Rethink Autism:

“Web-based Educational Treatment Solutions for Autism Assessment, Training, Curriculum & Data Tracking”


US Office of Education 84.325K
H325K12306

Drs. W.R. Jenson, E.L. Clark, & J. Hood

Presented by Joseph Viskochil
University of Utah
April 24, 2013
Presentation Overview

- What is Rethink Autism?
- Implementation
- Evaluation
- Tutorial
- Rethink at the University of Utah
Disclaimer

All content herein depicting or describing Rethink Autism®, the Rethink Autism website, or the Rethink Autism program, either in full or as a component of Rethink Autism, is copyright protected. The purpose of the current use of this content is educational in nature and not intended for any treatment or diagnostic purposes. With the exception of direct quotes, the content of this presentation has been constructed in the opinions of the author, Joseph Viskochil, and has been neither reviewed nor endorsed by Rethink Autism. Any persons using the content of this presentation beyond educational pursuits may be subject to legal action.
Web-based Educational Treatment Solutions for Autism Assessment, Training, Curriculum & Data Tracking

The first and only autism curriculum aligned with the Common Core State Standards

Subscribe Now!
Rethink Autism: Mission

“Offering parents and professionals immediate access to effective and affordable Applied Behavior Analysis-based treatment tools for the growing population affected by autism spectrum disorder.”
Rethink Autism: Goals

“To improve access to effective, affordable treatment by providing parents and teachers with a state-of-the-art, easy-to-follow, web-based curriculum and proven teaching tools.”
Rethink Autism: Beliefs

- Everyone should have access to effective intervention.
- Every parent and teacher can make a difference.
- Every child can learn.
- Interventions based on applied behavior analysis are the most effective.
The Challenges

If your child is three or older, educational and related services will be provided by your local school district. They will evaluate your child and work with you to plan his or her educational plan. Each child with ASD has unique academic strengths and needs. This means a “good education” can be hard to define, and will vary depending on the child and the school district. Many school districts will have the experience, commitment, staff and resources to meet your child’s individual needs. But, some districts lack the funding and/or services required to appropriately educate children with ASD.

Also there is no “gold standard” for autism education. Services and programs can differ from district to district, and may change when new trends come or special education directors go. Children may be handed a mixed bag, instead of the curriculum that’s right for them.

But take heart. You don’t have to accept what’s not in the best interest of your child. Many parents before you have been successful in getting their kids exactly what they needed. Read on to find out how.

What You Can Do

You know your child better than anyone else and have his or her best interests at heart. It’s up to you to take an active role in planning your child’s education.

Flex Your Parental Rights

You have power as a parent to influence the educational decisions being made for your child. The Individuals with Disabilities Education Act (IDEA) guarantees that the state will provide your child with a free and appropriate education that meets his or her unique needs. It also gives parents an equal say in determining the curriculum and services that are right...
Rethink Features: About Us

Why rethink autism?

Who we are

How it works

Pricing

Testimonials

Our program

Advisory board

In the media

Our mission
how it works

Rethink Autism is an effective, affordable, and easy-to-use Applied Behavior Analysis (ABA)-based online service that puts you in control of your child’s treatment now.

science-based

Supported by over 50 years of research, interventions based on Applied Behavior Analysis have the MOST scientific evidence supporting their effectiveness.

ABA is so effective that it has been recommended by
- the American Academy of Pediatrics,
- the New York State Department of Health, and
- the United States Surgeon General.

assess

customize

Fill out a brief skills checklist, and rethink Autism creates an individualized ABA-based learning plan for your child.

adapt

As your child learns new skills, our platform automatically adds new lessons to his or her customized curriculum.
Rethink Features: Community

- Mailing lists
- News
- Q & A
- Webinars
- Seminars
- Tip of the week
- In the media
Community

Whether you are looking to find information or share experiences, our community is here for you. Ask and answer questions, join or start a group, and communicate with others who share similar challenges. (disclaimer)

Questions & Answers

Not sure what to do? Interested in learning how other people dealt in similar situations? Submit your questions, browse through answers and contribute from your experience to our whole community.

Latest Question
Oppositional behavior.

Answer this Question >
Read all Questions >

Tip of the Week

Practical daily living advice and teaching strategies from the clinicians at rethink autism.

View Tips >

Free Webinars

Learn from leaders in the field of autism education and research.

View Webinars >

Autism News

Autism Tip: Teach Your Child How to Play!
Play is an important way for children to learn many cognitive, motor, language and social skills. Children with...

Read More >
### Who is Rethink?

#### Leadership
- **Daniel Etra**
  - Chief executive officer
- **Eran Rosenthal**
  - President
  - Chief operations officer
- **Jamie Pagliero**
  - Vice President
  - Chief learning officer
- **Bridget Taylor**
  - Senior Clinical Advisor

#### Scientific Advisory Panel
- **Bridget Taylor, Psy.D., BCBA**
- **Fred Volkmer, MD**
- **Peter Gerhardt, Ed.D.**
- **Catherine Lord, Ph.D.**
- **Louis Vismara, MD**
- **Patricia Wright, Ph.D., MPH**
- **Maurice Feldman, Ph.D., BCBA-D**
- **Nicolette Brigham, Ph.D.**
- **William Jenson, Ph.D.**
Rethink Model: Components

- Core foundation of ABA principles and Discrete Trail Training
  - Combination of academic and adaptive skills
  - Concurrent system for FBA of maladaptive and problem behavior
  - Hope for generalization to more complex behaviors

- Video Modeling and Supervision for Parent and Staff Training

- Progress Monitoring and Data Tracking to Inform Decisions

- IEP Builder
  - Incorporates Rethink goals and lessons into IEP
Two Programs of Rethink

Parents and Caregivers
- Home based
- Brief skills assessment
- Select individual lessons
- Learn ABA principles
- Graph child’s data
- Build IEP goals

Professionals, and Organizations
- Online assessment
- Generate individual plans
- Train staff in ABA
- Ongoing data tracking
- Multi-site collaboration
- District analytics
## Pricing

### Benefits of Membership

- Effective, Affordable, Easy to use autism treatment platform
- Individualized ABA-based curriculum for your child
- Hundreds of step-by-step video lessons
- Training videos show you how to teach using ABA
- Automated curriculum management
- Progress tracking and data management
- Online professional support

### Subscription Costs

<table>
<thead>
<tr>
<th>1 child</th>
<th>1 month</th>
<th>3 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 child</td>
<td>$89</td>
<td>$79</td>
<td>$59</td>
</tr>
<tr>
<td>2 children</td>
<td>$160</td>
<td>$142</td>
<td>$106</td>
</tr>
<tr>
<td>3 children</td>
<td>$225</td>
<td>$201</td>
<td>$150</td>
</tr>
</tbody>
</table>

* Add $25/month if you want Professional Curriculum Support

[Subscribe Now]
Supervision Services

- **BCBA Supervision**
  - For those pursuing BCBA degrees
  - Staff training center

- **Schools and Organization Supervision**
  - Team to team support
  - Functional behavior assessment and behavioral intervention plan
  - Educational development and consultation

- **Parents and Caregiver Supervision**
  - Problem behavior assessment and treatment
  - Family support
Rethink: Benefits

- Digital format is more effective
  - More people in more diverse geographic locations
  - Quicker dissemination from research-base to classroom

- Parents are directly involved
  - Not limited by services available in the school or privately funded
  - Parents are best experts on their child, know what behaviors are culturally and personally relevant and can match to common core

- Cost effective compared to service estimates in Utah
  - 2 day ABA parent training: $1200.00
  - Biweekly consultation: $480.00 per month
  - Rethink Autism: < $100.00 per month (per one child)
Rethink: Implementation

- Brief skills assessment
- Selection of comprehensive and individualized curriculum
- 1200 dynamic teaching videos
- Video modeling used to teach ABA skills
- Computer based instruction
- Data tracking and illustrated progress monitoring
- Adaptive decision making points
- Web-based functional behavior assessment and behavioral intervention plan
Rethink’s Curriculum

- Pre-Academic
- Academic
- Expressive Language
- Receptive Language
- Daily Living Skills
- Motor Skills
- Play and Leisure
- Social/Emotional

*Developed and reflective of the 2001 National Research Council Standards*
## Pre-Academic
**Attending**
- **Basic:** Making eye contact.

**Imitation**
- **Basic:** Imitating sounds.

**Matching**
- **Basic:** Matching colors.

## Academic
**Math**
- **Basic:** Counting objects from a set.

**Reading/Writing**
- **Basic:** Sequencing letters.

**School Readiness**
- **Basic:** Singing with a group.

## Expressive Language
**Labeling & Summarizing**
- **Basic:**

**Speech & Grammar**
- **Basic:** Singular & plural.

**Verbal Interaction**
- **Basic:** Making requests.

## Receptive Language
**Identification**
- **Basic:** Identifying familiar people in pictures.
- **Intermediate:** Identifying same & different.
- **Advanced:** Identifying what's wrong.

**Instruction Following**
- **Basic:** Demonstrating verbs.
- **Intermediate:** Locating objects in a room.
- **Advanced:** Following multi-step instructions.

**Grammar**
- **Basic:** Identifying singular & plural.
- **Intermediate:** Following instructions with negatives.
- **Advanced:** Identifying verb tense in pictures.
### Daily Living Skills

<table>
<thead>
<tr>
<th>Household</th>
<th>Pre-Vocational</th>
<th>Self-Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic:</td>
<td>Basic:</td>
<td>Basic:</td>
</tr>
<tr>
<td>Cleaning up toys.</td>
<td>Preparing a snack.</td>
<td>Toleting.</td>
</tr>
</tbody>
</table>

### Motor Skills

<table>
<thead>
<tr>
<th>Fine</th>
<th>Oral</th>
<th>Gross</th>
</tr>
</thead>
</table>

### Play/Leisure

<table>
<thead>
<tr>
<th>Independent</th>
<th>Group</th>
<th>Pretend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic:</td>
<td>Basic:</td>
<td>Basic:</td>
</tr>
</tbody>
</table>

### Social/Emotional

<table>
<thead>
<tr>
<th>Interacting with Others</th>
<th>Toleration &amp; Cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic:</td>
<td>Basic:</td>
</tr>
<tr>
<td>Initiating joint attention.</td>
<td>Cooperating when waiting.</td>
</tr>
<tr>
<td>Intermediate:</td>
<td>Intermediate:</td>
</tr>
<tr>
<td>Reciprocating comments with a peer.</td>
<td>Tolerating non-preferred items.</td>
</tr>
<tr>
<td>Advanced:</td>
<td>Advanced:</td>
</tr>
<tr>
<td>Making inferences in dialogue.</td>
<td>Preparing for a haircut.</td>
</tr>
</tbody>
</table>
Rethink Lessons Structure

1) Objective
2) Supplies
3) Teaching Steps
4) Next Steps
5) Generalization
6) Exercise
7) Error correction
8) Prompting
9) Troubleshoot
10) Helpful hints
11) Sample Skills
12) Review
Data and progress monitoring

- Mastery criteria: 5 trials, 90% accuracy over two sessions for successful skill acquisition

- Conducted based on 5 trial blocks
  - Student passes all 5 initial trials → 100% and end session
  - Another session must be passed at least 3 hours later
  - Student fails 1 trial → provide additional 5 trials (total=10)
    - Student passes 9 of 10 → 90% and end session
  - Student fails 2 or more trials → return to teaching sessions

- Data is uploaded to Rethink website, returns progress monitoring illustrated graph
Barriers to Implementation

- ABA is overwhelming
  - Need pre-service and in-service training
- Miscommunications between family and service provider
- Understanding the data collection process
- Undocumented modification and adaptation of Rethink
- Accessing and using full materials
- Not aligned with parents’ goals or mastery criteria
- Attrition and motivation
Evaluation of Rethink

- Large research base for components of Rethink Autism
  - ABA, Incidental teaching, Parent training, video modeling

- Anecdotal evidence
  - Winner of CODiE award 2011 and 2012: Best Instructional Solution for a Special Needs Population
  - Better Business Bureau accredited
  - Testimonials

- No peer reviewed empirical evaluation of Rethink
Testimonials

“This website is a pretty amazing tool for helping families get access to some ABA therapies without all of the usual cost and it keeps families informed and involved.”

“The website really helps devise an individual plan for each child. As you pick goals through the website there is an ability to track data, follow progress, make schedules, and communicate with other members of a child's team.”
“Last week I realized there was something you really helped us with that we have seen positive progress on. Once we started simplifying the command he started coming out of the car much better within a few days and after about a week I didn't need my daughter to get him out of the car. He even got out of the car at the doctor's office (he hates that place). So thank you for that!”
Dissertation: Jennifer Cardinal

Rethink Autism: Effectiveness of web-based applied behavior video modeling program on the performance of para-educators and students with autism spectrum disorder (2011).

- **Purpose:** Examine effectiveness of Rethink autism with para-educators and children with ASD
  - Effectiveness of video modeling on para-educators ABA teaching
  - Student response and skill acquisition of rethink curriculum
  - Student generalization of skill to non-rethink curriculum

- **Method:** Multiple-baseline with generalization probes
  - Midsize charter school in urban area; 4 para-educators; 4 students
  - Baseline: Rethink lessons with existing skill set/materials; pretest
  - Intervention: Staggered Rethink teaching lessons (12 step)
  - Posttest: Single session of novel Rethink lesson
Results: Progress Monitoring
Results: Generalization
Dissertation: Jennifer Cardinal

- Results
  - Effective in increasing trainer use of ABA skills
  - Students showed increase in skill, but not consistently
  - Generalization of trainer ABA skills to novel session

- Discussion
  - Support the use of Rethink Autism training program
  - Found to have high acceptability, integrity, effectiveness

- Limitations
  - Wide range in quality of videos, lessons, and ABA skills
  - No maintenance data
  - Lack of collaboration between parents and researchers
Rethink at the University of Utah

- Committed to providing Rethink Autism to families on waiting lists for services or who live in areas with limited service access

- Graduate students trained in ABA and the Rethink Autism model will provide direct training and consultation to parents

- Funding through USOE 84.325K, H325K12306; with written letter of support from New York Office of Rethink Autism

- Aim to provide services to families and training for graduate students in consultation of ABA and Rethink Autism model
## Rethink.U: Preliminary Model Overview

<table>
<thead>
<tr>
<th>Period</th>
<th>Activity</th>
<th>Direct Meeting</th>
<th>Consultation</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 1</td>
<td>Recruitment, Buy-in</td>
<td>-</td>
<td>-</td>
<td>Demographics Process variables</td>
</tr>
<tr>
<td>Month 2</td>
<td>Pre-service training</td>
<td>Full group Rethink</td>
<td>-</td>
<td>Pretests Records review</td>
</tr>
<tr>
<td>Month 3</td>
<td>Rethink lessons</td>
<td>Bi-monthly</td>
<td>Weekly</td>
<td>Progress monitoring Process variables</td>
</tr>
<tr>
<td>Month 4</td>
<td>Rethink &amp; In-service</td>
<td>Full group Bi-monthly</td>
<td>Weekly</td>
<td>Progress monitoring Problem encounter</td>
</tr>
<tr>
<td>Month 5</td>
<td>Rethink lessons</td>
<td>Bi-monthly</td>
<td>Weekly</td>
<td>Progress monitoring Process variables</td>
</tr>
<tr>
<td>Month 6</td>
<td>Out-service evaluations</td>
<td>Full group Observe child</td>
<td>-</td>
<td>Outcomes Acceptability</td>
</tr>
</tbody>
</table>
Rethink.U: Recruitment

- May be difficult to reach intended population with general advertising strategies
  - Low probability of timely return for media, flyers, snowball sampling

- Targeted recruitment (e.g. invitation word of mouth) includes selection bias

- School District Survey
  - Waiting lists, Special Ed. Classifications

- Utah Association of School Psychologists Listserv

- Research Project Database
Rethink.U: Buy-in

- Critically important component of this model
  - A lot of work on part of families
  - We will fail without their buy in

- Families must be willing to:
  - Learn rethink model and website navigation
  - Get on Skype on a regular basis
  - Ask us candid and potentially difficult questions, and
  - Work hard: ABA is exhausting

- We must be willing to:
  - Be accessible, approachable, and optimistic
  - Work as hard as the parents or harder, especially initially
Rethink.U: Data Collection

- Process data: collected throughout
  - Recruitment processes
  - Consultation experiences and meeting notes

- Pre-service data
  - Knowledge and Skill of ABA
  - Child variables

- Progress monitoring data
  - Progression through lessons to mastery

- In-service data
  - Areas of difficulty

- Out-service data
  - Outcomes; fidelity and integrity; acceptability
Rethink.U: Pre-service

- Full group, day-long session conducted at University of Utah

- Each graduate students will be training parents in either ABA (morning) or training parents in rethink model and set up (afternoon)
  - During non-training session, graduate students will observe each child in structured and unstructured situations

- Parents may also bring records and complete rating forms (to be determined)

- Once graduate/families pairs are made, graduate will conduct “intake” interview, score assessments, and review records
Rethink.U: Middle Sessions

- Direct meeting with families every 2 weeks
- Skype consultations every week
- Consultations will address how the program is going, what problems they are having, and if their child is progressing through the curriculum
- Continuous monitoring of Calendar Schedule on Rethink
- Data collection ongoing through Rethink, as well as process related data and anecdotal data taken from consultations
Rethink.U: In-Service

- At month 4.5, full group will reconvene for booster session and to discuss skill development
- Provides an opportunity for parents to share with other parents
- Provides an opportunity for graduate consultants to observe what has worked with other families
- Mid-project evaluations of acceptability, implementation integrity, barriers to effective implementation
Rethink.U: Out-service

- Full group together to evaluate overall effects of rethink model
- Final observations of child behaviors and skills
- Outcome data collected
  - Skill development
  - Skill generalization
  - Rethink effectiveness, acceptability, ease
- Describe adaptations made to curriculum
- Proposals for improvements to the preliminary model
Rethink.U: Evaluation

- Parent Evaluation
  - ABA skill development, generalization
  - Acceptability, integrity, suggestions

- Child Evaluation
  - Skill development
  - Responsiveness to Rethink model

- Graduate Student Evaluation
  - Consultation and training effectiveness
  - Barriers to implementation

- Faculty Evaluation
  - Service delivery and adherence to evidence based practice
  - Over cost effectiveness of Rethink model
Rethink.U: Barriers

- Connecting with families (recruitment and buy-in)
- IRB Approval for recruitment (if needed)
- Accessing the Rethink Autism course materials (cost)
- Miscommunication among and between grad students & parents
- Poor training of ABA or Rethink model
- Parent motivation or involvement
References


- www.rethinkautism.com