

# AUTISM'S MUSICAL GIFT



By HENNY KUPFERSTEIN

In the language of music, communication becomes possible through the give and take of tonality, rhythm, timbre, and phrasing. People who study an instrument for many years can participate in such musical exchanges at improvisation groups, open mic, and jam sessions. For parents who shuttle their children to speech and occupational therapy every other day, music lessons falls to the bottom of the priority list. In an effort to improve on skills that are presumed to be necessary for daily living, inner expressions become categorized as recreational. This can be counterproductive, since the autistic brain is specifically wired to have extraordinary musical abilities.

Autistic people benefit from the neural differences in their auditory perception. This type of detail-oriented information-processing lends itself to preeminence for fine arts (music) over whole-words (language), often resulting in the phenomenon of perfect pitch ("Absolute Pitch"), and synaesthesia. With non-verbal students, methods for teaching to their gift must be applied, to enhance their educability in all areas of life. This way, the gift allows them to blaze through their journey towards impressive achievements in music, reading comprehension, mathematics, and social behavior.

Numerous researchers have studied autistic individuals and their musicality, after they have reportedly demonstrated high intelligence through musical communication. Absolute Pitch has been a captivating phenomenon for researchers, though there are many discrepancies on the correlations between autism and absolute pitch. Absolute pitch has historically been estimated to



Henny with Susan

exist in 1 in 10,000 of the population. However, current studies mostly tested individuals through note-naming. This language component in the testing is inherently biased against a population with communication differences. To prove intelligence and musicality, different assessment methods are key.

Susan Rancer is a music therapist who gets it. Herself a perfect pitcher, Susan maintains a private practice in the San Francisco Bay Area. Her work is devoted to one-on-one teaching in a highly specialized manner. Almost all her autistic students have absolute pitch, and three of her students have transitioned into college. Susan explains how people with absolute pitch are addicted to sound. They will imitate voices from TV shows, mimic household sounds and car alarms, and learn languages with authentic accents instantly. AP possessors also have a

tendency to set impossibly high standards for themselves, and the explode when they do not master a skill instantly. With the ability to instantly match and recall pitch, the possessor believes that everything in life should be mastered with the same instantaneity. This is the cause of many life frustrations and deflated self-esteem. The individuals begins to think that they are simply stupid, when other things in life do not come to them just as easily.

Their lessons need to be taught in way so that the student begins creating sound right away. Teaching scales, fingering, and other foundational techniques will break down the student's motivation to learn. Modifying the lesson by using colored stickers to match color-coded notes to keys, is the antithesis to this process. The student does begin to create sound easily, however they learn no new skill which carries over to the functional musical world. Amongst seasoned musicians, this individual then falls through by the failures of their training. Alternately, teaching music theory and note-reading is a skill that opens up infinite possibilities, such as college music programs, and music composition.

Society values a person who plays Mozart on the piano, because reading and making music in the classical tradition is understood as a sign of intelligence. In a speech-oriented world, those who speak, have their thoughts known. All others have to find a way to make their inner thoughts and desires be heard through other means. My daughter has learned through music therapy

that she had the ability to sing, "more ketchup, more ketchup", by tapping a rhythm to pace herself into a song. Offering the gift of communication to an individual should be a primary goal. Finding the appropriate method for teaching is critical.

Parents should fire up their dream of providing piano lessons to their child. Clinicians who specialize in teaching autistic students, have arrived to their understanding by reorganizing piano pedagogy for their practice. It is critical not to train their students to becoming a Mozart-playing concert pianist. Music is not the goal; training in the discipline is. The process of learning is where the magic begins to happen. For students who possess absolute pitch, the intensity of their gift must be realized, and used to feed the other learning processes. The professional piano teacher in your neighborhood is not trained to adapt her lesson to teach from the top down. Unable to gauge the educability of the student, the teacher would give up. On the flipside, music therapists are trained to incorporate 'increase eye contact' and 'improve social interaction' as a goal for treatment. In between these two professions are the highly gifted individuals who have vast abilities waiting to be accessed.

Students who have absolute pitch will be able to play anything they have just heard. This prodigious ability gets in the way of the teacher-student relationship, and boggles the mind of traditional musicians. This is because the autistic brain masters the complex instantly, and then struggles to break it down into the simpler tasks.

<sup>1</sup> Synaesthesia: a neurological phenomenon in which the sensory perceptions of the brain are crossed. Possessors report hearing specific pitches in color, and other such anomalies.

**GOTHIC BLUES**

**RUDY SIMONE**

**GOTHIC BLUES**

**BORN THE WITCH**  
Coming in 2014

“Recently Rudy Simone released the album Gothic Blues. The album title itself is meant to show her dualism as an artist that can combine the nocturnal aesthetics of the Goth scene with emotional warmth of the blues. Opener “Take Me Back Home” is the perfect blend with a dark musical feel mixed with bluesy vocals and lyrics The mix works well and makes for a sweet listen. Rudy shows off her sultry voice on “The Box And The Machine”. The sound scape painted behind her voice seems complex and minimalistic at the same time. The focus on her voice leads to a relaxing trance like state. The stripped down title track “Gothic Blues” closes the record with a beautifully rendered acoustic guitar melody that acts like a lullaby to ease the weary mind. This is a deep emotional listen that will leave you slightly changed by the time you reach the end of the album.

Enjoy it for yourself...”  
review credit indiebandguru

When a person can solve an algebra problem in their head, the fundamental math lessons on addition and subtraction can elude such a learner. For gifted absolute pitch possessors, learning how to read music can be a tedious and even torturous process for both the teacher and the student. Yet, developing musical knowledge and skills should be understood as an integral part of functional living and social adaptation.

Nate is a 7-year-old boy that I am currently teaching piano. Nate has a diagnosis of autism, and is functionally non-verbal. During one of our lessons, he entered in a completely overwhelmed state. He immediately began singing our good-bye song. For the parent and for me, this was indicative of the potency of the communication skills that he now developed, as a result of the music training in the previous sessions. Thanks to the movie, "The King's Speech", more people are now aware that individuals with a speech impediment do not stutter while singing. So too, Nate had no difficulty communicating his needs while singing.

Our auditory perceptions occur alongside the brain functions utilized for gestalt thinking. This whole-word way of thinking incorporates color and texture in its greater picture. Computational functions such as mathematics are processed in the left brain areas, and are also responsible for speech. Additionally, this is the area which must be engaged for an individual to be able to follow directions, vocalize thoughts, and recall finer details in their memory. The figure-ground functions in this area are responsible for picking out words from a page, and associating it to a given meaning. When science is combined with the arts, all areas of the brain are utilized, encapsulating dormant possibilities.

In many schools, a student with a diagnosis will be enrolled in an ensemble just like all other students. However, if there are behavior issues, the teacher might put them in the corner to play the triangle. Thus, the gift is marginalized, even while this individuals might very well be the the most musically talented in the room. Instead, the teacher's goals should include attendance, eye-tracking, fine and gross motor skills, executive function, and motor planning, to name a few. This specific method affords the individual the gift of demonstrating their intellect to family, friends, and teachers. A school district can easily recognize such competence as indicative of a higher levels of sophistication. At this point, the parent can expect the educational team to use this demonstration of student competence to justify taking steps toward mainstreaming.

A highly specialized teaching method must bridge the arts and sciences to form a multidimensional sum of practice that is greater than its parts. Art and science are often diametric opposites, however when conjoined, also connect the right and left brain



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pathways measurable through modern medicine. The teacher must be a malleator of sound to invoke student perception, thereby creating biopsychosocial change to alter processing of the subject matter. This methodology relies on the neurological strengths of the absolute pitch possessor to begin forming connections in underutilized areas of the brain. When quality music is easily created by the absolute pitch student in the session, the intrigue of the multisensory experience from tactile playing and auditory perceptions combined, becomes the motivator for plowing through the lesson.

Music isn't what makes us smarter; it is the process of learning it that does.

Working on these goals each week through harmony and rhythm stimulates pattern recognition as translated from symbols. These associations of the musical notes opens the brain up to quantitative reasoning abilities which carry over to every area of life. This is how music can help bring about both dignity for the student with exceptionalities, and a change in social awareness in peer settings for what that student with special gifts can contribute. In the broadest sense, social change can be brought about through equal access and inclusion for arts and education. Acknowledging neurodiversity in music is a step toward inclusive education for all. ■



## About Henny

Henny Kupferstein is a prolific composer, with a degree in Interdisciplinary Studies for Music Leadership in Society. Henny maintains a private practice and is a frequent presenter and consultant to parents and educators on the subjects of music, perfect pitch, autism, and sensory integration.

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