Objective:

Identify effective methods for the practical application of concepts related to improving the delivery of services for persons with developmental disabilities

Notes:
“Leveraging Technology to Meet the Growing Demand for Autism Services”

Jamie Pagliaro
Co-Creator & EVP of Rethink Autism, Inc.
Autism Prevalence On The Rise*
There has been a 600% increase in prevalence over the last two decades.

AUTISM SPEAKS™
it's time to listen.
www.AutismSpeaks.org

*Recent research has indicated that changes in diagnostic practices may account for at least 25% of the increase in prevalence over time, however much of the increase is still unaccounted for and may be influenced by environmental factors.
What the research is telling us...

- United States Dept. of Ed
- Convened experts
- Determined best practices in education

*For more information see *Educating Children with Autism* (2001)
What the research is telling us...

Findings & Recommendations:
- Begin early
- Individualize
- 25 hours of instruction
- Repeated opportunities to learn
- Low student /teacher ratios
- On-going measurement
- Family involvement
What the research is telling us...

Curriculum Areas:

- Functional communication
- Social instruction
- Play and leisure
- Cognitive and academic skills
- Challenging behavior
- Generalization and maintenance
What the research is telling us...

• Expert panel
• Comprehensive analysis of autism treatments
• *National Standards Report* findings:
  1. *Established* treatments
  2. *Emerging* treatments
  3. *Unestablished* treatments

*For more information go to [www.nationalautismcenter.org](http://www.nationalautismcenter.org)
What the research is telling us...

Established treatments – beneficial outcomes

- 11 treatments identified
- Majority developed in the behavioral literature (e.g., Applied Behavior Analysis)
- Examples:
  - Comprehensive behavioral treatment
  - Joint attention intervention
  - Antecedent interventions
Schools & Service Providers faced with...

1. Increased demand for autism services*
   - Autism = 1 in 110
   - ~70% increase from prior estimate in 2002

2. Limited number of trained professionals
   - Less than 5,000 certified behavior analysts (BCBA’s) w/ autism-specific experience

3. Shrinking budgets
   - Reductions in staff and expert consultants
   - Fewer academic & professional development days

*From the Centers for Disease Control, 2009 Report on ASD
Out-of-district placements:
- Perceived as *only* solution
- $30,000-$120,000 annually
- Once leave, rarely come back

Costly “extra” services:
- Student w/ autism = $3x
- Layered into IEP
- No plan to fade
- Required to benefit?
The “hidden” costs of staff turnover: recruiting, training, and increased supervision
What is your greatest challenge in serving students w/ autism?

A. Finding staff with autism expertise
B. Training and supporting staff
C. Accessing autism-specific tools
D. Tracking data and outcomes
E. Working with parents
Web-based Technology can help...

- Standardize the delivery of research-based educational services for all students with autism
- Provide training and support across multiple staff, families and geographic locations
- Cost-effectively manage the increased demand for autism services, through use of existing resources
Impediments to Use of Technology...

- Experiencing technical difficulties!
- Competing demands: classroom vs. online
- Requires time and changes in workflow
- Fear and preference for face-to-face
Web-based Technology for...

Training

Collaboration

Supervision
Web-based Technology for...

**Training**

When new staff are oriented to their job responsibilities (i.e., pre-service training), and when experienced staff are provided with information on how to improve or broaden their job skills (i.e., in-service training).

**Challenges:** cost, availability of trainers, limited PD days, coordination issues and staff turnover.
Rethink Autism

Moodle

Video lesson on getting objects from a distance:

Step 1 Red Car

Teaching Materials

Overview

Step 1

Step 2

Step 3

Step 4

Teach the student to go increasing distances to get objects.

Choose your Next Lesson:

Getting Objects from a Distance

Podcast icon

Print Lesson Plan

Watch Lesson

Recent Results

Lesson Update

Print Data Sheet

Print Data Sheet

Print Lesson Plan

Close Video
Web-based Technology for...

Collaboration

When people work jointly towards a common goal, such as problem identification, development of interventions, and monitoring of outcomes. In special education, collaborative efforts are mandated by law and by practice.

Challenges: distance, lack of time, overwhelming job duties, lack of shared planning periods.
Web-based Technology for...

Supervision

*Ongoing process that takes place when feedback is provided to maintain or improve job performance* - typically delivered by a more experienced staff member, and may also be referred to as coaching, consultation or mentoring.

**Challenges:** scheduling time for observations and feedback sessions, limited availability of “experts” on-site.
Key Considerations...

❖ Establish realistic implementation plans, staff expectations, and timelines.

❖ Determine infrastructure needs, and consider goodness-of-fit with products.

❖ Requires ongoing involvement from district leadership to monitor and support: identify a point person!

❖ Ensure opportunities to share data and discuss progress with respect to goals.
Who We Are...

Mission

To make research-based educational treatment tools accessible, affordable and easy-to-use for parents and professionals.
Scientific Advisory Board

Bridget Taylor, Psy.D., BCBA-D, **Chair**
- Rethink Autism - Senior Clinical Advisor

Peter Gerhardt, Ed.D.
- Organization for Autism Research

Patricia Wright, Ph.D.
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Louis Vismara, M.D.
- Co-Founder, M.I.N.D. Institute, UC-Davis

Maurice Feldman, Ph.D., BCBA-D
- Professor, Brock University

Nicolette Bainbridge Brigham, Ph.D.
- Director at TRIAD, Vanderbilt University
Web-based Educational Treatment Platform

• *Parents/Individuals*
  ✓ Nationwide
  ✓ Worldwide – 26 countries

• *Professionals*
  ✓ 100’s of school districts nationwide
  ✓ Department of Defense – military base schools worldwide
  ✓ Health Net - behavioral health subsidiary (MHN)
  ✓ Medicaid coverage through waiver program in two states
Web-based Educational Treatment Platform

- **Key Components**
  - Comprehensive curriculum
  - Individualized assessment tool
  - Behavior intervention planning
  - Staff & parent training modules
  - Data tracking & progress reporting
  - Ongoing professional support
Comprehensive Video-Based Autism Curriculum

- 1200+ video-based ABA* exercises
- Research-based WITHOUT the jargon
- Featuring children with autism

Provides the **TOOLS** to teach!

*Applied Behavior Analysis*
Comprehensive Video-Based Autism Curriculum

- Point of diagnosis through adolescence
- Covers the full spectrum
- Benefits children with other disabilities

Based on INDIVIDUALIZED needs!
Comprehensive Video-Based Autism Curriculum

★ WINNER of the 2011 Education Innovation Summit
   Best in Class Curriculum Award

★ WINNER of the 2011 CODiE Award
   Best Instructional Solution for Special Needs Students

★ WINNER of the 2011 Interactive Media Award
   Best in Class Education
   Best in Class Healthcare
Comprehensive Video-Based Autism Curriculum

The FIRST & ONLY Autism Curriculum aligned with the Common Core State Standards

(www.corestandards.org)
Here’s how it works...

1. **Assess:** Brief Skills Checklist
2. **Plan:** Recommended Lessons
3. **Modify:** Manage Curriculum
4. **Intervene:** Behavior Tracking
5. **Data:** Progress Tracking & Reporting
6. **Train:** Principles of ABA + eLearning Option
Independent Field Research

- Study conducted at the University of Utah in a public school program (Western U.S.)

- Examined the effectiveness of lesson video models on
  1. paraeducator performance (i.e., program fidelity)
  2. student skill acquisition

  - Comparison of pre- and post-test results indicated **significant improvements** across both groups

  - Model was efficient, in that it required **minimal supervision** and the **results generalized**
Staff Performance Generalization

Sample in Public School – Western U.S.

(Cardinal & Jenson, 2011)
Student Skill Acquisition

Sample in Public School – Western U.S.

(Cardinal & Jenson, 2011)
Paraeducator Staff Feedback  
*Sample in Public School – Western U.S.*

“I noticed something different every time I watched it. It **helped me change my teaching**.”

“Once I was trained through video, **I saw a noticeable change**. I liked the positive reinforcement, and responses that would help teach.”

“It was very helpful to me to have the video modeling training. I was able to **focus on what the best approach was** in helping these kids.”

“If everyone could have some of the video modeling training it would **greatly benefit our students**.”

“I like that it’s visual. I’m a visual learner.”

(Cardinal & Jenson, 2011)
For More Information:

www.rethinkautism.com

Contact:

Jamie Pagliaro
jamie@rethinkautism.com
917-460-7117