Premier’s Australian Association of Special Education NSW Chapter Research to Practice Special Education Scholarship

Supporting Adolescents with Autism Spectrum Disorders

Best practice strategies, support structures, practices and pedagogies to enhance educational, social and vocational outcomes

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As a special educator, educational leader and faculty head teacher of an autism support unit in a NSW Comprehensive State High School, my team and I are continually challenged by the uniqueness, complexities, complications and intricacies of educating and supporting students with Autism Spectrum Disorder (ASD). The multidimensional aspects and highly personalised and specific needs of students with ASD are immense and challenge the most experienced and knowledgeable of educators. It is imperative that we explore, review and adopt current evidence-based research and pedagogies support structures and educational models/systems into our daily teaching practice.

My study tour’s primary focus was to explore the education of adolescents with ASD within the US education system. My goal was to observe, discuss, collaborate, establish networks and partnerships, and to gather resources/materials with the view of developing a best practice model.

Fusion Academy

My first visit was to Fusion Academy in Los Angeles, California. The school offers one-to-one learning opportunities and offers completely customised/personalised educational programs. Classes are self-paced, and course material is presented in ways that suit students’ individual interests, strengths, learning styles and challenges. Fusion students personalise, customise and negotiate their class schedules and begin a new semester any time of year.

Wellness Programs complement the academic experience, providing balance and offering opportunities for emotional and social growth. The numerous wellness elements include Art Expression, Music Expression, Physical Wellness and Healthy Habit. These are key pathways to healthy self-expression, helping students achieve more balance and deal effectively with stress, anxiety, low self-esteem, body-image issues, social pressures and substance abuse.

Fusion Academy programs recognise that adolescence is a challenging time and have developed programs to equip students with effective tools to navigate a range of issues. These include learning to:

* + solve problems creatively and assertively
  + cope positively with demands and challenges
  + form healthy relationships with others
  + achieve physical, mental and emotional balance

Fusion’s wholistic philosophy recognises that students don’t truly flourish academically when they face significant emotional and social challenges. Staff serve as trusted mentors, coaches and advocates to every student. As well, on-campus professional educational and family therapists provide:

* + coping strategies
  + family therapy
  + educational therapy
  + parenting support
  + behaviour contracts
  + academic placement assistance
  + self-advocacy and empowerment support
  + emotional support
  + community guidance
  + motivational training
  + life skills training
  + behaviour modification support

****STEM3 Academy****

As part of the HELP Group of schools (the HELP Group is the largest and most innovative and comprehensive nonprofit educational organisation of its kind in the US for young people with ASD), the **STEM3 Academy in Los Angeles provides a robust science, technology, engineering and mathematics (STEM) based curriculum to students with high-functioning ASD, ADHD and other social and learning differences. The school is dedicated to K–12 students with a passion for STEM-related fields and who may benefit from a n alternative and non-traditional learning methods.**

The **STEM3 approach incorporates** developmentally appropriate **curriculum** content that features interdisciplinary connections across fields as well as deep exploration of concepts and themes. Student-centred, project-based learning is infused with real-world applications that promote critical thinking, creativity and collaboration. The Pathway to Careers program provides exposure to professional internships, mentorships, university collaborations, professional laboratories and partnerships within the community. These opportunities provide models for careers in STEM and allow students to acquire 21st century skills.

Through the **STEM3** programs students learn to develop essential life skills and to consider that the way they approach the world through their own engagement and social interactions will play a key role in their own success.

Halstrom Academy

Halstrom Academy (HA), with four campuses in California, believe every child is unique and has their own skills, talents, and challenges. HA pioneered the one student to one teacher classroom, offering students a better, more effective way to learn. HA aims for their students to become:

* + self-directed learners
  + effective communicators
  + college and career ready
  + community participants
  + creative problem-solvers

Research proves that traditional classrooms and their rigid structure can actually be detrimental to a student’s ability to learn, understand material, and ultimately succeed. The HA philosophy embraces a progressive vision of education that is dedicated to students mastering the curriculum through flexible scheduling, customised plans and a thriving environment where they feel safe, nurtured and supported.

PEERS

The University of California (UCLA) has developed the Program for the Education and Enrichment of Relational Skills (PEERS), a social skills training intervention for youth with social challenges with a strong evidence base for use with adolescents and young adults with ASD.

The 16-week evidence-based social skills intervention is designed for motivated adolescents in middle or high school who are interested in learning ways to help them make and keep friends. During each group session adolescents are taught important social skills and are given the opportunity to practice them during socialisation activities. Parents are taught how to coach their teens in making and keeping friends by providing feedback through coaching during weekly socialisation homework assignments.

Village Glen School

Village Glen School is another school in the HELP Group.The school is an innovative, multidisciplinary day school specifically designed for students with challenges in the areas of socialisation, communicative and pragmatic language development and peer relations. Recognising the strengths, challenges and natural talents of each student, Village Glen promotes social and personal wellbeing and strong academic achievement

The Village Glen program features:

* + small class size with an adult/student ratio averaging 1:6
  + daily emphasis on social communication/pragmatic language development
  + social development integrated throughout the curriculum and extra-curricular activities
  + a college preparatory curriculum
  + elective programs including art, music, drama, photography, computer science, Spanish and athletics
  + best-practice instructional strategies
  + a gifted and talented educational curriculum
  + dual enrollment opportunities at local public schools and community colleges
  + speech and language therapy, counseling, adaptive physical education and occupational therapy

Meristem School

Meristem School, located in the California State Capital, Sacramento, serves young adults with ASD by helping them develop practical life skills, increase social capacity, and transition to work and independence. The Meristem method, a three-year day and residential program, uses a contemporary apprenticeship model to develop contextualised, transferable skills to transition young adults into work life.

Students learn in highly personalised, individualised and customised ways. Entering the workforce is a hallmark of the Meristem program with their transition-to-work program of developing vocational skills through work experience, placement and training. The program uses transformative movement, digital media, culinary arts and nutrition, equine therapy, sustainable agriculture, carpentry and woodwork, independent living skills, farm and animal care, textiles, jewellery, and metal work, filmmaking & photography.

Meristem’s emphasis on community life, seeks opportunities to partner with local businesses for work placements, entrepreneurial opportunities and internships.

Applied Behavior Consultants, Inc.

Applied Behavior Consultants, Inc. (ABC), also in Sacramento, is nationally renowned human services agency that is dedicated to enhancing the quality of life for people with ASD, developmental disabilities and learning disorders. ABC believe they can best serve clients by operating within the theoretical practices of applied behavior analysis (ABA) implemented within the following general parameters:

* + functional assessment will be performed on all presenting problems to determine the contextual contingencies, discriminative stimuli, setting events and consequences that affect the behaviours targeted for change
  + treatment procedures will be designed to systematically build in socially significant behaviours, decrease problematic behaviours, and generalise pivotal behaviours to maintain appropriate behaviour change.

Data-based analysis is a fundamental principle upon which ABC create individualised data-driven programs and interventions.

ABC’s school in San Francisco is a private school that serves children and young adults from ages 6 to 22 that have autism and other developmental disabilities. The school’s community-based programming provides opportunities to learn generalised skills that are transferable to daily real world settings outside the classroom environment. The highly specialised curriculum excels in helping students who have been unable to succeed elsewhere, offering a functional skills curriculum that includes math, language arts, vocational training, culinary classes, art classes, music classes, travel training and self-help skills.

The school uses ABA, TEACCH (Treatment and Education of Autistic and related Communications handicapped CHildren) structured teaching methodologies, Pivotal Response Training, and community based instruction. Specialising in behaviour management, the school offers a positive behaviour support and interventions approach to maladaptive behaviours that prevent students from being successful in a less restricted and more inclusive environment.

A comprehensive vocational training and transition preparation program, Workability, caters for students 16 years of age and older and operates by identifying areas of strength and employable skills and then matching them with an employment opportunity in the local community.

Schoolwide Integrated Framework for Transformation

The University of Kansas has developed the Schoolwide Integrated Framework for Transformation (SWIFT). At its core is inclusivity and the vision of All Means All. The SWIFT program is a national K–8 technical assistance program that provides academic and behavioural support to promote the learning and academic achievement of ALL students, including students with the most extensive support needs.

The SWIFT approach is committed to eliminating silos in education by bridging general and specialised educational structures and resources for all students. These bridges lead to powerful learning opportunities for students and teachers; promote active, engaged partnerships among families and community members; and ensure that every child is a valued member of their school and given the supports they need to achieve academic and social success. The SWIFT initiative focuses on five key domains that support schoolwide inclusive transformation:

* + integrated education framework
  + multi-tiered system of support
  + family and community engagement
  + administrative leadership
  + inclusive policy structure and practice

ASD Nest Program

New York City’s Department of Education and NYU Steinhardt’s ASD Nest Program is an integrated co-teaching program for higher functioning children with ASD. [Nestled within supportive neighborhood schools](http://steinhardt.nyu.edu/asdnest/about/publicschools), the ASD Nest program helps children with ASD learn how to function well academically, behaviourally, and socially in school and in their community.

Each ASD Nest Program is integrated into the fabric and culture of its school and learning community. The goal is to provide a therapeutic environment and supports within a grade-appropriate academic environment. The entire school embraces positive behavioural support.

Rebecca School

Rebecca School in New York City is a therapeutic day school for children ages 4 to 21 that promotes the education and development of children with neurodevelopmental delays of relating and communicating, including ASD. The school uses the developmental individual differences relationship-based model, which proceeds from the core belief that relationships are the foundation of learning.

Rebecca School’s academic program focuses on a student’s passions, interests, and lived emotional experiences. Academics foster a child’s ability to relate, communicate and think, and teachers create individualised lessons to address both the developmental and interest levels of each student.

Skills are taught in a dynamic relationship: in 1:1 interactions with a teacher, in small groups, and in large classroom activities. Rebecca School’s goal is to create classrooms that promote a child’s ability to think critically about their world.

Brooklyn Autism Centre

Brooklyn Autism Centre (BAC), in Brooklyn, NY, is a not-for-profit school serving children with special needs. The school was founded by parents, educators, and community activists who were determined to provide high quality, effective educational services for children who need one-on-one support.

The school is grounded in ABA, the educational standard and best practice for children on the autism spectrum. ABA is a scientific approach to determining the environmental variables that affect behaviour. Teaching methods are based on empirical research findings, and are modified and improved based on the student’s progress. The sensory needs of students are always taken into consideration when creating the educational environment.

Ascent Deer Park Academy

Ascent Deer Park Academy is located on Long Island, NY, and is chartered by the New York State. It plays an integral role in writing curriculum for New York State's only Masters in Autism Education program (one of four in the nation), providing direct support to children and families living with autism while investing in the professional development of the state’s educational system.

Ascent provides individualised behavioural, pre-academic and academic programs best suited to the unique characteristics of children with autism. All teaching strategies are based on the scientifically derived principles of ABA.

Intensive one-to-one sessions alternate with small group sessions that teach children to relate to classmates and to participate cooperatively in-group activities. Instruction emphasises language development, social interaction and multiple functional skill areas. Each child’s schedule of learning activities is designed to meet his or her unique needs. All instruction and treatment activities are data-based, providing instructors and parents with objective feedback and ongoing evaluation of the effects of intervention.

Discussion

*Various types of schools*

Private organisations or schools demonstrated the extreme disparity between the social and economic class structure in education, the ‘haves’ and ‘have-nots’. School fees ranged from state schools’ free education (with nominal fees) to the completely privately operated and funded schools with corporate sponsors and boards of directors/trustees where fees exceeded  
$500,000 USD per year.

Charter schools are independently run public schools granted greater flexibility in their operations in return for greater accountability for academic performance. The charter establishing each school is the foundation of its performance contract detailing the [school's mission](http://www.uncommonschools.org/our-approach), program, students served, performance goals, and methods of assessment.

Charter schools are public schools of choice, meaning that families choose them for their children. They operate with autonomy and freedom from some of the regulations that are imposed upon district/public schools but are accountable for [academic results](http://www.uncommonschools.org/results-for-charter-schools) and for upholding their self-determined charters.

The schools must demonstrate performance in the areas of academic achievement, financial management, and organisational stability. The US uses a student: teaching staff: support staff ratio of 8:1:1 or 10:1:1. Many of the districts are endeavouring to cope with shrinking budgets, aging buildings and resources shortages.

*Funding Structures*

Public free education have nominal, non-mandatory and often subsidised school fees. Private fee paying schools can have fees exceeding $500,00 USD per year, but the majority that I visited ranged between $20,000 and $80,000 USD per year. Health and medical insurance as part of the US salary or remuneration packaging system is being used to cover the expenses of specialist treatment, education and/or interventions for children with ASD.

If a child requires additional specialist interventions, a specialised educational setting/program or therapeutic modality that the local department of education cannot provide, the parents must engage in extensive annual litigation proceedings against relevant education departments to gain funding or financially support for any additional services their child requires. Each year the families must engage a comprehensive medico-legal team to assess, evaluate, report and provide expert testimony supporting their case, with legal costs often exceeding $40,000 USD. These funding sources have reinforced the need for extensive, comprehensive and detailed data-driven practices (ABA) as cost-benefit/student progress analysis is integral to some schools economic viability, validation and survival.

*Coaching/mentoring / advocacy*

In many of the schools I visited provided coaching and mentoring to further support students through various educations challenges, psycho-emotional issues, transitional difficulties, communication, positive relationship/social interactions and advocacy. Mentoring or coaching is a one-to-one, non-judgemental relationship in which both staff and students support, empower and encourage each other. This was an effective additional layer to support and assist, not only students, but families, siblings and carers. Mentoring and coaching also provide another layer of accountability to ensure individual learning plan goals are addressed and academic/scholastic progress is positive.

*Mental health*

Every school I visited had psychological/counselling support services and professionals on-site. Support, interventions and therapy for the various mental health, co-morbid diagnoses and disorders often heavily correlated and associated with ASD where programmed interventions are integral to the school day and success of programs.

Currently, most NSW state high schools have a school councillor on staff (with varying degrees of availability), but available time slots, professional experience/capacity of the councillor and the immediate complexities of ASD cases often place many ASD students in the too-hard basket. Referrals to outside agencies and organisations for pyscho-emotional support are challenging as community adolescent mental health services are scarce and or expensive.

*Personalised curriculum*

Students with ASD have a massive range of educational backgrounds, skills, interests, talents, strengths and learning styles, and may have histories of trauma, poverty, co-morbid diagnoses, mental health issues, familial dysfunction and neglect that have affected their development and learning.

In the US I observed many high-quality personalised teaching-learning programs that were underpinned by a commitment to providing developmentally responsive education that is targeted at the specific learning needs of each student:

* + All personalised curriculums/learning programs are characterised by each student having an individual education plan.
  + Curriculums are relevant to students’ identified interests and learning needs. Opportunities exist for hands-on application of skills learned. A variety of teaching strategies are used to accommodate students’ different backgrounds, interests and learning styles.
  + There are small teacher-to-student ratios, allowing a high level of interaction and support and use of technology embedded in program delivery ensuring differentiation.
  + Many schools incorporated cross-curriculum strategies by using project/enquiry/problem/challenge-based learning as a successful vehicle for personalised learning.

I witnessed high levels of engagement form all students, fantastic ingenuity, imagination and creativity, quality learning and innovative projects design, high academic standards, authentic assessment and quality feedback loops. Progress, outcomes and standards were mapped and staff collaborated on differentiation, adjustments and feedback.

*Inclusion/practice/least restrictive environment*

Most school I visited in the US were segregated, specialised environments supporting students with ASD. With the ratification of the United Nations Convention on the Rights of People with Disabilities in 2008, inclusionary practice has become a global effort and movement to promote equal and active participation of all people with disability.

In relation to education, the Convention states that persons with disability should be guaranteed the right to inclusive education at all levels, regardless of age, without discrimination and on the basis of equal opportunity. However, the schools and educational institutions I visited in the U.S presented views of supporting the highly complex, complicated and intricate needs of the students with ASD was able to be met by mainstream schooling.

Inclusive education is a contentious term that lacks a tight conceptual focus, and that may contribute to its misconception and confused practice. At a whole school level, good practices include adjustments to cultures, policies, and practices; development of support structures; regimes of funding support, and the provision of and access to equitable learning opportunities.

At an in-class level, differentiating curriculum or introducing alternative curriculums, the application of universal design, use of information technologies, individual planning through the individual education plan, and a focus on quality teaching for all students are the most prominent practices.

During one school visit, at Meristem, they believed that inclusion is core to their mission; however, they view the current focus of inclusion as a ‘one-way’ definition: the student with learning barriers included into a mainstream school setting, which should be the least restrictive environment. It has been their experience that many students with ASD have highly complex and complicated needs and transitioning into an inclusive classroom or school can be fraught with anxiety, depression, frustration, confusion, isolation, disconnection, lack of belonging etc… and in that state of mind the question is raised as to how positive or restrictive that environment is. Also in that state of mind the perception of a student can be less favourable and quite negative; however, if we flip inclusion so that mainstream students learn in the supported specialist environment where it is conducive and safe, then learning, behaviours and interactions change.

Conclusion

Schooling structures, philosophies and educational models for students with ASD are as complex, complicated and intricate as the condition itself. There is little consensus as to best practice or best model for schools to adopt. However, there is some consensus about essential strategies:

* + a conducive and sensory sensitive school environment
  + ABA + data driven centred practice
  + personalised curriculum
  + problem-based learning
  + psychological support and interventions, mentoring/coaching
  + authentic or transformative learning experiences.