


Autism and the Skilled Trades

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Who & What is TACT?

T.A.C.T is a 501(c)(3) organization with a mission to encourage and empower the full spectrum of individuals with autism through education and employment in skilled trades.




Who & What is TACT?

TACT was founded in 2016 by parents inspired by both the strengths and challenges unique to their child. In 2009, Claire Johnson and Danny Combs were blessed with a beautiful son. The first few years his progress was "on track," however around the age of three they began noticing his speech was behind, he was late walking and few other "differences." They visited a few doctors and he started speech and occupational therapy to work on his sensory developments. Fast forward to 2015: Their son is in the first grade and growing into a remarkable young man. He's becoming an extremely creative and innovative thinker, however, there are clearly some continued difficulties. After years of working with doctors and teachers he is placed on the Autism Spectrum. He's not alone. A 2020 report by the CDC found that 1 in 54 children are diagnosed each year on the Autism Spectrum.

As parents, Danny and Claire started looking into programs to build upon their son's strengths to help him build confidence and social and emotional awareness. They couldn't find anything outside of the doctor's office. So, they founded T.A.C.T.

TACT is the **FIRST & ONLY** trade program in the entire country developed exclusively for individuals with autism.

The Future of Autism

Studies analyzing services of K-8 students found that rates of service were: highest in 3rd and 4th grades and lowest in 8th grade .





IDEA requires students with ASD to have a transition plan by age 14.

Only 58% of high school students had one; even fewer implement them.

How old are most students in 8th grade?

Studies found that rates of service were lowest in 8th grade .

14 IDEA requires students to have a transition plan at 14.

In the next decade alone, nearly 500,000 children with ASD will age out of the special education system

- more if prevalence continues to increase-

leaving parents and children asking what's next?



"When you get to be 18 or 21, it's like falling off a cliff. We don't do a great job of educating parents about what's going to happen after school ends."

Zenia Zuker, a Certified Rehabilitation Counselor for adults with ASD.

What Happens After Highschool?

More than **half** of youth with ASD had no job and no postsecondary education in the two years after leaving high school.

Unsurprisingly, these same individuals had significantly higher rates of complete social isolation than people with other disabilities.

The autism community has a

90%

un(der)employment rate

The lack of available employment and/or training for adults with autism puts the cost for services and day programs back on the families and taxpayers.



The Cost of Autism

\$233,610

The cost of raising a neurotypical child today – excluding the cost of college.

\$1,400,000

The lifetime cost for an individual with autism.

\$2,400,000

The lifetime cost for an individual with autism and an intellectual disability.

Of those with autism 40% have an accompanying intellectual disability.

The current costs of ASD are more than double the combined costs of stroke and hypertension, and are equivalent to the costs of diabetes.

Autism Costs in Relation to Other Diagnoses

\$300,000,000,000

The annual cost of autism.

\$200,000,000,000

The annual cost of adults with autism.

Leonard Abbeduto: Director of the UC Davis MIND Institute

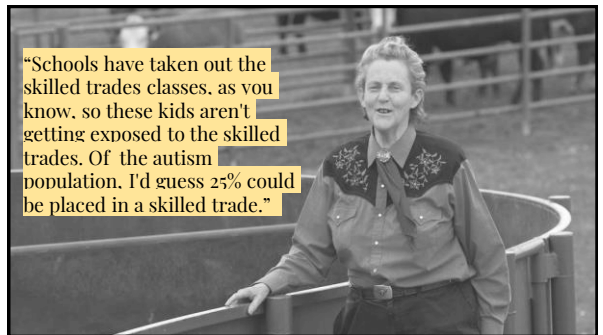
“The staggering costs identified in this study should serve as a call to action. We need to ensure that all children have access to intensive early intervention; that school-based interventions to support academics, as well as social and language skills, are adequately funded; and that supports are put in place to ensure **better postsecondary and vocational options for adults**. Investing in these areas, I believe, will actually reduce the costs to society.”

If not college, than what?

Among young adults with ASD in the general population, the rates of postsecondary education did not improve statistically from late 1990s to late 2000s.

The Skilled Trades

“Schools have taken out the skilled trades classes, as you know, so these kids aren't getting exposed to the skilled trades. Of the autism population, I'd guess 25% could be placed in a skilled trade.”

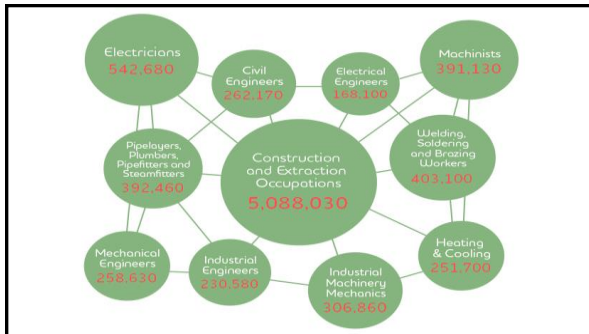





62%
of firms are already reporting a shortage in skilled trade workers.

Skilled Trade Careers are presently among the fastest growing and most difficult to fill careers.

By the end of 2025, the amount of baby boomers retiring will leave **31 MILLION** trade positions unfilled.



In Colorado, the unemployment rate sits at an especially tight **2.8%** and analysts are projecting job creation to slow because companies can't find enough employees to keep growing.



“The economy is still strong here. We just don’t have enough labor,”

Richard Wobbekind, executive director of the business research division at the University of Colorado in Boulder, told the Denver Post.

Colorado Trade Workers

Eric Graybill - Electrician - "You get on one job, you get one done and then two more come in."

"We're not getting the young guys coming into the trade. If we don't get these guys coming in to learn the trade, it's going to get even worse," Graybill said.

It's the same issue for general contractors like Nate Latimer.

"All my work is 100 percent referral work," Latimer said. "And I'm actually having to turn down referrals."

**THIS IS WHERE
THE WORK AT
TACT BEGINS...**

Here at TACT, we envision a world where neuro-diversity is not only embraced but inherently valued; a world where the full spectrum of the autism community can contribute their talents and gifts and find personal fulfillment.



What Skills Can YOU Gain at TACT?

- Career exploration
- Job skills training- specific to trades of interest
- Hands on learning
- Sensory adaptive environment
- Individualized curriculum
- Motor Skills (fine and gross)
- Developmentally Appropriate Designed Curriculum
- Executive functioning skills
 - e.g., organizing, prioritizing, time management, regulating
- Social and communication skill development
- Independent living skills
- Resume/interviewing skills
- Personal financial management
- Support with post-secondary options; vocational/trade school, college, and competitive employment

TACT Programming

- Exposure to create a track record of interest and discover a career!
- Holistic approach teaches math, communication, soft skills, technical skills, etc together rather in isolation
 - Most autism groups break down and teach everything one at a time
- Trades as a vessel for developing work skills
- Fun, engaging, projects with the right staff
 - Use the tools right away – safely (learn through doing)
 - 6 students per class with 2 teachers
 - Deception without deceit
 - Example – chair or box with same materials, cuts, measurements, etc
 - Each student is achieving the desired skill with the illusion of picking their own project
 - Permanent products
- Environment set up for success
 - iPads with TA's, color coding, personal tool boxes, videos and written instructions

- Night and weekend classes, 90 minutes of hands on learning
 - The right staff!
 - Make it about the students
 - Can balance control with support
- Real choice over illusion of choice in job selection
- Strengths based
- Assessment and tracking

Data for showcasing talent

Occupational Metric	Blue Star Workforce	Industry Workforce
Employee Turnover	Less than 10%	300%+
Absenteeism	Zero	2 per month per worker
Lost-time Accidents	.5 per 100 workers	8.5 per 100 workers
On the Clock Task Engagement	98.43%	49% (US worker)

Career Tracks

TACT's Transition program is designed to educate transition age students (ages 14-30) to develop interests and skills for life.

- See what employers need – train for the job
- Train at TACT for the job
 - Training is real and authentic
- Lower employment costs for training for employers
 - The Sales pitch
 - Higher retention rate and on task performance
 - Showcase of talent and skill
 - Saves companies money from turnover and training
- Hands on training/teaching
- Job coach when at the job
- Portfolio over resume
- Simulation site over classroom
- Train employers
- No time limit on training
 - Not broken out in auto 101, auto 102, etc like a traditional school

Success in the Trades

- Most employers have already embraced language barriers
- Color coding and visually based
- Repetitive
- Career level income over entry level job placement
- Room for growth and advancement
- Trades are set up to work in isolation or in groups
- Rewards talent and performance

Asset Based Approach vs Deficit Based Approach

Recent studies have proposed that implementing strength-based programs that prepare adolescents with ASD for the workforce could improve their employment outcomes in adulthood.

So what does an asset based approach look like?

Comparison Between the Approaches	
Asset Based	Deficit Based
Strengths Driven	Needs Driven
Opportunity focus	Problems focused
Internally focused	Externally focused
What is present that we can build upon?	What is missing that we must go find?

Environment

To accommodate our students, our garage - where carpentry, auto mechanics, and welding classes take place - space is equipped with specific ventilation that can be easily turned on/ off to reduce prolonged exposure to loud noises as well as noise cancelling headphones, tinted safety glasses for those sensitive to light, even weighted vests for comfort.

Environment



Spaces are organized with both written and visual labels for students of varying abilities- and where applicable have also been color coated.



Environment

In addition to specific changes in our garage, we have created a space for students to escape when over-stimulated. This sensory room includes large mats for big body movement and gross motor input, special lighting fixtures, a trampoline, swivel chairs, weighted animals/ lap pads/ vests, as well as a variety of fidgets and and strengtheners. In our larger open area, there are a few swings as well.



Takeaway

- Large pool of extremely talented people that are unemployed
- They are more reliable, have better time on task on and less turnover
- They are more engaged and dependable
- TACT provides all training and skills so each candidate is "job ready" specific to each job an employer is hiring for
- TACT is working to be Denver employer's to funnel qualified candidates.
- Joint marketing - so your community knows the good work you do
- Incredible on-task time and reliability