

NoticeAbility*

Organizational Overview

NoticeAbility is a nonprofit organization dedicated to helping students with dyslexia identify their unique strengths and build self-esteem. We incorporate the neuroscience of dyslexia, the best practices of special education, and the technology of Silicon Valley to construct learning curricula and teacher training programs for global distribution.

NoticeAbility has created a new paradigm for educating middle school students with dyslexia. While remedial reading programs are essential to dyslexics' early education, the traditional school curriculum does a profound disservice to millions of students by failing to mine the specific and powerful capabilities of the dyslexic mind. NoticeAbility disrupts this trajectory by introducing tailored curricula to students with dyslexia at the point (middle school) where they have achieved a level of reading proficiency but their negative self-image has not yet solidified. Once students with dyslexia come to recognize their strengths, they are more inclined to embrace their educational experience and fulfill their personal and professional potential.

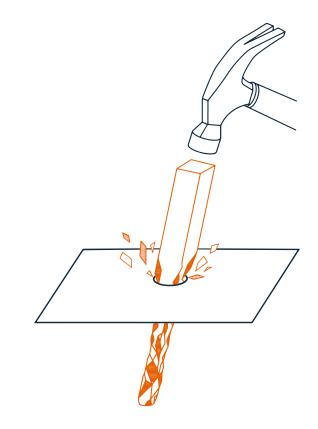


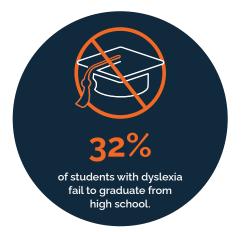
Locked Potential	— 3
Unlocked Potential	— 5
The Key: Focusing on Strengths	— 6
Awareness and Application	— 7
Support for Social-Emotional Learning	— 8
Professional Development Overview	— 9
Curriculum Overview	— 12
Entrepreneurs & Innovators Curriculum	— 13
Curricula Design	— 14
SOUL Centers	— 15
Outcome Measures	— 16
Data Measurements	— 17
References	- 19

Locked Potential

The unmet needs of students with dyslexia have farreaching consequences for both the individual and society. According to The National Center for Learning Disabilities (Cortiella & Horowitz, 2014), "There are 2.4 million American public school students (~ 5% of the total public school enrollment) identified with learning disabilities under the IDEA." They cite dyslexia as "the most prevalent and well-recognized of the subtypes of specific learning disabilities."

Research has consistently shown that students with dyslexia are disproportionately at risk for a multitude of adverse outcomes, including low educational attainment, substance abuse and juvenile delinquency:





Unemployment

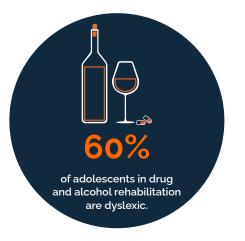
Thirty-two percent of students with learning disabilities including dyslexia drop out of high school or do not receive a regular diploma (National Center for Learning Disabilities, 2013). Low educational attainment has a significant impact on one's ability to gain meaningful employment. According to the National Longitudinal Transition Study-2 report (Newman et al., 2011) only thirty-eight percent of youth with disabilities who had less than a high school education were currently employed at the time of the interview.

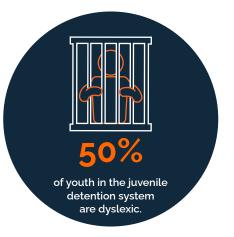
National Center for Learning Disabilities. (2013). Diplomas at Risk: A Critical Look at the Graduation Rate of Students with Learning Disabilities. New York, NY: Cortiella, C.

Crime

Research has shown that roughly half of young offenders are dyslexic at least to some degree (Kirk & Reid, 2001), while individuals with indicators of dyslexia are significantly overrepresented in samples of prison populations: 31% of the entire prison population according to Davies and Byatt (1998) and 38% according to Klein (1998). Given the incidence of dyslexia in the general population (5-17%) (Shaywitz, 1998), it is clear that individuals with dyslexia are at much greater risk of imprisonment during their lives. Further, according to the National Center for Learning Disabilities (Cortiella & Horowitz, 2014), "More than half of people with learning disabilities (55%) had some type of involvement with the criminal justice system within eight years of leaving high school."

Kirk, J. & Reid, G. (2001). An Examination of the Relationship between Dyslexia and Offending in Young People and the Implications for the Training System. Dyslexia, 7:77–84.





Substance Abuse

Up to sixty percent of people in substance abuse treatment programs have been found to have a learning disability, according to the National Center on Addiction and Substance Abuse (2000). Young adults with specific learning differences are more likely to smoke cigarettes and use marijuana, cocaine and other illegal drugs than any other disability subgroup. Substance abuse, according to the National Longitudinal Transition Study (2005), renders students vulnerable to "crime, violence, sexual risk-taking and suicidality."

> The National Center on Addiction and Substance Abuse. (2000). Substance Abuse and Learning Disabilities: Peas in a Pod or Apples and Oranges. New York, NY: Columbia University.

These outcomes are not only disastrous for the individual dyslexic but also come at great cost to our larger society. For example, it costs on average \$148,767 per year to incarcerate one youth (Justice Policy Institute, 2014); adults lacking a high school diploma earn over \$10,000 less annually than high school graduates and over \$36,000 less than college graduates (US Census Bureau, 2012); and high school dropouts cost individual taxpayers nearly \$300,000 every year (Sum et al., 2009).

Unlocked Potential

When we consider the achievements of empowered dyslexics—those who have managed to avoid the pitfalls and fulfill their potential—the charge to embrace all dyslexics becomes clear. The fact, for example, that 35% of all entrepreneurs (Logan, 2009), and 40% of all self-made millionaires (Tulip Financial Report, 2003) proves that dyslexia need not be disabling. The wider population of dyslexics deserves the opportunity to discover that they, too, have abilities and talents that can lead to success.





35% of entrepreneurs are dyslexic.



Dyslexia is known as the **"MIT disease"** at the nation's top engineering university.



40% of self-made millionaires are dyslexic.

Logan, J. (2009). Dyslexic Entrepreneurs: The Incidence; Their Coping Strategies and Their Business Skills. Dyslexia, 15:328–346.

West, T. G. (2004) Thinking Like Einstein: Returning to Our Visual Roots with the Emerging Revolution in Computer Information Visualization. Amherst, MA: Prometheus Books.

Tulip Financial Report. (2003). *This article is quoted frequently. We are pursuing the original source.

'Note: Due to the lack of consistency in criteria, diagnostics, and clinical definitions, some statistics on dyslexia may be outdated or refutable.

The Key: Focusing on Strengths

NoticeAbility identifies for students, educators, and parents alike the abilities associated with dyslexia. Its approach is shaped by the neuroscientific discoveries outlined by Eide and Eide in The Dyslexic advantage: Unlocking the hidden potential of the dyslexic brain (2012). NoticeAbility highlights the cognitive assets of dyslexia as a means of bolstering students' selfesteem, building awareness among educators, and recontextualizing dyslexia through a strength-based narrative.

NoticeAbility's work is grounded in a

reconceptualization of the term 'disability' as formulated by Critical Disability Theory (Hosking, 2008). Critical Disability Theory attempts to change long-held notions of cultural capital by pivoting away from a deficit view of disability and focusing instead on the often-unrecognized and unacknowledged attributes knowledge, skills and unique abilities—of supposedly 'disabled' individuals. Critical Disability Theory supposes that 'disability' is not the inevitable consequence of impairment but is, instead, a socially constructed relationship between impairment, individual responses to impairment, and the social environment which fails to meet the needs of those who do not match its expectations of normalcy.



Awareness and Application

On a systemic level, NoticeAbility builds awareness of dyslexia by increasing teacher capacity. According to the National Longitudinal Transition Study-2 report (Newman et al., 2011), the two predictors of longterm success for students with learning disabilities are (a) supportive teachers who understand their learning differences and (b) close relationships with mentors. NoticeAbility has designed a methodology for educating teachers in the neuroscience of dyslexia and providing students with a curriculum scaffolded by adult mentorship.

By offering teachers insight into the strengths of dyslexia, NoticeAbility is shifting the traditional 'onesize-fits-all' educational paradigm towards one that highlights the attributes of the individual, regardless of his or learning differences. As educators lead their students through NoticeAbility's project-based learning curricula, the dynamics of the classroom shift: camaraderie and authentic inquiry come to replace doubt and fear of failure.

"

As students discover their innate abilities, they are empowered to change the narrative surrounding their 'disability.' Parents and educators participate in this perspective shift by encouraging their students' creativity in and outside the classroom.

> Dean Bragonier, Founder, NoticeAbility



Support for Social-Emotional Learning

NoticeAbility's focus on social-emotional learning (SEL) and executive functioning (EF) is supported by research. Students with learning disabilities suffer socially and emotionally in school (Bryan et al., 2004) and have shown deficits in EF across various tasks and domains (Varvara et al., 2014).

Yet research overwhelmingly supports the importance of developing strong SEL and EF skills for positive educational and social outcomes. Students who complete SEL programs demonstrate a stronger sense of connection to school, improved classroom behavior, and higher academic achievement (Durlak et al., 2011). Similarly, increases in EF skills have translated to success in and outside of school, improved mental and physical health, and positive cognitive, social, and psychological development (Diamond, 2013).

"

While research shows that students benefit from curricula that support their SEL growth, few attempts have been made, to incorporate this scaffolding into school programs for students with dyslexia. NoticeAbility's innovative curricula are designed to do just that.

> Dean Bragonier, Founder, NoticeAbility

EF Research Outcomes

(Diamond, 2013)

Table 1	Executive functions (EFs) are important to just about every aspect of life

Aspects of life	The ways in which EFs are relevant to that aspect of life	References
Mental health	EFs are impaired in many mental disorders, including:	
	- Addictions	Baler & Volkow 2006
	- Attention deficit hyperactivity (ADHD)	Diamond 2005, Lui & Tannock 2007
	- Conduct disorder	Fairchild et al. 2009
	- Depression	Taylor-Tavares et al. 2007
	- Obsessive compulsive disorder (OCD)	Penadés et al. 2007
	- Schizophrenia	Barch 2005
Physical health	Poorer EFs are associated with obesity, overeating, substance abuse, and poor treatment adherence	Crescioni et al. 2011, Miller et al. 2011, Riggs et al. 2010
Quality of life	People with better EFs enjoy a better quality of life	Brown & Landgraf 2010, Davis et al. 2010
School readiness	EFs are more important for school readiness than are IQ or entry-level reading or math	Blair & Razza 2007, Morrison et al. 2010
School success	EFs predict both math and reading competence throughout the school years	Borella et al. 2010, Duncan et al. 2007, Gathercole et al. 2004
Job success	Poor EFs lead to poor productivity and difficulty finding and keeping a job	Bailey 2007
Marital harmony	A partner with poor EFs can be more difficult to get along with, less dependable, and/or more likely to act on impulse	Eakin et al. 2004
Public safety	Poor EFs lead to social problems (including crime, reckless behavior, violence, and emotional outbursts)	Broidy et al. 2003, Denson et al. 2011

SEL Research Outcomes

(Zins et al. 2007)

ACADEMIC OUTCOME	INTERVENTIONS
School Attitudes	
 Stronger sense of community (bonding) 	CDP
· More academic motivation and higher aspirations	CDP, Coop, SSDP
· Better understanding of consequences of behavior	SDM/SPS
· Able to cope more effectively with middle school stressors	SDM/SPS
 Positive attitudes toward school 	Coop, SSDP
School Behavior	
 More prosocial behavior 	C & C, CDP, Coop, PATHS,
	RCCP, SDM/SPS, SSDP
· Fewer absences; maintained or improved attendance	C & C, SDM/SPS
 More classroom participation 	SSDP
 Greater effort to achieve 	Coop
 More likely to work out own way of learning 	CDP
 Reductions in aggression and disruptions; lower rate of conduct problems 	Coop, PATHS, RCCP, SSDP
 Fewer hostile negotiations 	CDP, Coop
 More likely to be enrolled in school/fewer dropouts 	C&C
On track to graduate	C & C
Fewer suspensions	C & C
 Better transition to middle school 	SDM/SPS
Higher engagement	C & C, Coop, SSDP

Professional Development Overview

NoticeAbility is a Professional Development Provider licensed by the Massachusetts Department of Education and Secondary Education. Educators interested in using NoticeAbility's curricula are required to complete a fivehour professional development seminar.

NoticeAbility's professional development training offers teachers a neurobiological explanation of dyslexia and the opportunity to explore a variety of pedagogical techniques that highlight the strengths of dyslexic students. Participants experience a perceptual shift from a deficit-view--dyslexia as a disability--to an understanding of dyslexia as a learning difference with associated advantages. Educators come to see the importance of supporting their students' social-emotional learning and executive functioning and explore the methods that NoticeAbility's curricula incorporate to promotes these outcomes.

"

It was truly an enlightening, inspiring, and thought-provoking experience.

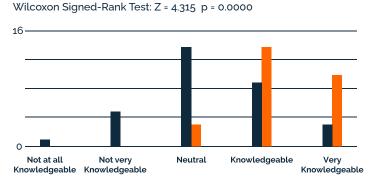
PD participant

"

I used to think dyslexia was a learning disability that was a challenge for students. But now I think that students with dyslexia are a gift and it is our jobs as educators to tap into their strengths and see what they can achieve.

PD participant

Pre-PD Post-PD

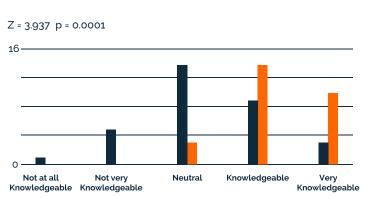


How knowledgeable are you about dyslexia?

Professional

Development Outcomes

- Overall, knowledge about dyslexia was significantly higher following the PD (p = 0.0000).
- 74% of participants increased their knowledge of dyslexia following the PD (26% stayed the same).



How well prepared do you feel to teach and engage students with dyslexia?

- Overall, preparedness to teach students with dyslexia was statistically significantly higher following the PD (p = 0.0001).
- 59% of participants felt more prepared to teach and engage students with dyslexia following the PD (41% stayed the same).

Net Promoter Score (NPS)

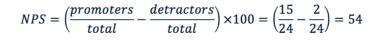
NPS is an index ranging from -100 to 100 that measures how likely a customer is to recommend the product. It is a proven metric used to gauge customers' satisfaction and loyalty. Customers are asked on a scale of 0 to 10, how likely is it you would recommend us to a friend or colleague.

NPS of our professional development:

Participants scored our program an NPS of 54

*According to PD market research by the Bill & Melinda Gates Foundation (2014), current satisfaction with PD courses is 22. By contrast, our NPS score is 54.

Teachers report that the most effective professional development learning incorporates not just presentations and lectures but, most important, opportunities to apply that learning (Bill and Melinda Gates Foundation, 2014). NoticeAbility has created a pedagogical tool that provides teachers with exactly this opportunity. Use of its curricula in the classroom enables teachers to create stronger relationships with their students and acquire insight into their individual potential.



NoticeAbility's professional development training utilizes strategies which are highlighted in the Effective Professional Development Report issued by The Learning Policy Institute. These strategies are directly linked to effective Professional Development training and increases in teacher knowledge and improvements in student learning outcomes.

"

The most important thing gained from the session is "being given the opportunity to start to make a positive difference in a student's life.

PD participant

"

I gained an understanding of all the things a dyslexic can achieve and that it is not a bad thing to be dyslexic.

PD participant

"

In 25 years, parents will LOVE the diagnosis of dyslexia for their child. The greater public will be aware of the strengths of the dyslexic child and not just the challenges.

PD participant

Wonderful presentation. Clear, concise, entertaining, comfortable. Really looking forward to this. Thank you.

PD participant

NoticeAbility's professional development training sets four principal learning objectives for participants:

- Understanding dyslexia as a brain-based difference
- Shifting from a deficit-based to a strength-based approach to working with dyslexic students
- Understanding how social and emotional learning, executive function, and academic and social outcomes are interconnected
- Navigating and using NoticeAbility's online learning platform and in-class curriculum materials

Upon completion of the training, educators will have access to the materials required to teach NoticeAbility's ten-module, blended-learning curriculum. They will receive:

- A Certificate of Completion and a three-year license to teach NoticeAbility's curricula.
- Registration for NoticeAbility's online learning platform and access to one of three NoticeAbility Courses (see below).
- A printed edition of Course Curriculum Materials for one of the three NoticeAbility courses. Each book contains a syllabus, optional grading rubrics, ten lesson plans, student handouts and notes, and ten teacher's script. International providers will receive a PDF of these materials.





Entrepreneurs & Innovators



Engineering and Architecture



Consenses Arts

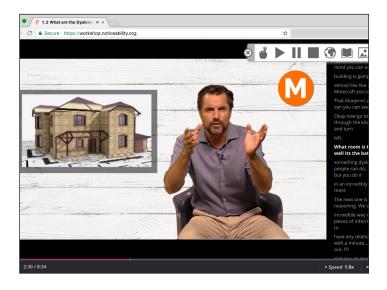
Curriculum Overview

NoticeAbility's curricula are guided by best practices for diverse learners as prescribed by the Center for Applied Special Technology, a nonprofit education research and development organization which pioneered Universal Design for Learning (UDL). According to the UDL framework, curricula should incorporate multiple means of representation, multiple means of action and expression, and multiple means of engagement.

NoticeAbility's online content is delivered through multiple modalities (video instruction, audio instruction, graphic aids/infographics). Rather than force students to digest all course content exclusively through written text, NoticeAbility provides access to content through visual and auditory means, while using assistive technology for the text components. (NoticeAbility's text-to-speech tool has the ability to translate text into other languages and to provide definitions of words through pictures and infographics.)

Check-in quiz questions and downloadable handout notes provide students with various options to test their comprehension of the key concepts embodied in each lesson. Further, the online platform allows them to study and reflect on material at their own pace in a safe environment that minimizes distractions.

Finally, NoticeAbility's online learning platform encourages parents/caregivers of students with dyslexia to participate in their children's educational experience. Student Voices: A Study of Young Adults With Learning and Attention Issues-Executive Summary (National Center for Learning Differences, 2015) shows that parental involvement is a crucial factor in building a dyslexic student's self-confidence. Those young adults who report having had supportive home lives credit their parents with understanding their children's learning and attention issues, helping them address those issues and, most important, believing in their children's potential for success.





Entrepreneurs and Innovators

"35% of entrepreneurs have dyslexia. This is the class for the problem solver, the tireless negotiator, or the relentless inventor."

NoticeAbility's Entrepreneurs & Innovators course explores the fundamental tenets of entrepreneurship through a project-based, experiential lens Students produce a business plan and create a presentation and pitch for the business they design.



Engineering and Architecture

"They call dyslexia the "MIT disease." This is the class for the student who dabbles in machinery, writes computer code, or builds fortresses in Mindcraft"

NoticeAbility's Engineering and Architecture course explores the fundamental tenets of residential and landscape architecture, civil engineering, and 3D computer rendering through a project-based, experiential lens. Students produce a computer-generated settlement or a unique biome.



Consenses Arts

"Yeats, Picasso, Ansel Adams, and Agatha Christie: Artists with dyslexia are ubiquitous. This is the class for the student who excels in artistic expression."

NoticeAbility Consenses Arts course explores perspective-taking and artistic creativity. Students work on a series of prompts from each others work and explore expression through drawing, movement, poetry, sculpture, photography, and music.

Curricula Design

NoticeAbility's curricula consist of ten modules and are designed to fit within a school semester. Each module requires two 50-minute class periods a week: the first class focuses on the online learning component, while the second emphasizes collaborative, projectbased learning.

Class A Online Learning

Students have secure access to NoticeAbility's online learning platform (affording them the opportunity to review material at home if they choose). Each module contains 2-3 videos which provide approximately 20 minutes of learning content. During each module, students explore the cognitive strengths of dyslexia and the socialemotional skills required for appropriate classroom participation. Instructors are encouraged to hold Class A in their school's computer lab and provide clarification as their students explore content.





Class B Collaborative Team Learning

Students apply the knowledge they have acquired online to a projectbased, experiential learning process. In Entrepreneurs & Innovators, students work in 3 person teams called SOUL Centers to create a unique product, prototype, and business plan. In Consenses, students engage in a game of 'telephone' using studio and performance art to communicate. Throughout these semester-long endeavors, teachers provide students with guidance on using active listening, conflict resolution, and negotiation techniques.

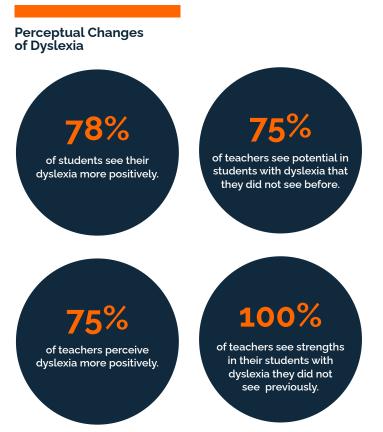
SOUL Centers

SOUL Centers (Self Organized, Unbridled Learning Centers) provide students with a safe environment to problemsolve, take risks, and build team cohesion. Further, the SOUL Center structure activates the social emotional learning skills that enable students to build confidence and resilience as represented by the Zone of Proximal Development (the distance between an individual's actual developmental level as determined by independent problem-solving and the level of potential development as determined by problem-solving with adult guidance or in collaboration with more skilled peers). SOUL Center members exhibit an increased interest in school, greater awareness of their dyslexic attributes, and improvements in their relationships with their peers (please refer to Data Measurements below).

Outcome Measures

Research reported in Student Voices shows that strong social connections are critical to students' long--term success. Young adults in the study prioritized the following components of 'strong connections': a sense of belonging to their school or community; relative ease in dealing with social issues; and comfort in taking steps to make new friends.

NoticeAbility's emphasis on social--emotional learning is designed to foster this sense of connection: participants work together in a constructive environment while developing skills in conflict resolution, negotiation and active listening. Exercises in interpersonal collaboration and team--building foster social--emotional proficiency and, thus, the ability to make good decisions, manage emotions, self--advocate and build successful relationships.



Impact Area #1 Self Esteem

The Student Voices report (National Center for Learning Disabilities, 2015) shows that students benefit greatly when they are provided "accurate information about their [disability] and structured and safe opportunities to develop and practice self-advocacy skills. Knowing how and when to disclose their [disability] and understanding their rights and protections and how to access services and supports during the K-12 years and beyond are critical to successful transition from high school and successful outcomes in the years that follow." Student Voices reported that, "When young adults with learning disabilities described being 'self--confident,' they said that they tended to see the positive in situations; were comfortable taking the first step in reaching out to peers and adults; and didn't give up, even when things got hard or obstacles got in their way."

NoticeAbility's curricula stimulate participants' self-determination and self-confidence in the service of goal--directed, self--regulated, and autonomous behavior. Each lesson plan exposes students to the neurological and cognitive advantages of their dyslexia. Team-based learning environments encourage them to "find the best" in each other, delegate tasks and complete projects effectively. Identifying their strengths and contributing in collaborative settings stimulates the growth of both their interpersonal and intrapersonal skills.

Impact Area #3 Mastery Motivation for Learning / Mastery Goal Orientation

Motivation has enormous influence on student learning. It directs students towards specific goals and stimulates their expenditure of effort and energy on tasks related to achieving those goals. "One theory of motivation holds that students are motivated to engage in behaviors 1) that have value to them and 2) where they have a reasonable expectation to succeed" (Sviniki, 2008, p. 2). NoticeAbility's project-based entrepreneurship curriculum allows students to tackle problems relevant to them and their interests and provides the task value that encourages them to work toward mastery of these tasks. Among other factors, expectations of success are influenced by the degree to which the task fits the skills of the individual (Sviniki, 2008). Since the content and delivery of this curriculum are tailored to the strengths of individuals with dyslexia, students quickly learn that they are indeed skilled and able to succeed in these tasks, a discovery which, in turn, helps to motivate their learning in school.

Impact Area #2 Stigma Consciousness

The stigma often attached to dyslexia affects the self-perception of individual students differentially depending on the degree to which they expect to be stereotyped by others and believe that their life experience will be negatively affected (Pinel, 1999).) The level of students' stigma consciousness is associated with their academic performance: those who experience higher levels tend to under-perform in certain situations and are more likely to disengage from school over time (Pinel, 2005).

NoticeAbility's curriculum aims to lessen students' stigma consciousness. The curriculum's focus on the strengths of dyslexia allows students to grow beyond their learning disability stereotype. The course creates an environment that promotes a feeling of belonging and inclusion in a school setting that might not otherwise make students with learning disabilities feel validated.

[My child] seems much more independent and confident about her school work.

Jodi, parent

This is the first year that my child does not complain about going to school. He stated that Tuesday's were the best days because that was the day that he had NoticeAbility.

Mary, parent

"

More confidence in who they are as learners. Not afraid or ashamed of being dyslexic. Kiely, teacher

"

As a father sitting in the audience, it put a lump in my throat to see my child on stage proudly acknowledging the fact that she does not "learn" by "conventional" standards.

Scott, parent

l've seen increased confidence with students.

Melissa, teacher

"

[My child] has found the strength to end a friendship with a girl who has often ridiculed her and put her down publicly for years.

Lisa, parent

Data Measurement

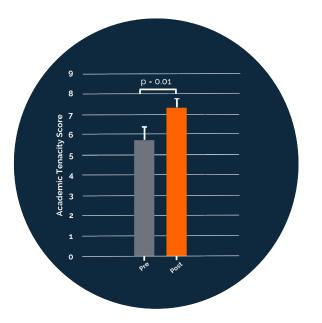
NoticeAbility uses the Stigma Consciousness Questionnaire-Learning Disabilities (SCQ-LD) to measure stigma consciousness; the questionnaire, developed by the Center for Applied Special Technology (CAST), has been validated for students with learning disabilities. It assesses students' school experience as it relates to their disability and the way they are treated by their peers and authority figures such as teachers/administrators.

NoticeAbility's questionnaire measuring mastery motivation for learning and goal orientation has been designed in collaboration with the Harvard Graduate School of Education (mentored by Dr. Gabrielle Rapport-Schlichtmann, Executive Director and Chief Scientist of EdTogether Inc., and Adjunct Lecturer at Harvard's School of Education). Likert-scale questions are used to assess a student's preparedness for class and how able (s)he feels to persevere, improve, and solve problems creatively.

Student Changes

At the conclusion of the first pilot of the program, we found that students showed significant improvements in their academic tenacity -- reporting that they were more likely to persist with challenging problems, plan ahead to achieve goals, (prepare) for class and feel able to solve problems creatively (pretest M=5.72 SE=.65, post-test M=7.35 SE=.41; t(11)=2.68, p=.01; a 17% change or about 1 standard deviation). Furthermore, 78% of students perceived dyslexia more positively following the program, and teachers and parents reported positive changes in their student's self esteem (82% of parents, 100% of teachers), relationships with friends or peers (64% of parents, 100% of teachers), and attitudes toward school (64% of parents, 50% of teachers).

Parents reported changes in their children	Positive Delta	Teachers reported changes in their students
82 %	Self-esteem	100%
73%	Confidence	100%
64 %	Relationships with friends or peers	100%
64 %	Attitudes towards school	50%



Academic Tenacity

Following the course, students showed significant improvements in their academic tenacity — reporting that they were more likely to persist with challenging problems, plan ahead to achieve goals, be prepared for class, and feel able to solve problems creatively.

Pre-Test M=5.72 SE=0.65; Post-Test M=7.35 SE=0.41; t(11)=2.68, p=0.01

Teacher Changes

We found that participation in the professional development program significantly increased teachers' knowledge about dyslexia (pretest M=3.26 SE=.19, post-test M=4.26 SE=.13; t(26)=-7.08, p<.01) and improved their preparedness to teach and engage students with dyslexia (pretest M=3.22 SE=.19, post-test M=4.04 SE=.16; t(26)=-4.82, p=.0001). Furthermore, 100% of teachers found that facilitating the curriculum helped them build deeper and more meaningful relationships with their students, and 75% of them perceived dyslexia more positively by the end of the program.





of teachers felt more confident teaching students with dyslexia.



100% of teachers agreed that the course helped build deeper and more meaningful relationships with their students.

References

- Bill and Melinda Gates Foundation. (2014). Teachers know best: Teacher's views on professional development. Seattle, MA.
- Bryan, T., Burstein, K., Ergul, C. (2004). The social-emotional side of learning disabilities: a science based presentation of the state of the art. Learning Disability Quarterly, 27:45-51.
- Cortiella, C., & Horowitz, S. H. (2014). State of Learning Disabilities: Facts, Trends and Emerging Issues. New York: National Center for Learning Disabilities.
- Davies, K., & Byatt, J. (1998). Something Can Be Done! Shropshire STOP Project. London, England: Shrewsbury.
- Diamond, A. (2013). Executive Functions. Annu. Rev. Psychol., 64:135-68.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1):405-432.
- Eide, B. L., & Eide F. F. (2012). The Dyslexic advantage: Unlocking the hidden potential of the dyslexic brain. New York, NY: Hudson Street Press.
- Hosking, D. (2008). Critical disability theory. Paper presented at the 4th Biennial Disability Studies Conference 2–4 September. Lancaster, UK: Lancaster University.
- Justice Policy Institute. (2014). Sticker shock: Calculating the full price tag for youth incarceration. Washington, DC: Petteruti, A., Schindler, M., and Ziedenberg, J.
- Kirk, J., & Reid, G. (2001). An examination of the relationship between dyslexia and offending in young people and the implications for the training system. Dyslexia, 7:77–84.
- Klein, C. (1998) Dyslexia and offending. Dyspel: London.
- Logan, J. (2009). Dyslexic entrepreneurs: the incidence; their coping strategies and their business skills. Dyslexia, 15:328–346.
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., Wei, X., with Cameto, R., Contreras, E., Ferguson, K., Greene, S., and Schwarting, M. (2011). The Post-High School Outcomes of Young Adults With Disabilities up to 8 Years After High School. A Report From the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011-3005). Menlo Park, CA: SRI International.
- Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. Journal of Personality and Social Psychology, 76, 114–128.

- Pinel, E. C., Warner, L. R., Chua, P-P. (2005). Getting there is only half the battle: Stigma consciousness and maintaining diversity in higher education. Journal of Social Issues, 61(3), 481-506.
- Renick, M. J., & Harter, S. (2012). Self-perception profile for learning disabled students: Manual and questionnaires. Denver, CO: University of Denver.
- The National Center on Addiction and Substance Abuse. (2000). Substance Abuse and Learning Disabilities: Peas in a Pod or Apples and Oranges. New York, NY: Columbia University.
- Shaywitz, S. E. (1998) N. Engl. J. Med. 338, 307-312
- Sum, A., Khatiwada, I., and McLaughlin, J. (2009). The consequences of dropping out of high school: joblessness and jailing for high school dropouts and the high cost for taxpayers. Boston, MA: Center for Labor Market Studies, Northeastern University.
- Sviniki, M. (2008). Student goal orientation, motivation, and learning. The IDEA Center, paper #41.
- U.S. News. (n.d.)The 10 best colleges for engineering. Retrieved from https://www.usnews.com/best-colleges/rankings/engineering-doctorate
- US Census Bureau. (2012). Statistical Abstract of the United States: 2012 (131st Edition). Retrieved from https://www2.census.gov/ library/publications/2011/compendia/statab/131ed/tables/ educ.pdf
- Varvara, P., Varuzza, C., Sorrentino, A. C. P., Vicari, S., and Menghini, D. (2014). Executive functions in developmental dyslexia. Frontier in Human Neuroscience, 8(120):1-8.
- West, T. G. (2004)Thinking Like Einstein: Returning to Our Visual Roots with the Emerging Revolution in Computer Information Visualization. Amherst, MA: Prometheus Books.

NoticeAbility*

Contact Information

Website: www.noticeability.org Contact: support@noticeability.org

NoticeAbility P.O. Box 380617 Cambridge, MA 02238, USA

Copyright © by NoticeAbility, Inc.