

We teach the venerable Chinese martial art of Tai Chi Chuan to people with special needs so students have better health, an inclusive social group and life goals, notably performance-based collegiate bachelors and masters degrees. Like many martial arts, Tai Chi Chuan has a number of canonical sets or forms that are composed of sequences of movements, and there are published international competition judging standards for each movement. Typical would be a two hour class five days (seven days preferred) per week where students wearing smart garments follow videos of a grandmaster. We will provide parents and physicians a daily digital stream of movement scores so that a statistical anchorpoint is available to inform decisions about diet, medications, sleep and logistics. If the scores, which we aggregate as a velocity of learning, increase at an expected rate, the change was right.

Currently, there are at least twenty million Americans in the thirty disability categories where we can provide benefits. Those span 563 syndromes and 1164 genes. The major categories are

Description	Syndromes	Genes	New Zealanders	
Autism spectrum	93	207	149,000	includes Fragile X syndromes
Ataxia spectrum	131	179	5,000	
Amyotrophic lateral sclerosis	1	38	2,000	ALS; Lou Gehrig's disease
Arthrogryposis spectrum	23	35	4,000	
Alzheimer's syndrome	2	24	120,000	includes some other dementias
Cerebral palsy spectrum	15	19	14,000	
Down Syndrome	4	11	6,000	includes translocations
TOTAL			300,000	2 of 3 can walk

Supporting conditions like Alopecia (areata) spectrum, Huntington's Disease and microcephaly would require some thought. Without making light of the suffering, we currently view panic phobia anxiety spectrum, sleep disorders, Crohn's disease and other similar irritable bowel syndromes, glucose intolerance, lactose intolerance and galactosemia as significant but secondary symptoms.

Even our preliminary results already very clearly show that it is not very accurate or even useful to compare the velocities of learning of among students with generic autism. Presently, there is no map defining which genes influence common metabolic pathways, and, in many cases, even knowing the gene or genes judged to be the cause of a student's condition is not sufficient. We were able to measure significant differences in velocity of learning between two students both of whom had Van Der Aa-Helmsmoortel syndrome (a type of autism) caused by different mutations in their ADNP genes. Fair comparison of students has to take into account specific mutations, repetitions, deletions and translocations. Such comparisons would help parents and physicians make informed choices.

Our supporting software, code-named SAITO (an acronym, and Japanese for 'wisteria') is already 520 Windows forms and 220,000 lines of code. The horizontal challenges ahead are to start and maintain economically sustainable schools staffed by teachers who have integrity, compassion and courage. The vertical challenges ahead are to consider expansion from 120 minute daily classes to adult day care and clustered group homes.