bounce" to occur

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A PROGRAM WITH *BOUNCE*

- **Nest classroom:**
  - Small, collaboratively taught class with two teachers (no aides)
  - Nest programs start with two kindergarten classes that age up each year
  - Class ratios:
    - Kindergarten: 12 students, 4 with ASD
    - 1st-3rd: 16 students, 4 with ASD
    - 4th & 5th: *up to* 20 students, *up to* 5 with ASD
  - Academic curriculum identical to that used in the school's general ed classrooms

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A PROGRAM WITH *BOUNCE*

- **Nest classroom (cont.):**
  - Clear expectations of what classrooms should look like and the strategies to be used
  - Pull-outs & disruptions kept to a minimum
  - Home/school connection:
    - phase-in strategy with home and school visits
    - a home/school communication notebook
    - monthly parent meetings / workshops led by a social worker or guidance counselor
    - collaborative planning

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A PROGRAM WITH *BOUNCE*

- **Nest staff:**
  - Skilled, smart, teachers who are eager to learn
  - Highly skilled, collaborative therapists (speech pathologists, occupational therapists and social workers)
  - All teachers and therapists receive graduate level training on autism, behavior, Nest strategies and social development
  - Principals receive training and on-site support during the planning year and the first three years of the program

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A PROGRAM WITH *BOUNCE*

- **Nest staff (cont.):**
  - Weekly 90-minute team meetings are mandated for all staff; each student's progress is assessed and specific strategies are agreed upon
  - Therapists and teachers work as a collaborative, interdisciplinary team
  - All teachers and therapists receive a variety of professional development activities

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A PROGRAM WITH *BOUNCE*

- **Nest school:**
  - Host schools are typical neighborhood schools with flexible, collaborative principals, instructionally sound practices and a positive approach to behavior
  - Principals are experienced at running their school and are good instructional leaders
  - School has space to accommodate the need for one additional classroom per year

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A PROGRAM WITH *BOUNCE*

- **Nest district:**
  - Understanding and commitment from all levels of the school district, especially the top
  - Adequate, timely funding: *The ASD Nest Program costs the same or less than other public or private programs for children with autism*
  - Collaboration with university-based autism experts for training, professional development and on-site support for teachers and therapists
  - Student evaluation process identifies and places only appropriate children in the program

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THE ASD NEST CLASSROOM

Shirley Cohen, Professor Emeritus
Hunter College, City University of New York

THE TEACHERS

WHO ARE THEY ?
(And how did they get to be fabulous?)

- Selection
- Pre-service training
- Professional development

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SUMMER INSTITUTE COURSES

- Autism Spectrum Disorders: Characteristics, Assessment, Implications for Intervention, and Educational Strategies

- Behavioral Theory and Its Applications to Young Children with Special Needs (with a focus on Autism Spectrum Disorders)

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THE ENVIRONMENT

What does the room look like at the beginning of the school year in a kindergarten class
...and *why*?

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A WHOLE CLASS INSTRUCTION AREA

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A BREAK AREA

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A FIRST GRADE "OFFICE"

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OTHER STRATEGIES AND PRACTICES

- Classroom Guideposts

- Three-Tier Model of Supports for the ASD Nest

CLASSROOM GUIDEPOSTS

- Prevention strategies
- Instructional strategies and supports
- Social supports
- Teaching replacement behavior
- Positive reinforcement systems

PREVENTION STRATEGIES

Designed to keep interfering behavior from occurring or to minimize its disruptive effect upon the child with ASD and his classmates

Examples:
- Environmental modifications to address sensory issues
- Visual aids
- Priming
- Frequent opportunities for making choices

VISUAL AIDS

The ASD Nest program uses lots of visual aids
Why?

    Because many students with ASD are better at visual processing than auditory processing, and because visual aids can be very valuable in helping students who have organizational issues, which are common in students with ASD.

THE INCREDIBLE 5-POINT SCALE

MORNING SCHEDULE

INSTRUCTIONAL SUPPORTS

- Use co-teaching models that support differentiated instruction
- Probe to ensure that a student understands the steps required in a task before being expected to complete it independently
- Simplify tasks by shortening them or breaking them into parts
- Create checklists for student use in completing complex academic tasks

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SOCIAL SUPPORTS

- Experience sharing

- Social problem solving

- Use of Social Stories™

- Role play

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TEACHING REPLACEMENT BEHAVIOR

- Help cards

- The "break" program

I NEED A BREAK!

HELP!

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POSITIVE REINFORCEMENT SYSTEMS

- "Catch them being good"

- Class-wide "point" (or check mark, or sticker, or smiley face or ticket or cotton ball) system

- Individual (positive) behavior charts

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THE ASD NEST THREE-TIER SYSTEM

WHAT IS IT?

- A structure for use of the Classroom Guideposts with a focus on issues in four (overlapping) areas: sensory, academic, behavioral, and social

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TIER I

Strategies for use in all ASD Nest classrooms

Examples
- Behavioral: Tell students what *to do* rather than what *not to do*
- Social: Lead whole class/small groups in role-playing new/difficult situations
- Academic: Task analyze complex academic activities to clarify component steps and sequences

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MOVEMENT TO TIER II

- Requires completion of Tier I Checklist and team meeting to plan more effective use of Tier I strategies
- Is followed up in two to three weeks to evaluate progress
- Student is moved to Tier II if the team concludes that additional, individualized planned interventions are needed

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TIER II

Individualized, planned interventions

Examples
- Sensory/motor: Use individual sensory tools as recommended by OT, e.g., pencil grips, slant boards, weighted vests
- Behavioral: Use individualized behavior reinforcement system
- Academic: Provide one-to-one and small group previewing for new/challenging content
- Social: Create Social Story ™ books written for and with individual student

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MOVEMENT TO TIER III

- Requires Completion of Academic Screening Form if Tier III is needed for academic supports

- Requires implementation of a functional behavior assessment (FBA), including parent interview, if Tier III is need for behavioral supports

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TIER III

Examples
- Academic: Modify content, work expectations, and instructional pacing, and provide 1:1 support during lessons and activities/tasks

- Behavioral: Provide frequently scheduled teacher-supported break times throughout the day, and implement a more intensive reinforcement system with frequent teacher monitoring
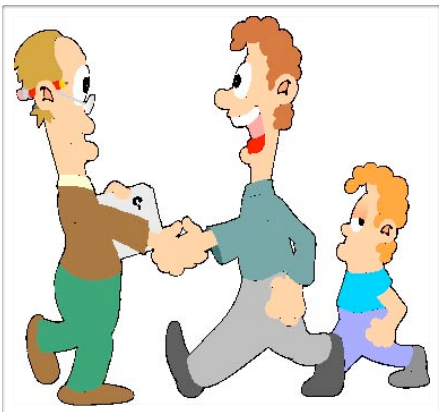
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ENSURING FIDELITY OF IMPLEMENTATION

The Tier I Classroom Checklist of Strategies and Supports

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RELATING TO FAMILIES

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AND DON'T FORGET ABOUT HAVING FUN

SOCIAL DEVELOPMENT INTERVENTION

Susan Brennan, CCC SLP
Primary Developer of SDI

SOCIAL DEVELOPMENT INTERVENTION

SDI is a social therapeutic intervention implemented in tandem with academics. It is based on the developmental language model, relationship-development and social cognitive theories, and is used to cultivate the social and pragmatic language skills of children with ASDs.

BUT HOW WILL THE SOCIAL GENERALIZE?

Well, let's make Speech and Language Therapy a integral part of the Nest!

Yeah, Nest kids will have a Pragmatic-based 'lab-time' 3 to 5 times a week!

Ohhh.. and the teachers will collaborate with the SLP and the students during this 'lab-time!

That's it! The language, concepts, and strategies will then be integrated into the classroom!

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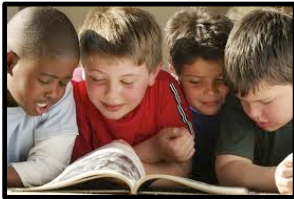
SCHOOL IS SOCIAL!!!!
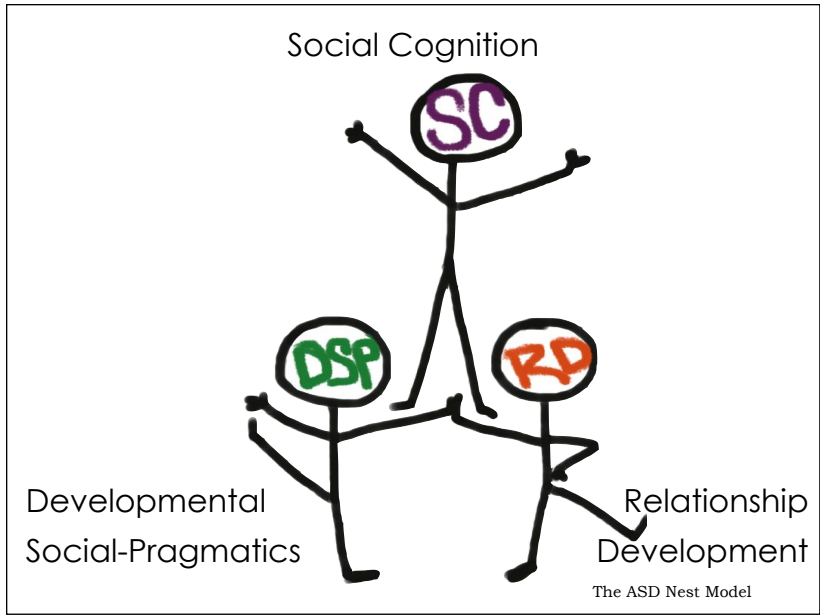
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COGNITIVE THEORIES
Central Coherence
Theory of Mind
Executive Functioning

SELF-DETERMINATION THEORY

DEVELOPMENTAL SOCIAL PRAGMATICS

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Social Cognition

SC

DSP

RP

Developmental
Social-Pragmatics

Relationship
Development

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SDI Team Planning Map

Unit __: _____

~ unit blurb ~

Group Goals

Social Relational & Social Cognition	Pragmatic Language	Problem Solving

Concepts to
explore / highlight / investigate...

Interests to incorporate:

SDI Focus Time: Vocabulary, Activities & Explorations

Lessons & Group Work

Academic Content / Curriculum

Instructional Lunch & Recess

SDI Throughout the Day: Weaving & Plopping

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GOAL #1
SOCIAL RELATIONAL DEVELOPMENT & SOCIAL COGNITION

An intervention that encourages engagement, shared imagination, and dynamic interactions. It focuses on social communication and connected thinking to support classroom learning.

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GOAL #2
PRAGMATIC LANGUAGE & CONVERSATION

Building attention to and the expression of an authentic use of language in a social context by exchanging thoughts, opinions and feelings (verbally & non-verbally)

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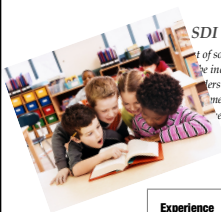
GOAL #3
PROBLEM SOLVING

The ability to appraise a situation, consider relevant experiences, new information that is given, the information that is not known, and then put it all together to make a guess about the best solution

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SDI GUIDEPOSTS
ELEMENTARY SCHOOL MODEL

SDI Guideposts for Social Development Across the School Day

...t of social development focus areas for the students in the ASD Nest Program. Strategies outlined her... ...e incorporated in the classroom, the therapy rooms, into instructional lunch and when possible into cluster... ...derstanding and addressing these social deficits, we are supporting our students' full participation i... ...ment. These strategies serve to reduce interfering behaviors, giving each child greater access to... ...en targeting social deficits, we also are consistent in providing positive behavioral supports...

Hm, her eyes and face are telling me she isn't interested in meal worms

Sections					
		The Basics Page 1			
Experience Sharing Page 2	Language & Dynamic Communication Page 2	Problem Solving Page 3	Social Cognition Page 3	Flexibility Page 4	Incorporating Strengths & Interests Page 4

Hello my name is **director**

Hello my name is **set designer**

Hello my name is **videographer**

Assigning roles for group activities supports problem solving

I'm thinking about the group so I'm going to sit on the rug.

11:30 Lunch/Recess

12:15 Surprise!

Incorporating flexibility into the classroom schedule

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SDI SESSIONS:
BALANCING EXPERIENCE SHARING & SOCIAL COGNITION

Kindergarten to 2nd grade	3rd to 5th grade
Putting the social world on the radar	*Thinking through social world*
• Explore & Engage!	• Explore & Engage!
• Model	• Roleplay
• Highlight	• Social Relevance
• Social Language	• Put the Social in Context
• Expose to Social Concepts	• Investigate Social Concepts

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Tailoring an intervention for a public ICT ASD program....

Greenspan DIR

Gutstein RDI

Bloom & Lahey *Bloom & Tinker* Development Social-Pragmatic Model

Winner Social Thinking

Grey Social Stories Social Comic Strips

Myles, Trautman, Schelvan The Hidden Curriculum

Vermeulen Context Blindness

Self Advocates .....

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Jessie Saperstein

Zosia Zaks

Ari Ne'eman

Steven Shore

Nest Students

John Scott Holman
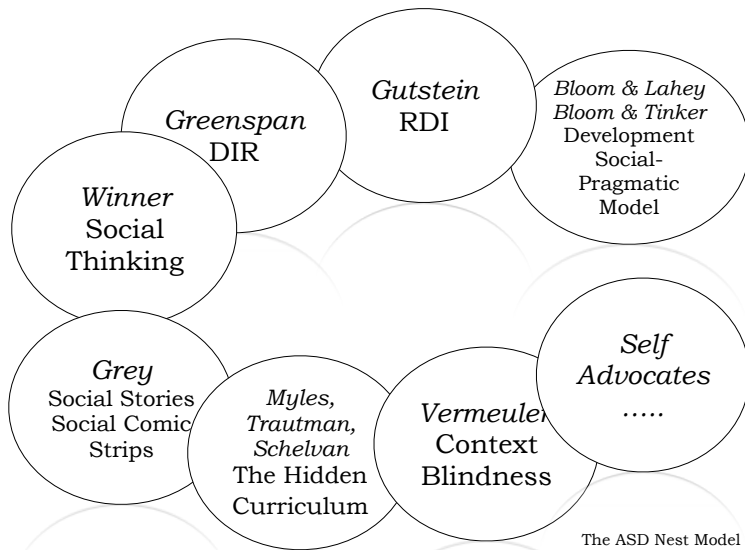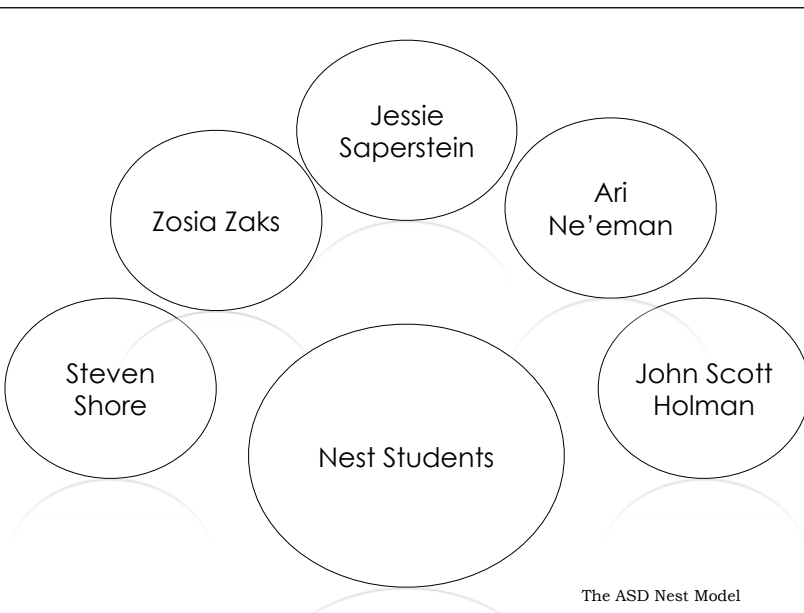
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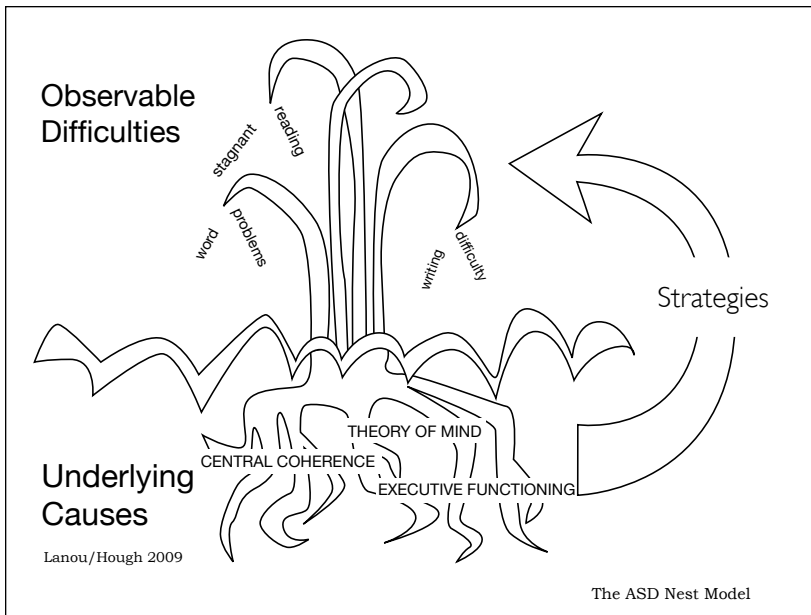# WEAVING AND LAYERING SOCIAL CONCEPTS INTO THE SCHOOL DAY

UNDERSTANDING ACADEMICS

Aaron Lanou
Director of Professional Development

OVERVIEW

- Academic Strengths

- Theoretical Frameworks for Academic Challenges

- Academic Difficulties

- Strategies

Observable Difficulties

Underlying Causes

reading

stagnant

problems

work

writing

difficulty

Strategies

THEORY OF MIND

CENTRAL COHERENCE

EXECUTIVE FUNCTIONING

Lanou/Hough 2009

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ACADEMIC STRENGTHS

• **READING**	• **WRITING**	• **MATH**
• Word reading (*hyperlexia*)	• Creativity	• Computation
• Nonfiction	• Grammar & syntax	• Recall of basic facts
• Recalling details	• Writing on topics of interest	• Following algorithmic procedures

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THEORETICAL FRAMEWORKS

• Theory of Mind

• Central Coherence Theory

• Executive Functioning

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THEORY OF MIND

- The ability to recognize and interpret other people's thoughts, feelings, beliefs and intentions, live and in the moment, and to understand the implications for one's behavior

> *She has… to "compute" other's intentions and states of mind, to try to make algorithmic, explicit what for the rest of us is second nature.*
>
> O. Sacks, 1995 p. 270

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CENTRAL COHERENCE THEORY

- Difficulty conceptualizing the "big picture" or "gist"

- Hyper-focus on details at the expense of the larger context

> *Can't see the forest for the trees?! I can't see the forest for the veins on the leaves.*

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EXECUTIVE FUNCTIONING

- Organizing and coordinating multiple cognitive tasks, such as:
  - recalling & applying information from memories
  - attention & self-monitoring
  - flexibility in problem solving
  - time management & prioritizing
  - abstract thinking
- Company CEO

> *Without appropriate support, the child with Asperger's Syndrome may feel he is drowning in a million different sub-tasks.*
>
> S. Shore in Attwood, 2007

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READING CHALLENGES

1. Tracking a story / synthesizing text

2. Thinking about characters

3. Understanding figurative & higher-order language

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THINKING ABOUT CHARACTERS

- Understanding character thoughts & feelings

- Considering character motivation & intention

- Inferring internal character traits

- Making self-to-text connections

- Drawing inferences independently

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Pickle Puss by Patricia Reilly Giff, pp. 4-7

Nonsense word

Non-literal language

Perspective taking

Deception

Perspective-taking & lying

Irrelevant detail

Inference

"Emily looked down at the book. It had about a skillion pages. It would take forever to read. "Well…" she said. "Go ahead. Try it," said Freddie. "I guess so," Emily said. She went to Mrs. Baker's desk. Too bad she didn't have a skinnier book. She looked back. Freddie was talking to his friend Edward. Emily stuck the fat book on the book cart. She grabbed another one. It was much skinnier. She gave it to Mrs Baker. Mrs. Baker checked it out. "You like snakes?" she asked. "Yucks," said Emily. Then she looked at the book. There was a snake on the cover. It was the kind with the fat neck. Its tooth was sticking out. "I mean, I love them," Emily said."

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WRITING CHALLENGES

1. Concept of writing

2. Organizing and prioritizing

3. Considering characters and audience

ORGANIZING & PRIORITIZING

• Planning and organizing structure

• Understanding details and the main idea

• Managing time and self-monitoring

• Completing long-term projects

MATH CHALLENGES

1. Abstract concepts

2. Abstract skills

3. Word problems

4. Explaining thinking

EXPLAINING THINKING

- Checking work for accuracy

- Trying alternate strategies

- Explaining reasoning with words

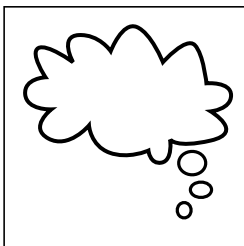The ASD Nest Model

ACADEMIC STRATEGIES

Instructional principles:

- Visuals

- Graphic organizers

- Social-cognitive strategies
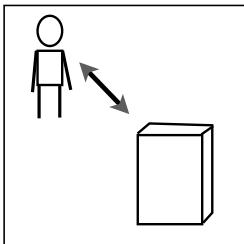
- Incorporating student interests

Benefits:

- Use visual strength

- Organize information

- Concretize abstract concepts

- Increase motivation

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Think about your character

Think about how your life relates to the text

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What the text says + **Your thinking** = **INFERENCE**

graphic representation of
"making an inference"

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problem!
action!

uh-oh!
problem
starting!

problem
getting fixed

introduce
characters
and topic

problem
fixed

revised story mountain

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			November 2012			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 **Gathering**	3	4	5	6	7
8	9	10 *topic due **Drafting**	11	12	13	14
15	16 *draft due **Revising**	17	18	19	20 *revisions due **Editing**	21
22	23	24 *editing due **Publish**	25	26	27	28
29	30	31 **WRITING DUE**				

color-coded calendar

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Explaining your work in words

I knew _____ ,
the numbers the problem says

and I needed to know _____ ,
what you're looking for

so I _____ **and**
what operation or strategy you used

found _____ .
your answer

Lanou 2010

explaining your thinking work
on the state math test

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COMIC STRIP CONVERSATIONS

Carol Gray

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THE ASD NEST MODEL

For a closer <u>overall</u> picture of the ASD Nest program model you may want to see our upcoming book,

The ASD Nest Model, and manual,

Everyday Classroom Strategies and Practices for Supporting Children with Autism Spectrum Disorders,

that AAPC will publish in April 2013

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