

Autism Connect Early Evaluation Report 2025

UNE Research Team

Professor Vicki Bitsika, AM, PhD, CF, FCCLP, FRSN

Professor of Neuroscience
Brain Behaviour Research Group
School of Science & Technology
University of New England Armidale NSW 2351 Australia

Email: vicki.bitsika@une.edu.au

Phone: (02) 6773 3774

Professor Christopher F Sharpley, PhD, FAPS, FCCLP, FRSN

Brain-Behaviour Research Group
Chair of Research, School of Science & Technology
School of Science & Technology
University of New England Armidale NSW 2351 Australia

Email: csharple3@une.edu.au

Phone: (02) 6773 2596

Mr Christopher B Watson

PhD Candidate
Brain Behaviour Research Group
School of Science & Technology
University of New England Armidale NSW 2351 Australia

Email: cwatso62@une.edu.au



Acknowledgements

This report represents the dedication and persistence of several people. First, Viryan Collins-Rubie initiated the project as a means of offering autistic children and their families much needed understanding and evidence-based support. In doing so, she exemplified the very best of attitudes held by responsible service-providers and employers who not only want to deliver a service, but who also wish to find out just how well it works. That takes vision, courage, and generosity.

Second, throughout this report there are multiple pieces of data attesting to the commitment made by Liz Barclay to guide her team of educators to ‘get it right’ no matter how new or demanding the evaluation process was, and how much extra work it added to her already very full days. We also acknowledge the contributions of Abby Marshall and the other Coordinators who worked in the ACE Programme.

Third, the parents involved in the project deserve sincere thanks for supporting it in a very practical way, i.e., by placing their children in the ACE Programme and telling us about their own experiences. Our very big thanks also go to the children who participated and who worked so hard to achieve their goals—they are lovely little people, and we wish them the very best.

Finally, the UNE Researchers who were fortunate enough to be invited to undertake the evaluation are mindful of the privilege that they have enjoyed. To work so closely with dedicated professionals, the children they supported, and Viryan herself, has been a great journey we would not have missed.

Table of Contents

Autism Connect Early	3
Meaningful Inclusion Pillars 1, 2, 3, 4	3
Transdisciplinary Model of Intervention	6
Parent Involvement and Support	7
Child Involvement and Support	8
Research Data-Collection, Foci, Methods , and Processes	11
Child-Focused Data Gathering Tools and Methods	11
Parent-Focused Data Gathering Tools and Methods	14
Educator-Focused Data Gathering Tools and Methods	15
Discussion of Evaluation Findings	17
Overall Group Evaluation	18
Nerang ACE Programme	18
Holmview ACE Programme	19
Tarneit ACE Programme	21
Case Study (<i>n=1</i>) Evaluation of Children and Their Parents	23
Case Study 1 Findings	23
Case Study 2 Findings	28
Case Study 3 Findings	33
Case Study 4 Findings	37
Case Study 5 Findings	41
Case Study 6 Findings	46
Case Study 7 Findings	50
Case Study 8 Findings	54
Case Study 9 Findings	58
Case Study (<i>n=1</i>) Evaluation of Educators	62
Case Study 1 Findings	62
Case Study 2 Findings	65
Case Study 3 Findings	67
Global Summary of Evaluation Findings	70
Evaluation of ACE Against Research Questions	70
Evaluation of ACE Programme Against National Standards	72
Commendations	74
Recommendations	75
Appendices 1—8	76

Autism Connect Early

The ACE is an Early Intervention Programme designed to prepare young autistic children to reach their potential for inclusion within wider school, social, and community settings. To achieve this goal, the ACE focuses on exposing children to opportunities for ‘meaningful inclusion’ that emphasise their unique perceptions, assets, interests, and preferences. Understanding of the child’s particular needs sets the foundation for creating ‘meaningful’ learning experiences, activities, and contexts. In broad terms, learning opportunities aim to support the child’s capacity for inclusion by building readiness (i.e., child possesses the skills needed to participate effectively in selected inclusive contexts), comprehension (i.e., child understands the important components of the inclusive context), and resilience (i.e., child self-regulates when challenged by some aspect of the inclusive context). Importantly, educators are not only trained to understand autism but guided in building empathic relationships with the children they support.

The ACE model for inclusion is in contrast to current ‘passive’ approaches which focus on placing autistic children in mainstream settings that deliver content suited to the needs of neurotypically-developing peers. Further, these environments are high in competing sensory stimuli (e.g., noise, touch, movement) and are therefore experienced as highly aversive and overwhelming by autistic children. This combination of factors not only blocks learning by causing escalations in anxiety, emotion dysregulation, and cognitive load, but also results in social ‘exclusion’ because the child does not demonstrate the pre-requisite skills needed to engage with learning. These features of mainstream settings are recognised as **significant barriers** for children by premier autism organisations (e.g., Autism Awareness Australia), researchers (e.g., Carter et al., 2023), and families (e.g., article by McKinlay et al., 2022 titled *“It feels like sending your children into the lions’ den”* – A qualitative investigation into parental attitudes towards ASD inclusion, and the impact of mainstream education on their child). Therefore, the ACE Programme aimed to remove these barriers by developing an evidence-based and autism-specific model for inclusion that addresses four pillars.

Pillar 1 – Educators

The first pillar targets **educator knowledge, practices and attitudes**. It is essential that educators are well-informed about autism and that they feel confident in their ability to use evidence-based practices to support children with autism in the classroom. Educators’ attitudes about autism and other important aspects, such as valuing and creating a positive identity for the child, not only influence educators’ daily practice but provide a model for shaping the attitudes of peers.

Barriers to Pillar 1

The following factors negatively impact meaningful inclusion:

- Poor education/training on autism in certificates and other degrees.
- Insufficient resources and funding that limits educator ability to implement strategies.
- Inadequate time allocation for professional development.
- Insufficient focus/time to implement strategies for ‘autism friendly’ classrooms and other educational settings.

Enabling Pillar 1

Strategies to enable Pillar 1 include:

- Continuous educator training in an immersive model.
- Assisting educators to apply practical strategies for learning and behaviour-change such as prompting, reinforcement, and use of visual supports.
- Allocating time for continuous professional development, pre-planning, feedback/refinement of effective approaches.
- Collecting data on competence and accuracy of educators' skills.
- Cohesion among centre staff.
- A clear mission that underpins the goals of the programme, because this allows inclusion strategies to be more effective.

Pillar 2 – Peers

The second pillar recommends **preparing neuro-typical peers** to interact with the autistic child in positive ways. This is achieved by building an understanding of autism, encouraging the acceptance of difference, and educating peers on how to appropriately interact with autistic classmates to support relationship-formation and play.

Barriers to Pillar 2

Factors that can impede neurotypical-peer acceptance of autistic children:

- Lack of educator time and resources to provide consistent opportunities for supported interactions between autistic children and their peers.
- Fear (arising from misunderstanding atypical behaviour), leading to negative attitudes towards autistic children
- A lack of practical skills needed to communicate and play with autistic classmates.
- Peers imitating 'non-supportive' responses modelled by significant adults.

Enabling Pillar 2

Strategies to enable Pillar 2 include:

- Educating peers about the autistic child/children who will be entering their classroom in specific/practical terms—especially in relation to any atypical responses.
- Educator vigilance on any early warning signs of typical-peer anxiety and adverse responses with the focus on supporting and reinforcing positive alternatives.
- Using common interests and preferred activities to promote shared play.
- Teaching peers how to communicate effectively with autistic classmates.

Pillar 3- Environment

The third pillar is based on **designing a physical, social, and sensory environment** that meets the learning needs of children with autism. This means reducing factors that may be overwhelming for the child, and which may create an inefficient place for learning. These factors include management of sensory elements, particularly sound and light, and creation of a safe space in which an autistic child can retreat to regain balanced arousal if they feel overwhelmed. This enables autistic children to self-regulate and learn skills in a comfortable environment before generalising those skills to potentially challenging mainstream contexts. Other aspects for consideration include physical arrangement (e.g., delineated areas for different activities), structure (e.g., predictable social/activity routines), and role-definition (e.g., part child is to play within activities and interactions)

Barriers to Pillar 3

Barriers to Pillar 3 in the educational environment include:

- Mismatch between the autistic child's capabilities/resources and the learning demands they are exposed to.
- Poorly organised and communicated routines and expectations.
- Low knowledge on the setting events (in the environment) that escalate anxiety and other adverse states.
- Inconsistencies, across educators, in interaction style, physical presentation, and use of visual supports.

Enabling Pillar 3

To enable Pillar 3, the following factors should be considered:

- Consistent audits of the learning environment 'from the child's perspective' to identify issues that could cause child discomfort and distress.
- Creation of safe spaces for retreat.
- Use of spatial sequencing, sensory zoning, and compartmentalisation.
- Maintaining social safety and security.
- Using natural lighting, noise management, and spatial organisation.

Pillar 4- Individual Child

Pillar 4 encourages **continuous and systematic preparation** of the individual autistic child for the mainstream environment. This includes development of important skills such as emotional and behavioural self-regulation, self-help, communication, coping with change and sensory challenges, and socialisation. Pillars 1, 2, and 3 need to be developed in tandem with these skills, to ensure the mainstream environment is prepared appropriately for inclusion. A vital aspect of Pillar 4 is clear communication and cooperation between families, educators, and therapists to teach consistent skills and provide a sense of structure and safety across environments as skills are built and generalised. Timing of transitions from one setting to the next (e.g., ACE Programme to start of school) is best decided on in light of particular childrens'

needs and tolerances. Increasingly, such transitions are being timed following a period of re-establishing routines and learning experiences at the ‘home’ setting (i.e., ACE Programme) at the beginning of the school year while, at the same time, implementing an individualised transition process into the ‘receiving’ setting (i.e., Primary School) in readiness for Term 2. This option avoids the excessive stress, confusion, and fear that can arise for an autistic child who is exposed to a new environment following a large holiday break.

Barriers to Pillar 4

Success in Pillar 4 is impeded by:

- A lack of clear communication between links (e.g., educators, parents).
- Lack of refinement of strategies to support child communication deficits and social difficulties (which can lead to challenges in participation, play, and relationship-formation) in the mainstream setting.
- Poorly structured environments, tasks, and interactions
- Unpredictable and/or inconsistent transition processes.

Pillar 4 is highly dependent on the other Pillars. Lack of educator knowledge on how to best understand and support the child can result in negative experiences of inclusion and loss/non-use of existing coping skills. Absence of peer education can lead to bullying and social exclusion. Poorly designed learning environments are likely to cause high levels of distress for the child, making it difficult to learn, interact, and participate.

Enabling Pillar 4

The following approaches are relevant to enabling Pillar 4:

- All Pillar 1, 2, and 3 strategies outlined above.
- Timed (at pre-determined intervals) use of screening tools and ongoing evaluation processes aimed at determining a child’s strengths and needs, sensory profile, and skills, in order to program effectively for them.
- Establishing a continuous data-collection process capable of yielding information to be used in decision-making and planning.
- Use of evidence-based strategies to teach needed skills such as antecedent-based intervention, modelling, prompting, reinforcement, and visual supports.
- Identifying/addressing the in-context (i.e., learning environment) and out-of-context (i.e., family, home, community) factors likely to influence learning outcomes and skill development.

The ACE Programme uses a **transdisciplinary model** of therapy to provide effective, evidence-based early intervention. The model sets the foundation for service delivery and, within the ACE Programme, involves a team of specialist therapists, ACE Coordinators, and ACE educators collaborating to develop/implement approaches to improve child learning, behaviour, and well-being. Importantly, whilst each team member performs a set of well-defined duties, communication and collaboration across team members occur on a continuous basis. The specialist therapists are responsible for assessing children, developing needs-based interventions, and applying interventions to children for a fixed number of hours per week. The ACE Coordinators ensure that all procedures and activities involving children and their

families occur according to appropriate accreditation and ethical standards. These personnel are also responsible for all data handling, data integrity plus data reviews, and provide a 'bridge' between educators and researchers. The ACE educators apply therapist-driven interventions with children throughout their day in the ACE room. To maximise effective delivery of evidence-based services to children, educators receive direct/continuous training from the specialist therapists and ACE Coordinators. Further, educators have access to online training on topics such as understanding the diversity of the autism spectrum, building social awareness/skills, creating environments and activities high in sensory balance and structure, and using autism-specific tools such as visual schedules and PECS.

Parent Involvement and Support

Parents are viewed as important contributors to the educational decisions made in relation to their children and play a role in assessment (e.g., Vineland-3), programme planning (e.g., skills targeted for intervention), and feedback. Parents and other caregivers also have access to face-to-face and online education, mentoring and coaching to help them in becoming more confident in understanding their children's unique learning needs. The transdisciplinary team works closely with parents/caregivers to determine family priorities and goals for intervention. Goals are reviewed on a quarterly basis. The ACE Programme has an open-door policy, and parents are invited to observe and participate in goal-directed intervention with their child's early intervention educators and therapists, and to develop the skills and confidence required to actively participate in their child's development.

Specific procedures for gathering, and incorporating, parent input include:

- Quarterly goal setting and intervention planning meetings.
 - Therapy consultations using direct intervention and parent coaching to build capacity in communication, self-regulation, play, social participation, community participation and toilet training.
- Daily feedback on progress, participation, and challenges whilst the child is in attendance.
- Support to generalise the skill building strategies to the home in the form of weekly 'parent support packs' that recommend individualised experiences for families to use with the child to help in transferring important skills to another environment. These parent support packs are based on experiences, strategies, and items used within the ACE Programme that have been observed to be motivating and effective in supporting the child work towards achieving early intervention goals. By using the same strategies and items across the childcare and home settings, the child is exposed to the predictability and familiarity needed to make learning meaningful.

Child Involvement and Support

The children who accessed the ACE Programme had a number of important features in common. These features not only described children's educational and support needs, but also became the basis on which programming goals, learning opportunities, and learning resources were created, refined, and expanded. Therefore, programme development and delivery was 'shaped' by children's needs and avoided becoming a 'formula' that was applied in a generic manner. In brief, these children:

1. Had received a diagnosis of Autism Spectrum Disorder—Severity Level 3 for DSM-5-TR Criteria A and B (indicating the necessity for 'very substantial support').
2. Were identified as showing evidence of a co-existing neurodevelopmental disorder such as Global Developmental Delay or ADHD.
3. Were non- or minimally-speaking. Low expressive communication was often associated with persistent difficulties in receptive language.
4. Displayed high levels of sensory processing difficulties.
5. Had experienced 'failure' in previous childcare settings as reported by their parents.

Children accessed core ACE interventions between the hours of 9:00am to 2:30pm within long daycare settings. Children were supported by a team of educators and therapists who delivered individualised daily programmes that 'held' a series of differentiated (for each child) long- and short-term goals developed from parent interviews, standardised tests (Parent and Educator) and direct observations of child functioning. All goals were developed to assist children in learning important skills essential to immediate and future learning. The educator/therapist to child ratio was kept at 1:2 to 1:4 during delivery of core interventions and decisions on ratio were made in relation to factors such as the child's familiarity with the skills being taught, the learning context (e.g., group *vs.* individualised learning opportunities, inside *vs.* outside experiences, directed *vs.* spontaneous or incidental learning) and each child's daily capacity for self-regulation, and changes to expected routines/events. Children were able to attend the Centre outside the core intervention times (e.g., a standard long daycare arrangement) and were supported by familiar educators during these times to maintain consistency and predictability. While all twelve domains of the ACE Programme (see Table 1 below) were united by the overarching ethos of helping students to participate in 'meaningful inclusion', this aspect received dedicated focus during free play time (usually during outdoor activities) when opportunities for interaction with typically-developing peers were at a maximum. Further, it was planned that 'meaningful inclusion' be supported within the ACE Programme (to encourage interactions, connections, and play opportunities with other autistic peers) and the broader Centre environment via access to 'mainstream' rooms, contexts, activities, as well as interactions with neurotypically-developing peers.

Table 1. Child Developmental Domains and Defections

Domain	Definition Developed from Review of Literature
Cognition and Learning	The ability to think, read, learn, remember, reason, and attend to material in the environment. The child uses these skills in a combined manner to effectively receive incoming information, process that information and (based on understanding) construct a meaningful response. Examples include knowledge of basic facts (experienced and taught), understanding of concepts, and solving problems.
Social and Emotional	The ability to initiate and sustain interactions with others and build friendships using appropriate verbal and non-verbal social behaviours. Examples include sharing, turn-taking, reading others' emotions, and adhering to social expectations. These skills also relate to detection, regulation and control of own emotions across social situations and contexts.
Play	The ability to select, self-direct, and create/shape activities for self-enjoyment that lead the child to experience positive/meaningful social, cognitive, and psychomotor outcomes. Play activities can be planned (by an educator), spontaneous, joint (involving other children) or independent. Play activities progress in relation to transition points (phases) such as undirected/non-intentional, solitary, observed, parallel, associative, and cooperative.
Language	The ability to use speech, gestures, body movements and other language modalities to deliver clear messages on knowledge, needs, wants, and opinions. Examples include speaking (single word or sentences), labelling feelings, and voicing concerns. Also included are the capacity to attend to and understand the language messages of others as these relate to instructional, social, and play contexts.
Communication	The ability to transmit and exchange information with another person using vocal, verbal and non-verbal means (e.g., gestures, symbols, signs). If the child signals a message to another person using challenging behaviour, then this is also considered communication.
Fine Motor	The ability to use small muscles specific to the fingers, hands, and wrists to complete a range of manipulation tasks requiring dexterity, controlled movement, and hand-eye coordination. Examples of fine motor skills include writing, grasping small items, buttoning clothing, turning pages, eating, cutting with scissors, and using computer keyboards.
Gross Motor	The ability to use large muscles in the arms, legs and torso to physically navigate and move in the environment. Examples of gross motor skills include walking, running, throwing, lifting and kicking. These skills also relate to body awareness, reaction speed, balance, strength, and coordination.

Domain	Definition Developed from Review of Literature
Adaptive Capacity	The ability to meet daily demands and participate in routine activities present in key environments (e.g., childcare, kindergarten, home) in an age/developmentally appropriate manner. Adaptive skills cluster into conceptual skills, social skills (as outlined above), and practical life skills. Adaptive capacity progresses from supervised, prompted, to independent demand-fulfilment. The focus during teaching these skills is on accuracy, appropriateness, and achieving independence.
Self-Care	This is a subset of Adaptive Capacity and relates to the ability to complete basic personal care activities of daily living in an age-appropriate manner. Examples include washing, feeding, toileting, dressing, and self-protection (e.g., avoiding common dangers) skills. The focus during teaching these skills is on accuracy, appropriateness, and achieving independence.
Inclusion—ACE	The ability to participate positively in planned opportunities for social interaction, relationship building, and activity completion with ACE peers and within the group learning activities of the ACE room. Those activities could be structured (i.e., formal group lesson) and/or child-initiated (i.e., spontaneous interactions/cooperation with peers).
Inclusion—Mainstream	The ability to participate positively in planned opportunities for social interaction, relationship building, and activity completion within mainstream contexts. ‘Traditional’ inclusion involves entry of the ACE child into the wider kindergarten (i.e., exposure to unfamiliar context, educators, and peers), whereas ‘Reverse’ inclusion involves entry of mainstream peers into the ACE room to participate in activities for which the ACE child demonstrates competencies.
Coping Behaviour	The ability to, when faced with aversive conditions or demanding circumstances, respond with positive behaviour options instead of challenging behaviour. The teaching focus is on building the child’s repertoire of coping skills so that (s)he has some capacity to control and manage difficult situations. These skills will vary greatly according to the child’s functional level, educational context, and home circumstances.

Research Data-Collection Foci, Methods, and Processes

The UNE Research Team collaborated closely with ACE Programme personnel to create a set of data-collection instruments and procedures that would become ‘embedded’ in daily practice to facilitate gathering of information about the ‘progress’ and ‘improvement’ of children and the ‘robustness’ of core interventions. It was decided, based on review of the research into autism-focused educational interventions, to adopt a ‘triangulated’ research strategy using **multiple** data sources, participants (i.e., children, parents, and educators), and data-collection time periods (i.e., pre-determined time points and continuously). In this way, the ACE programme would be evaluated in relation to particular child-, parent-, and educator-focused outcomes (see discussion below).

Child-Focused Data Gathering Tools and Methods

The data-collection process was designed to answer questions about ‘*changes in child skill-development in the 12 developmental domains*’, and involved two methods of measurement: first, administration (at designated time points) of standardised assessments; and second, daily data collection on progress towards achieving short-term goals linked to childrens’ individualised learning programmes. The first type of measurement was conducted, upon child enrolment, using the ACE Developmental Checklist, co-developed with UNE Researchers, in order to establish a baseline of specific child skills across the key developmental domains. The first type of measurement also included administration of the Vineland Adaptive Behaviour Scales—Third Edition: Caregiver and Teacher (Vineland-3) and the Sensory Profile (see Table 2 below for administration time points). Importantly, because the Vineland-3 and Sensory Profile-2 are norm-referenced standardised assessments designed to map a child’s abilities in comparison to neurotypically-developing same-age peers, they are most useful for the purpose of classification and overall tracking but do not necessarily constitute precise measures of skill development in line with specified programme goals. A further caution arises from the fact that both measures gather information via ‘other’ report by asking parents and educators to judge the child’s performance within a dedicated time period. This reliance on others’ impressions of the child (whilst constituting a frequently used data-collection method in research) can be open to limitations such as (using parents informants as an example) stress and fatigue, their own emotional state and presence of conditions such as depression and anxiety, over-or-under reporting of child behaviours, and difficulties in putting observations into words. Research findings from studies conducted by UNE Researchers with autistic children/adolescents show that mothers’ own levels of anxiety influenced how they reported their childrens’ levels of anxiety (e.g., Bitsika et. al., 2015; Bitsika & Sharpley, 2017). The decision to take Vineland-3 and Sensory Profile-2 measures at designated points in time, while needed for psychometric validity, focused measurement on particular pre-determined reporting periods that might or might not have contained extraneous factors (e.g., child illness, inconsistent care, medication changes) that could have influenced child performance and data trends. To counterbalance the impacts of ‘unknown’ extraneous factors in the ACE Programme, UNE Researchers recommended use of a Setting Events Checklist (which they had previously used as a data-collection tool and which was modified for applicability to the early childhood setting) but this was not possible in the research period. However, such tools permit identification of child-oriented, environmental, and situational factors that contribute to variations in child responses, therefore, providing greater capacity to explain data trends and a basis for modifying factors that have been shown to adversely affect the child’s daily functioning.

Table 2. Data-Collection Protocol—CHILD

Standardised Measure	Description/Focus	Collection Time Points
ACE Developmental Checklist	Parent-reported child intake interview recording diagnosis, functioning estimate, family structure, previous education and parent expectations. Parents also completed a Consent Form at this time.	On enrolment
Vineland-3: Parent Comprehensive	Structured parent-reported questionnaire designed to measure the child's overall adaptive behaviour (i.e., ABC score) in communication, daily living skills, socialisation, and motor skills. The Vineland-3 also contains a Maladaptive Behaviour Domain that was not completed during the research period. Scores in each area were referred to the autistic child's performance in each domain in comparison to a norm-referenced group of TD same-age peers.	On enrolment Start each Term 1 Exit from ACE
Vineland-3: Educator Comprehensive	Structured teacher-reported questionnaire completed by educators following a six-week period during which they observed the child's responses in the ACE Programme. Domains and scoring procedures are the same as for the parent-reported version of the Vineland-3.	6-weeks post enrolment Start of Terms 1 & 3 each year
Sensory Profile-2: Parent#	Parent-reported survey designed to measure the child's sensory processing patterns and how they affect daily activities.	On enrolment
Sensory Profile-2: Teacher#	Educator-reported survey designed to measure the child's sensory processing patterns in the educational setting.	6-weeks post enrolment

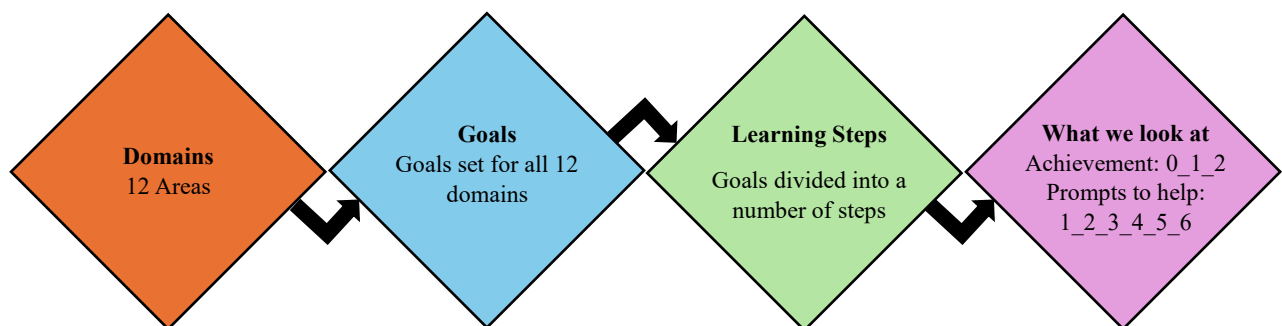
Not included in the data analysis.

The limitations discussed above argue for caution in over-reliance on data obtained from standardised tests. Wider research recommends that child progress also be measured in relation to specific skills that are directly taught and supported in the learning environment. Importantly, the fundamental approach for intervention delivery in the ACE Programme (based on research recommendations) involved use of an $n=1$ design that would permit educators to 'build' goals and educational activities that related directly to the specific learning needs of each child. This was the basis for incorporating the second type of measure (i.e., daily data-collection) and much effort was dedicated to creating procedures for writing Daily Programmes and establishing a robust basis for collecting data on child progress. Essentially, these programmes focused on supporting children to develop the skills needed to enhance daily living skills, independence, social connection (with peers and adults), participation, and inclusion. In contrast, 'behavioural training' formats focused on 'minimising' or 'removing' challenging behaviour were excluded on the basis that, if children were assisted to build the skills to successfully manage the daily

demands they confronted, ‘negative responses’, which have been shown to arise from gaps in skill, would be ‘crowded out’. Such proactive approaches fall in line with humanistic, neuro-affirming, and ethical frameworks.

The flowchart below summarises the elements of daily programme planning and delivery. Information gathered from standardised assessment, parent priorities for child learning, educator observations, and additional data-collection methods (e.g., Speech Therapy assessment) was used to create an individualised profile of child skill needs and strengths. The broad areas depicted in the twelve developmental domains were used to create the ‘skeleton’ of the daily programmes. While all programmes contained intervention goals for each domain, the focus and content of goals varied for each child. To assist children in achieving goals in a graduated and supportive manner, each goal was further divided into a number of ‘learning steps’ that provided the necessary scaffolding for children to understand and master the skills being taught. Finally, child progress was measured, on a daily basis, in relation to whether they had accomplished particular learning steps. Educators recorded ‘achievement’ on a three-point scale (i.e., 0 = skill absent; 1 = skill emerging; 2 = skill mastered) and ‘additional prompting’ using a six-point scale to record how much extra input and direction (beyond the initiating instruction) an educator delivered in order to the child to display the learning step. The scale ranged from 1= independent display to 6 = needed complete hand-over-hand to display the learning step.

Daily Programme Elements



Parent-Focused Data Gathering Tools and Methods

Parents of the ACE children were invited to partner with educators in making all decisions relating to their child's learning and to take an active role in providing input and feedback on their child's functioning. Parents were also supported to implement strategies, derived from their child's daily programmes, in the home to extend and generalise skills caregivers wanted their child to learn. ACE educators built strong links with parents to ensure caregivers received empathy, understanding, and support as they navigated their children's diagnosis and needs whilst also remaining optimistic about the future. The effects of the ACE Programme on parent functioning were evaluated with two questions '*Is the ACE Programme capable of creating positive changes in parent confidence as this factor relates to their autistic child?*' and '*How satisfied are parents with the impacts of the programme on their child's functioning?*' Both questions were examined by gathering self-reported information from parents: changes in 'confidence' were monitored with the Parent Confidence Scale (PCS), and level of 'satisfaction' was assessed using the Parent Satisfaction Scale (PSS). The Parent Confidence Scale was originally developed by the UNE Researchers and had been previously used in research that monitored pre- and-post levels of parent confidence following access to parent training. The original scale was adapted in collaboration with ACE personnel to ensure that it applied well to the childcare setting. The Parent Satisfaction Scale was co-developed by UNE Researchers and ACE personnel to ensure that it tapped the key elements of the programme. Subsequent to setting up the parent-focused data-collection process, it became evident that monitoring parenting stress and parent resilience would assist in further understanding the experiences of parents so that they could be better supported and advocated for. Inclusion of these two self-report questionnaires occurred at the conclusion of the research process but are mentioned here as an example of the responsiveness of ACE personnel to parent needs (see Table 3 for further details on parent scales).

Table 3. Data-Collection Protocol—PARENT

Measure	Description/Focus	Collection Time Points
Parent Confidence Scale	This is an 11-item survey adapted from UNE research to monitor parent self-reported confidence during their child's enrolment in the ACE Programme. Each item is rated on a 10-point scale which invites parents to report on ' <i>How confident are you in ...</i> ' with scores ranging from 0 = 'Not at all confident'; 50 = Moderately confident; 100 = Perfectly confident.	On enrolment Start of Terms 1 & 3 each year Exit

Parent Satisfaction Scale	This is a 10-item survey co-developed by UNE Researchers and ACE Coordinators to monitor the level of satisfaction parents reported with specific aspects of the ACE Programme delivery (items 1—7 only). Each item invites parents to report on <i>‘The degree of satisfaction you feel regarding your child’s participation in the ACE Programme [in relation to specific skills]’</i> . Each item was rated on a 10-point scale with scores ranging from 1 = Not at all to 10 = Very much so.	On enrolment Start of Terms 1 & 3 each year Exit
Parenting Stress Index: SF*	The short form (SF) of this survey consists of 36-items that identify the sources of parenting stress in relation to parenting distress, child difficulties, and parent-child dysfunctional interactions. Caregivers use a 5-point scale (Strongly agree; Agree; Not Sure; Disagree; Strongly disagree) to rate their experiences. *Introduced in late 2025 (not included)	Enrolment Exit
Connor-Davidson Resilience Scale*	This is a 25-item self-report survey that measures ‘psychological resilience’ which is defined as the ability a person has to thrive in the face of adversity. Caregivers reported on their experiences using a 5-point scale (0 = Not true at all; 1 Rarely true; 2 = Sometimes true; 3 = Often true; 4 = True nearly all of the time). *Introduce in late 2025 (not included)	Enrolment Exit

Educator-Focused Data Gathering Tools and Methods

The data-collection process also extended to exploring changes in educator self-reflections by addressing the question *‘Do educators report changes in their practices as a result of supporting autistic children in the ACE Programme?’* This form of monitoring focused on tracking ‘change’ in relation to confidence, self-efficacy, and job satisfaction and was considered highly relevant to evaluating whether the transdisciplinary model for training and support influenced educator (see Table 4 for description of educator-focused measures) However, this aspect of the data-collection proved to be challenging in the sense that educators were not always able to complete surveys within designated time periods, and their responses were sometimes inconsistent. Anecdotally, this aspect of the data-collection appeared not to be given priority by educators who demonstrated (as would be expected) greater dedication to caring for children, running their programmes, and collecting information on their progress. It is expected that practitioners participating in a ‘living intervention’ would respond in such a

manner and, in retrospect, greater attention could have been paid to offering more training in self-report monitoring and emphasising the ways in which such a process would be very helpful in drawing conclusions about programme impacts. Due to these issues, the educator-focused findings should be interpreted with caution. As mentioned earlier in this report, the UNE Researchers and ACE Coordinators collaborated on producing an ACE Educator Fidelity Checklist which was not able to be implemented as a tool for tracking educator practices, and this precludes conclusions on the accuracy and consistency with which educator-implemented interventions occurred.

Table 4. Data-Collection Protocol—EDUCATOR

Measure	Description/Focus	Collection Time Points
Educator Confidence Scale	This is a 14-item survey adapted from UNE research to monitor educator self-reported ' <i>level of confidence you feel in your ability to handle the situations presented below.</i> ' Each item is rated on a 10-point scale which invites educators to report on their experiences on a 10-point scale ranging from 0 = 'Not at all confident'; 50 = Moderately confident; 100 = Perfectly confident.	Start of Terms 1 & 3 each year End of year
Educator Self-Efficacy & Satisfaction Scale	This is a 15-item survey adapted from the Teachers' Self-Efficacy and Job Satisfaction Scale (Tschannen-Moran & Hoy, 2001) originally used to identify levels of self-efficacy and their association with job satisfaction. The current survey contained 12 self-efficacy and 3 job satisfaction items that invited educators to record their experiences within the ACE Programme on a 9-point scale ranging from 1 = Nothing to 9 = A great deal.	Start of Terms 1 & 3 each year End of year

Discussion of Evaluation Findings

In auditing and reviewing (for accuracy) the available data on child-, parent-, and educator-focused measures, some inconsistencies and gaps in data-recording were identified. It was necessary to address these areas to ensure that the ACE Programme evaluation was based on the most reliable data sets. This would ensure that any conclusions drawn from the data were accurate, robust, and conservative. To achieve this, the UNE Researchers set a number of criteria that were taken from guidelines on action-based research to make decisions on whether particular data-collection activities would be included or excluded from the evaluation.

Criterion 1 Limit analysis to Centres, with an ACE Programme, that showed the most systematic, timely, and compliant (to collection requirements) monitoring process.

Criterion 2 Focus analysis on Centres that maintained identifiable, accurate, and complete data-records.

Criterion 3 Include child-focused data records (extracted from standardised testing and achievement on daily programmes) that were most complete, consistent, and regular

Criterion 4 Limit analysis to data sets that showed evidence of a consistent and complete monitoring process for the longest continuous time period to permit accurate representation of changes in the factors

Table 5. Decisions on Selection of Data Sets Submitted to Analysis

Criterion	Included Data Sets	Excluded Data Sets
1	Nerang, Holmview, Tarneit	All other Centres
2	Nerang, Holmview, Tarneit	All other Centres
3	Data ‘forms’ with few gaps. Manageable.	Data ‘forms’ with many gaps. Unimageable.
4	Complete data collected $\leq$ 12 months	Incomplete data despite time period.

In summary, the findings discussed below represent the most complete data sets collected over a minimum of one and (most frequently) two years by educators in the Nerang, Holmview, and Tarneit Centres. Child ‘change’ was mapped in relation to the Vineland-3: Parent and Educator scores as well as the skill-based data obtained from the daily programme recording for seven developmental areas: Adaptive Capacity, Communication, Fine Motor Skills, Gross Motor Skills, Play, Self-Regulation, and Social-Emotional. Parent ‘change’ was examined via analysis of findings from the Parent Confidence Scale and Parent Satisfaction Scale. Educator ‘change’ was explored minimally (due to few data records) using information from the Educator Confidence Scale and Educator Self-Efficacy and Job Satisfaction Scales.

The UNE Researchers adopted two research approaches to analysing the ‘included’ data to ensure that meaningful conclusions that were based on the questions set for the research could be reached. The first approach focused on establishing group findings to evaluate the overall effectiveness of the ACE Programme. Importantly, this approach does not reveal the specific experiences of individuals in an in-depth manner (which was of keen interest to this project) but does offer a basis for drawing broad conclusions. The second research approach applied an $n = 1$ analysis that examined the **specific** experiences of **individuals** (children and parents), thus providing a basis evaluating specific aspects of the ACE Programme to permit comment on ‘*what worked*’ and ‘*where to go next*’.

Overall Group Evaluation

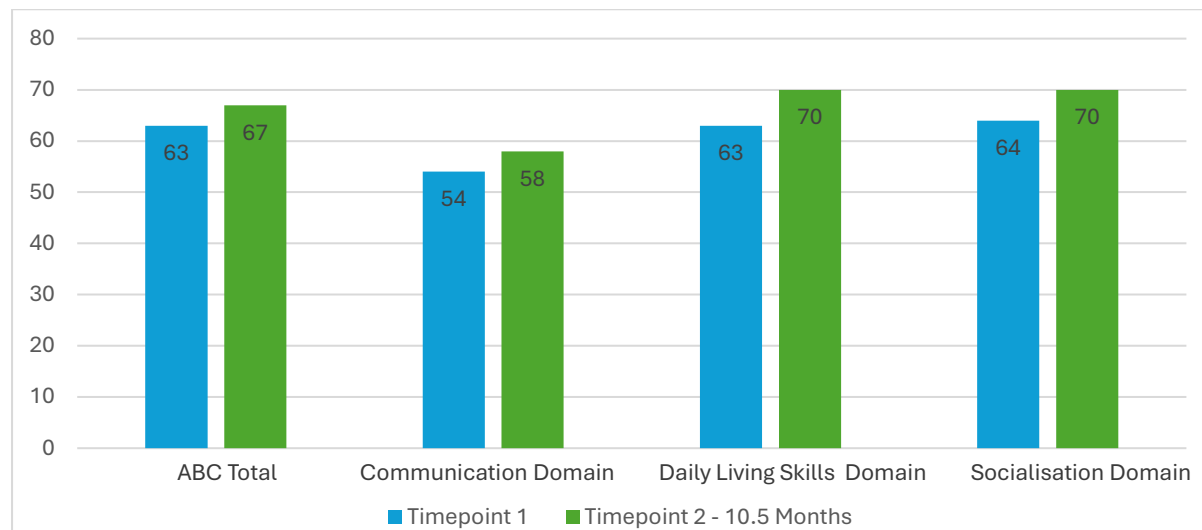
Nerang ACE Programme

Parent-Reported Group Vineland-3 Trends:

The group findings for Nerang were calculated using data from 14 children who showed the most consistent/accurate data during the period between December 2022 and December 2024. The duration between data collection at timepoint 1 (T1) and timepoint 2 (T2) ranged from 6 months to 14 months, with an overall group average of 10.5 months. The lowest ABC Total score at T1 was 45 and the highest was 82 with a group average of 63. ABC scores at T2 ranged from 44 to 91 and the group average increased to 67.

At the Vineland-3 domain level, the lowest Communication score at T1 was 24, the highest was 82 and the group average was 54. At T2, the lowest Communication score was 27, the highest was 100 and the group average increased to 58 from T1. The lowest Daily Living Skills score at T1 was 39, the highest score was 93, and the group average was 63. The lowest score at T2 was 54, the highest was 98, and the group average increased to 70. The scores for Socialisation at T1 ranged from 42 (lowest) to 94 (highest) with a group average of 64. At T2, Socialisation scores ranged from 36 (lowest) to 98 (highest) and the group average increased to 70. As shown in Figure 2 below, the group average for all three Vineland-3 domains showed an increase (i.e., greater skill acquisition) between T1 and T2 with Daily Living Skills demonstrating the greatest increase of 7 points closely followed by Socialisation which increased 6 points.

Figure 2. Group Vineland-3 Parent-Reported Change Over 10.5 Months

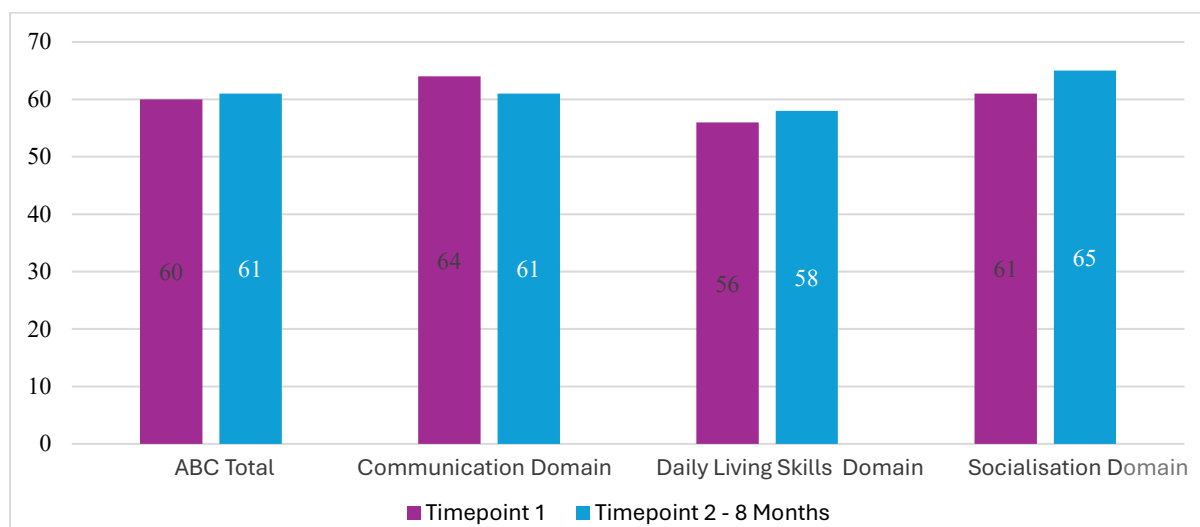


Educator-Reported Vineland-3 Group Trends:

Only five children were found to have Vineland-3 (Educator Comprehensive) data collected at two timepoints while they participated in the Nerang ACE Programme. This does not permit direct comparison with parent-reported information presented above. The duration between T1 and T2 ranged from 5 months to 14 months with the average being 8 months. The ABC total scores at T1 ranged from 57 to 63 and the group average was 60. At T2, scores ranged from 54 to 67 and the group average was 61. As shown in Figure 3, the Daily Living Skills and

Socialisation domains increased over the 8-month period while the Communication domain decreased by 3 points.

Figure 3. Group Vineland-3 Educator-Reported Change Over 8 Months

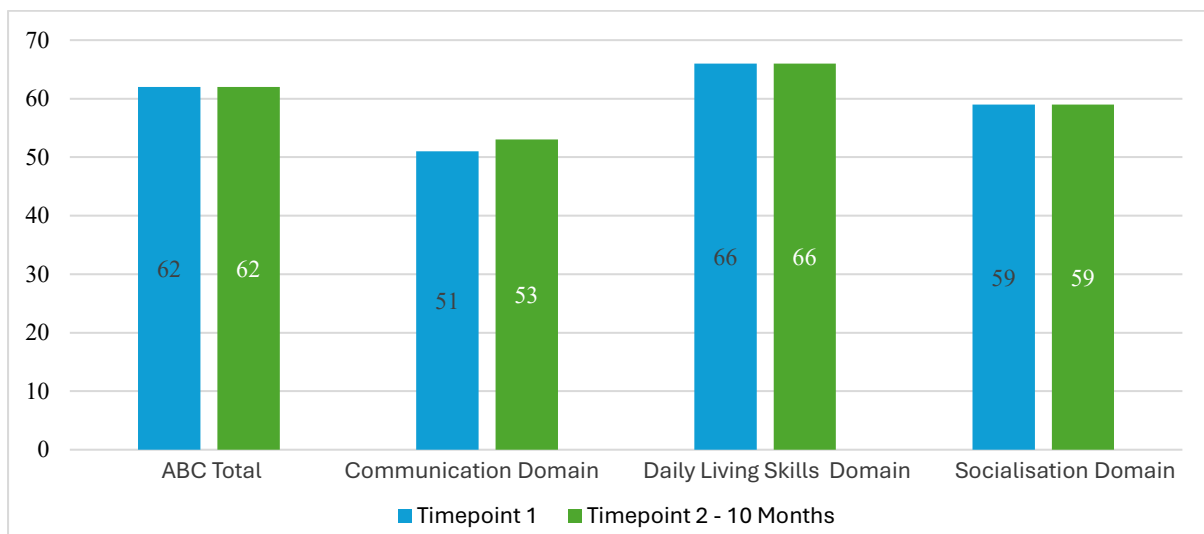


Holmview ACE Programme

Parent-Reported Group Vineland-3 Trends:

The group findings for Holmview were calculated using data from 14 children, with those data being collected between January 2023 and April 2025. The duration between data-collection points (i.e., T1 and T2) ranged from 4 months to 17 months, with an overall group average of 10 months. The lowest ABC score at T1 was 50 and the highest was 83 with a group average of 62. ABC scores at T2 ranged from 48 to 80 and the group average remained the same at 62. The lowest score in the Communication domain at T1 was 28, the highest was 86 and the group average was 51. At T2, Communication scores ranged from 32 (lowest) to 79 (highest) and the group average increased to 53. T1 scores for the Daily Living Skills domain ranged from 54 to 100 and the group average was 66. The domain core at T2 ranged from 51 (lowest) to 93 (highest) while the group average remained the same at 66. The scores for Socialisation at T1 ranged from 42 (lowest) to 84 (highest) with a group average of 59. At T2, the Socialisation score ranged from 40 to 88 and the group average remained the same at 59. As shown in Figure 4 below, all domain scores remained the same over the 10-month period except for Communication which decreased by 2 points.

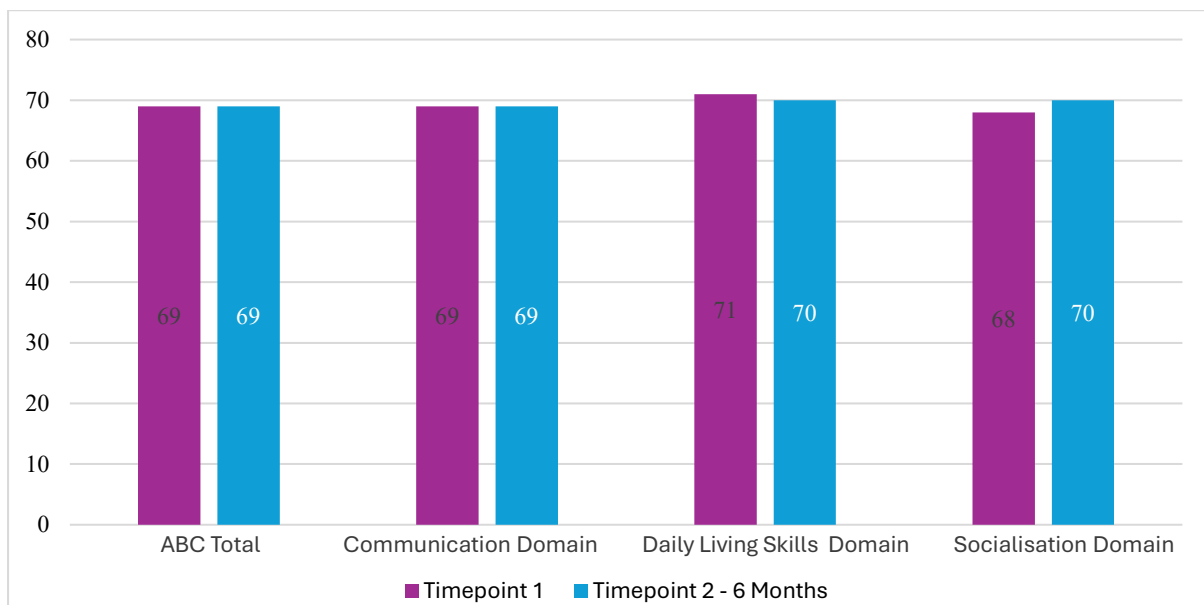
Figure 4. Group Vineland-3 Parent-Reported Change Over 10 Months



Educator-Reported Vineland-3 Group Trends:

Educator data were collected at two time points for a smaller group of 9 children in the Holmview ACE Programme. The duration between the T1 and T2 time points ranged from 2 months to 11 months with the average being 6 months. The ABC total scores at T1 ranged from 55 (lowest) to 98 (highest) and the group average was 69. At T2, the ABC total scores ranged from 54 (lowest) to 101 (highest) and the group average was 69. As shown in Figure 5 below, most domain scores remained the same or very similar over the 6-month period with the Daily Living Skills score dropping by 1 point and the Socialisation increasing by 2 points.

Figure 5. Group Vineland-3 (Educator Comprehensive) change over 6 months

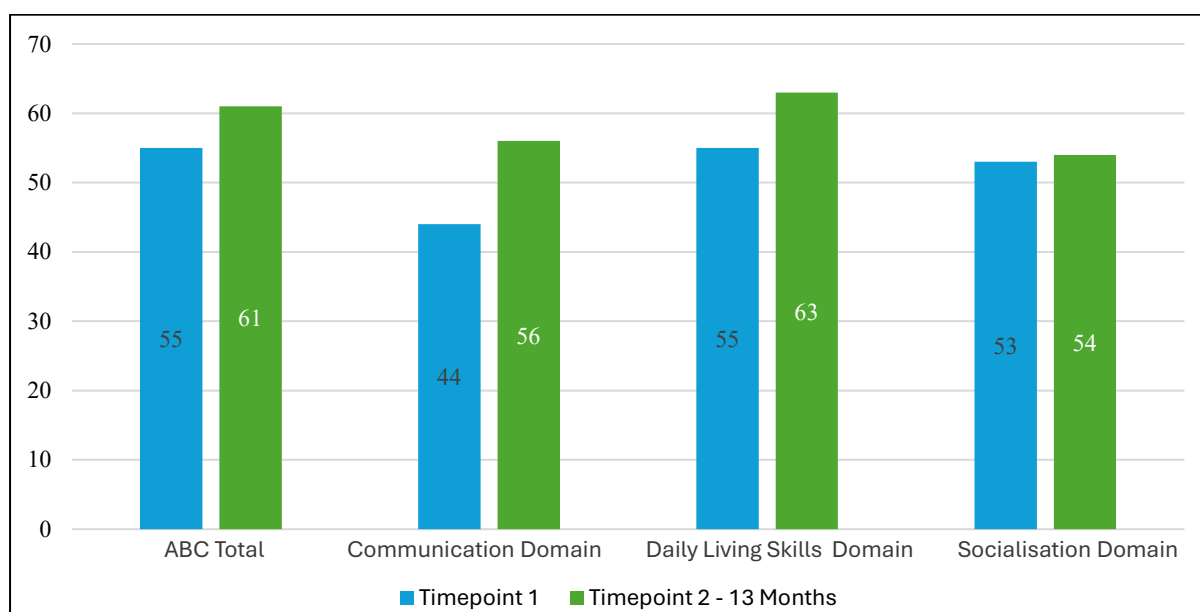


Tarneit ACE Programme

Parent-Reported Group Vineland-3 Trends:

The very low frequency of data-collection at Tarneit location resulted in group findings being calculated using information from only 4 children – this could have reflected low enrolment numbers or poor parent uptake for Vineland-3 completion, rather than gathering information on fewer children. These data were collected between May 2023 and December 2024. The gap between time points (T1 and T2) ranged from 10 months to 16 months, with an overall group average of 13 months. The lowest ABC score at T1 was 44 and the highest was 66 with a group average of 55. ABC scores at T2 ranged from 50 (lowest) to 75 (highest) and the group average remained the same at 61. The lowest score for the Communication domain at T1 was 28, the highest was 63, with the group average being 44. At T2, Communication scores ranged from 42 (lowest) to 74 (highest) and the group average increased to 56. T1 scores for the Daily Living Skills domain ranged from 45 (lowest) to 70 (highest) and the group average was 55. Scores at T2 for this domain ranged from 48 (lowest) to 81 (highest) and the group average increased to 63. The scores for Socialisation at T1 ranged from 45 (lowest) to 64 (highest) with a group average of 53. At T2, Socialisation ranged from 42 (lowest) to 74 (highest) and the group average increased by 1 point to 54. As shown in Figure 6 below, all domain scores increased over the 13-month period with the largest growth occurring in the Communication domain (by 12 points).

Figure 6. Group Vineland-3 Parent-Reported Change Over 13 months

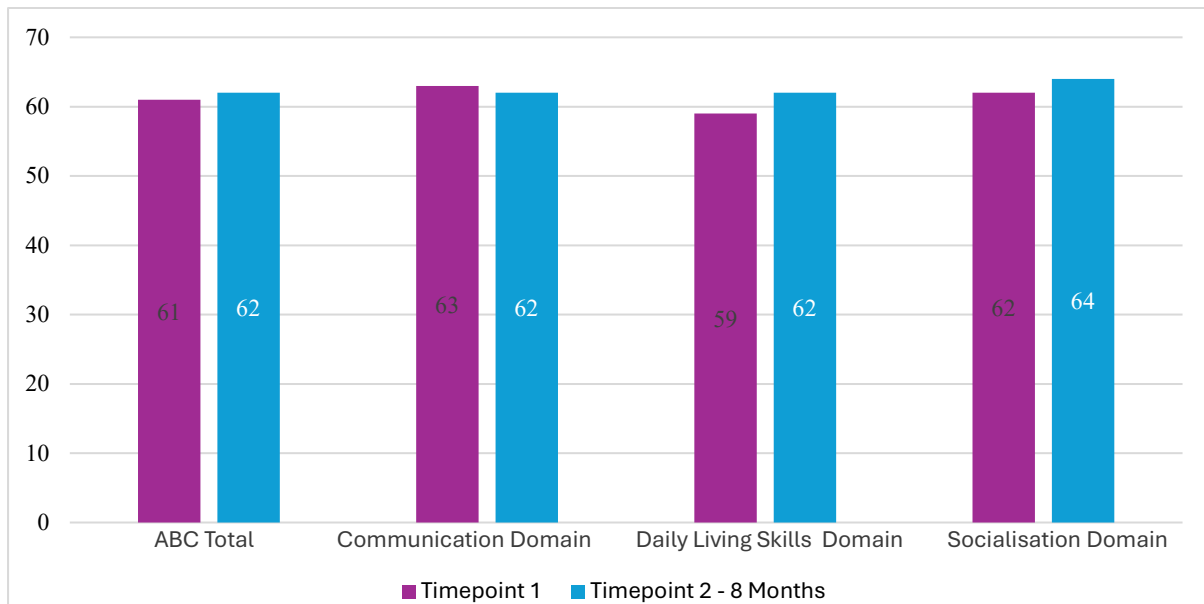


Educator-Reported Vineland-3 Group Trends:

Nine children had Vineland-3 educator-reported data, collected at two timepoints, in the Tarneit ACE Programme. The gap between T1 and T2 timepoints ranged from 4 to 11 months with the average being 8 months. The ABC total scores at T1 ranged from 51 (lowest) to 78 (highest) and the group average was 61. At T2, ABC scores ranged from 53 (lowest) to 76 (highest) and

the group average increased 1 point to 62. As shown in Figure 7 below, the Daily Living Skills and Socialisation domain scores increased over the 8-month data-collection period while the Communication domain decreased by 1 point.

Figure 7. Group Vineland-3 Educator-Reported Change Over 8 Months



Case Study (*n=1*) Evaluation of Children and Their Parents

This aspect of the evaluation focused on an individualised assessment of responses as a result of participating (children) or involvement (parents, educators) in the ACE Programme. The overall approach involved selecting individual child-parent dyads with the most robust data which focused on their daily programmes (children) and their self-reported levels of confidence and satisfaction (parents). This case study approach was extended to a very small group of educators who had supported a ‘case study child’ and were most diligent in completing the self-reported scales on confidence, self-efficacy, and job satisfaction. Therefore, the discussion of findings below represents data obtained from nine children, nine of their parents, and three educators.

Findings for Case Study 1

The Case Study 1 Child (CS1) was a female with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. She commenced the ACE Programme in January 2023 at 2 years of age and exited in December 2024 at 4 years old. CS1 attended the programme five days per week for a total of 24 months.

CS1 Vineland-3 Parent and Educator Trends:

Figure 8 below maps the change in the Vineland-3 ABC Total and Domain scores for CS1 at entry into and exit from the ACE Programme as reported by CS1’s caregiver. It can be seen that the ABC Total score increased by 17.78% (T1—T2 comparison). Further, in the level of domain changes at T1 *versus* T2, Daily Living Skills demonstrated the highest increase of 46.15%, Socialisation increased to 14.28% and (in contrast) Communication decreased by 6.25%. This child showed sizable improvement in Daily Living Skills and reasonable progress in Socialisation.

Figure 8. CS1 Change in Vineland-3 score (Parent/Caregiver)

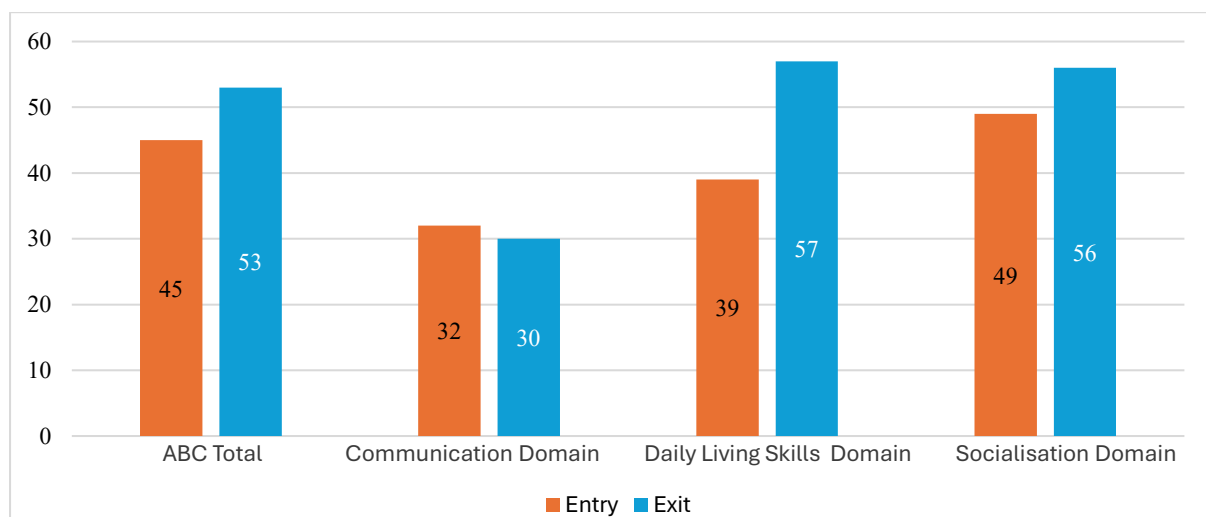
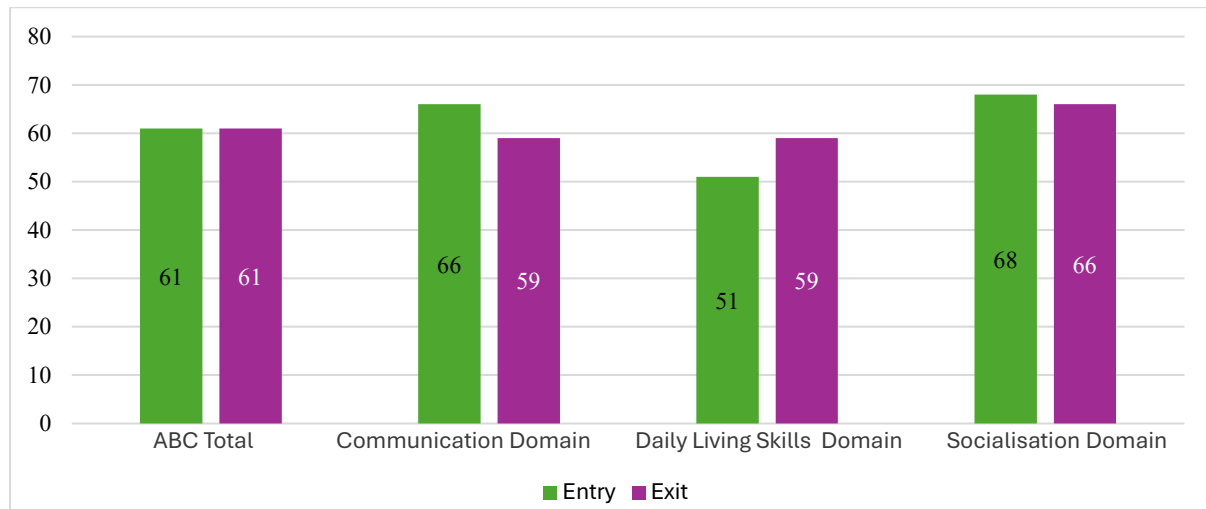


Figure 9 below, shows the educator-reported change in Vineland-3 ABC Total and Domain scores for CS1 at entry into and exit from the ACE Programme. The T1—T2 comparison for the ABC total shows that this score (i.e., 61) remained the same at the two measurement points. The Communication score decreased from 66 to 59 (10.60%) which reflects the reduction skill level also reported by this child’s parent. There was also a negligible decrease from 68 to 66 in

Socialisation from T1 to T2. In contrast, CS1 achieved increases in the score for Daily Living Skills (increased from 51 to 59 and 15.68%).

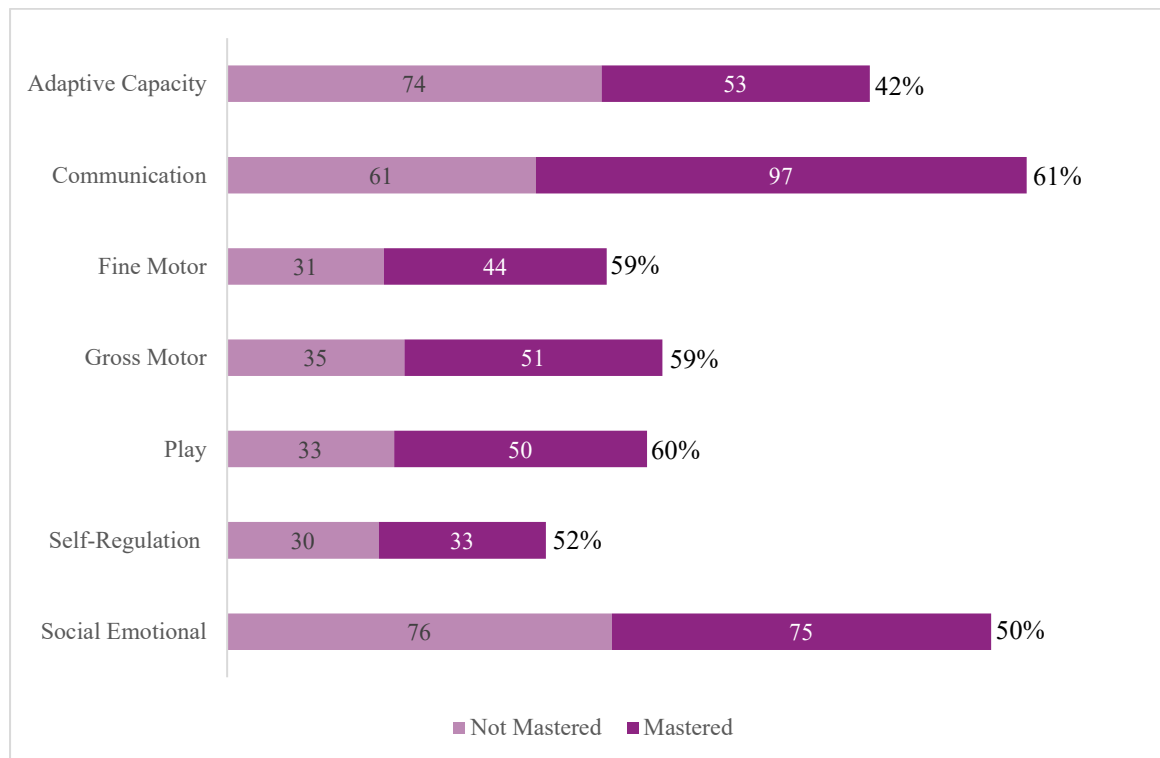
Figure 9. CS1 Change in Vineland-3 score (Educator)



CS1 ACE Daily Programme Trends:

Over the two-year ACE enrolment period, CS1 participated in a total of 743 learning steps across the intervention period. She mastered (i.e., achieved a level of proficiency that allowed consistent and accurate execution of the specific skill being taught) 403 learning steps and achieved an overall mastery rate of 54%. (The full list of learning steps used for this analysis for CS1 is shown in Appendix 1). Figure 10 shows the mastery rate for total learning steps *per* developmental domain. Communication showed the highest mastery rate at 61% and, interestingly, this finding contradicts the T1—T2 decline in skills reported in the parent- and educator-reported Vineland-3 trends. (see Appendix 1 for outline of Communication learning steps). In reviewing the learning steps that were most commonly completed, we can see a strong response to “Hands/Extends object to ask for help”, “Makes eye contact to obtain object” and “Uses PECS to request” which accounted for 116 of 158 learning steps dedicated to communication. In addition, Fine motor (mastery = 44%), gross motor (mastery = 51%) and play (mastery = 50%) learning steps also showed reasonable mastery rates, and this aligns with the Vineland-3 reported improvements. The moderate mastery rates for adaptive capacity, self-regulation and social emotional are consistent with the moderate improvements for the Vineland- 3 Daily Living Skills and Socialisation domains.

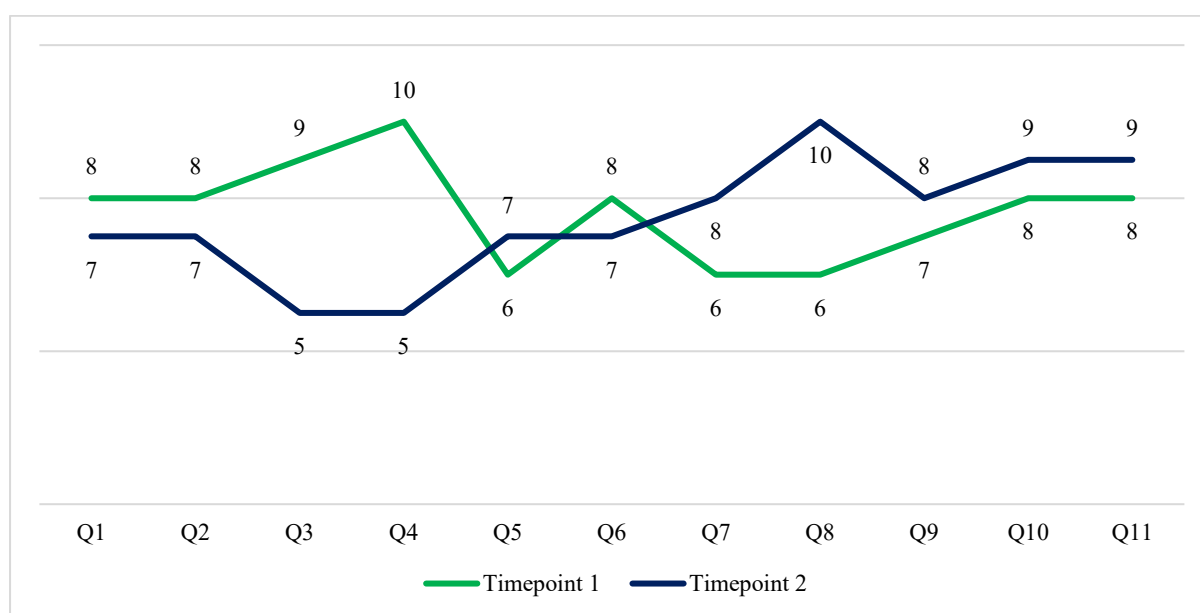
Figure 10. CS1 Mastery Rate for Learning Steps *per* Developmental Domain



CSI Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed at entry to and exit from the ACE Programme, by CS1's Mother. The overall PCS score was 84/110 at entry and 82/110 at exit which indicates reasonably high pre- and post parent confidence and negligible overall change. Figure 11 below, shows item-specific scores in parent confidence together with scale questions to provide ease in identifying the area/issue that resulted in 'confidence changes.' The T1 and T2 graphs show greatest 'negative' change for questions three and four, which signifies decreased confidence in 'responding to negative comments from the public' and 'reduced confidence in the ability to support the child as their needs change over time'. In contrast, the Mother reported increased confidence in 'explaining autism to others' (question 8) suggesting greater understanding of the child's responses. All other items remained at similar levels.

Figure 11. CS1 Item-to-Item Changes for the Parent Confidence Scale

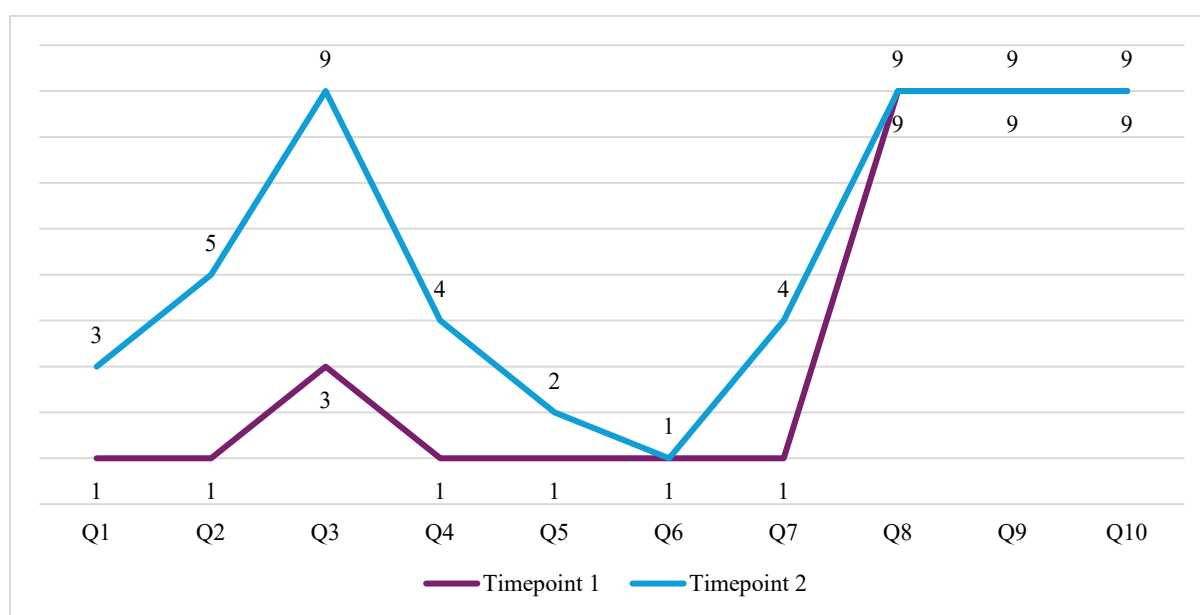


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS1 Parent Satisfaction Trends:

The overall PSS score was 36/90 at entry and 55/90 at exit, which indicates some improvement in overall satisfaction at post-assessment. As shown in Figure 12 below, the mother's T2 ratings for all PSS items (questions) were either the same or higher than those recorded at T1, indicating no reduction in satisfaction related to the 7 scale items which directly dealt with satisfaction. The largest positive change in parental satisfaction was reported for improvements in the child's gross motor skills, followed by fine motor skills, pretend play skills and early learning skills. The Communication rating remained low at T1 and T2. These trends align with the parent-reported information obtained from the Vineland-3.

Figure 12. CS1 Item-to-Item Changes for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS1 Changes:

Across two years of participation, CS1 demonstrated meaningful gains in core adaptive and developmental domains aligned with ACE Programme daily goals and learning steps. Parent-rated Vineland-3 findings showed a 17.78% increase in the Adaptive Behavior Composite, with the largest domain growth occurring for Daily Living Skills (+46.15%) and a moderate improvement in Socialisation (+14.28%). Educator Vineland-3 ratings corroborated growth in Daily Living Skills (+15.68%) with a stable T1—T2 overall ABC score. Educators further reported a small decline in Socialisation (-2.94%). The PSS findings revealed a positive trend in overall satisfaction (T1 = 36/90; T2 = 55/90) with specific increases in satisfaction noted for gross motor, fine motor, pretend play, and early learning.

Overall, CS1's engagement with the ACE programme was high (the child participated in 743 learning steps and achieved an overall mastery rate of 54%). Despite showing the highest programme-level mastery within Communication (61%), gains were concentrated in building foundational requesting and help-seeking skills essential for non-speaking children (e.g., PECS requests, object extension for help, eye contact to obtain items). These skills, which indicate solid improvements in communication might not have generalised to broader communication

skills in other contexts as indicated by the T2 Vineland-3 Communication score and low parent satisfaction rating for the PSS item on communication. It was pleasing to see that overall parent confidence remained largely stable (T1 84—T2 82/110), but there was a dip in confidence as related to ‘responding to public negativity’ and in ‘supporting changing needs over time’. Our research has shown that these are areas of particular difficulty for parents of young autistic children who are in the early stages of their children’s long-term needs and how best to meet them.

Findings for Case Study 2

Case Study 2 Child (CS2) was a male with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. He commenced the ACE Programme in June 2023 at 4 years of age and exited in August 2024 at 5 years old. CS2 attended the programme three days per week for a period of 14 months.

CS2 Vineland-3 Parent and Educator Trends:

Figure 13 below shows the change in Vineland-3 ABC Total and Domain scores for CS2 at entry to and exit from the ACE Programme as reported by CS2’s caregiver. It can be seen that the ABC Total score decreased by 6.38% (T1—T2 comparison). Further, in relation to domain-level changes at T1 *versus* T2, skill development in Communication decreased by 10% and declined for Socialisation by 14.29%. The scores Daily Living Skills remained stable over the intervention period.

Figure 13. CS2 Change in Vineland-3 Scores (Parent/Caregiver)

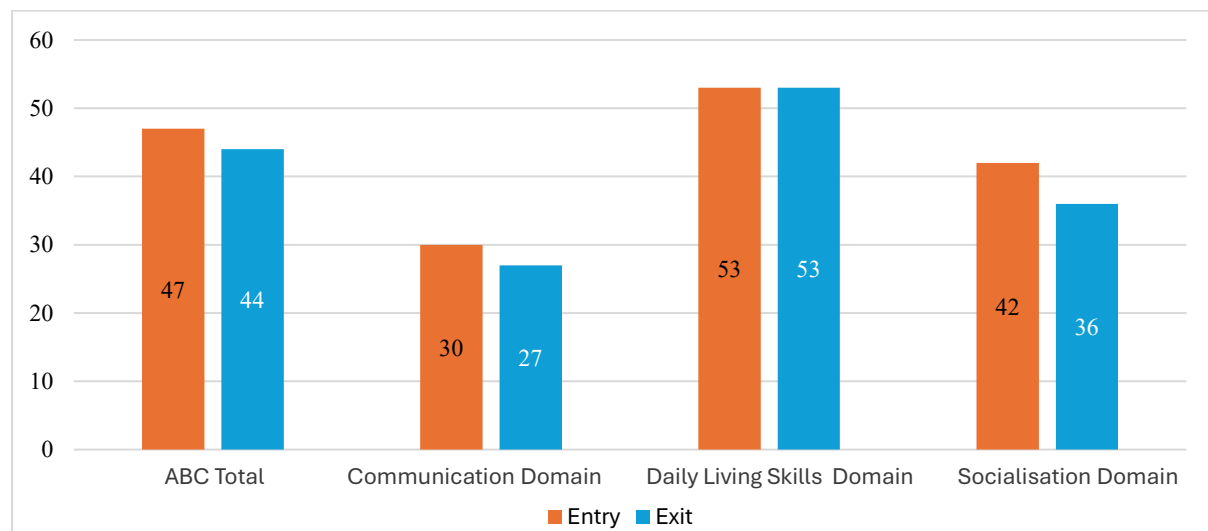
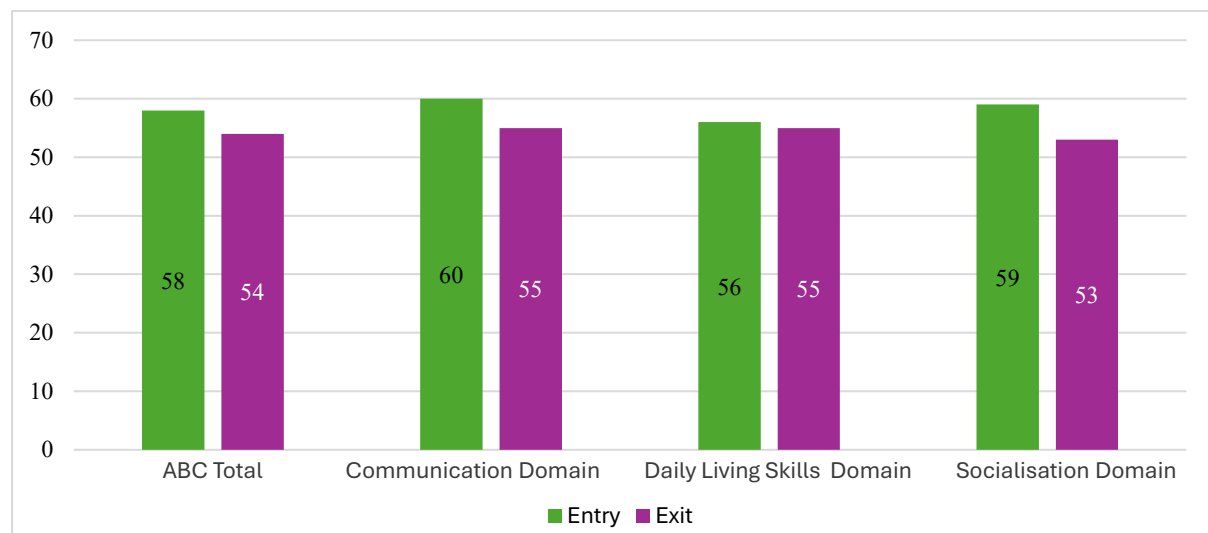


Figure 14 below shows the educator-reported change in Vineland-3 ABC Total and Domain scores for CS2 at entry to and exit from the ACE Programme. The T1—T2 comparison for the ABC total shows that this score decreased by 6.90%. The downward trend also occurred for Communication (T1—T2 decrease of 8.33%), Daily Living Skills (T1—T2 decrease of 1.79%), and Socialisation (T1—T2 decrease of 10.17%). While educator-reported scores across Vineland-3 domains were slightly more optimistic than those of the caregiver, they confirmed decreases in skill achievement.

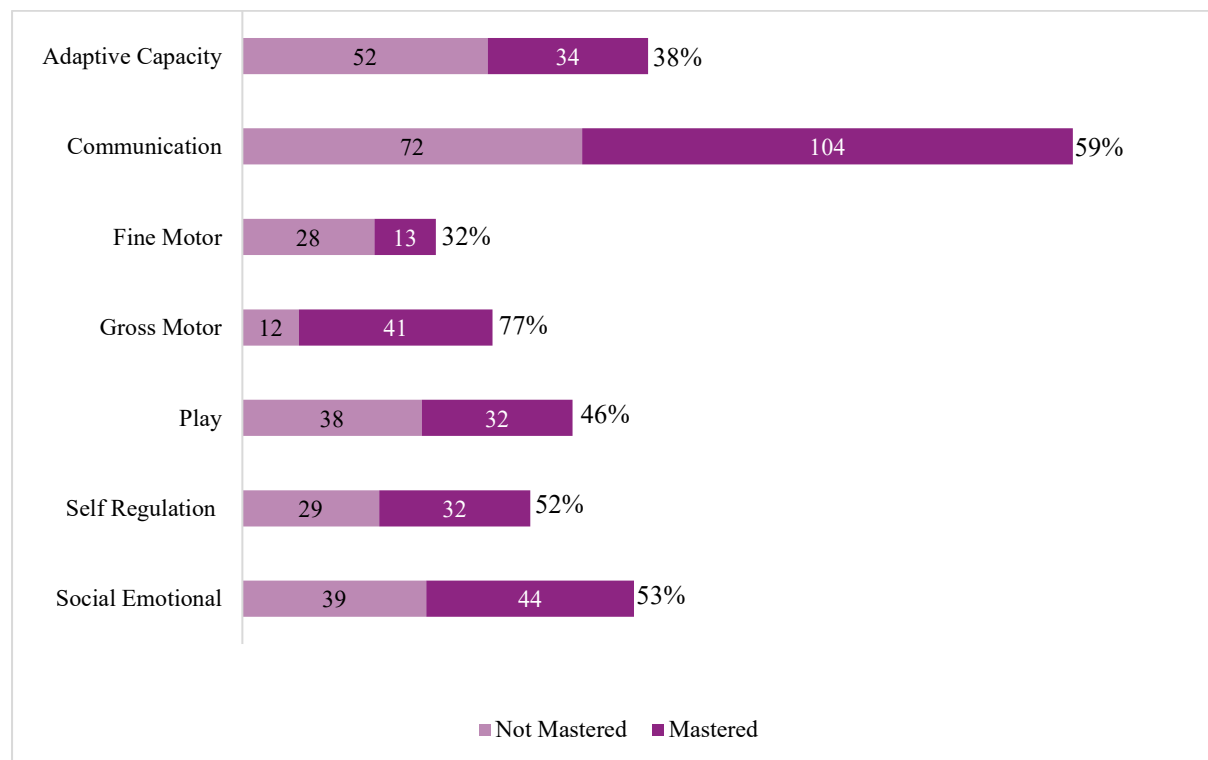
Figure 14. CS2 Change in Vineland-3 Scores (Educator)



CS2 ACE Daily Programme Trends:

Over the 18-month enrolment period, CS2 participated in a total of 570 learning steps and mastered 300 of these, resulting in an overall mastery rate of 53%. (The full list of learning steps used for this analysis for CS2 is shown in Appendix 2). Figure 15 below shows the mastery rate for the total number of learning steps *per* developmental domain. Gross Motor development showed the greatest mastery rate (i.e., 77%) and Communication, which was endorsed as declining from T1—T2 in the parent- and educator-reported Vineland-3 findings, showed a mastery rate of 59% at the specific learning step achievement level. This child was exposed to basic receptive (e.g., learning step = ‘Follows instructions to complete an action’) and non-verbal communication (e.g., learning step = ‘Makes eye contact to obtain object’) activities which indicates substantial communication difficulties. Importantly, achievement in more complex domains such as ‘self-regulation’ (mastery rate = 52%) and ‘social emotional’ (mastery rate = 53%) showed pleasing progress despite the low number of learning steps the child was exposed to.

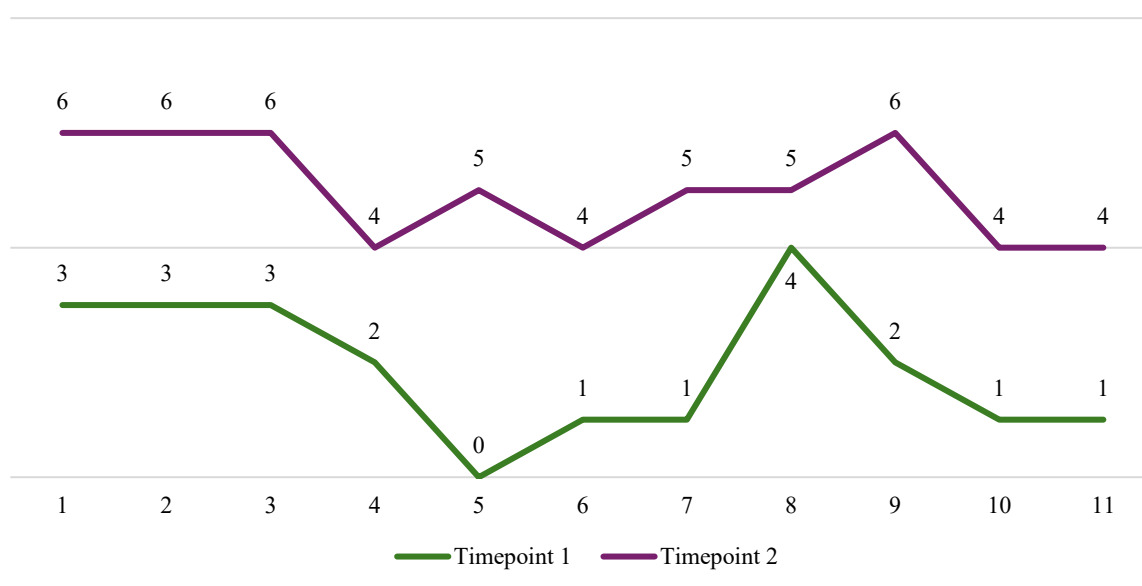
Figure 15. CS2 Mastery Rate of Learning Steps *per* Developmental Domains



CS2 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed at entry and exit from the ACE Programme by CS2's Mother. The overall PCS score was 21/110 at entry and 55/110 at exit which suggests a moderate increase from a very low confidence level reported at T1. Figure 16 below reveals that this mother reported greater 'confidence' across all items of the PCS. In particular, she reported a five-point increase for item 5 ('responding to unfamiliar situations') and greater confidence, by four-points, for 'helping the child to develop play with others' and item 9 'understanding the child's sensory preferences'. These findings indicate that CS2 experiences positive effects on personal confidence as a consequence of her child participating in the ACE Programme.

Figure 16. CS2 Item-to-Item Changes for the Parent Confidence Scale

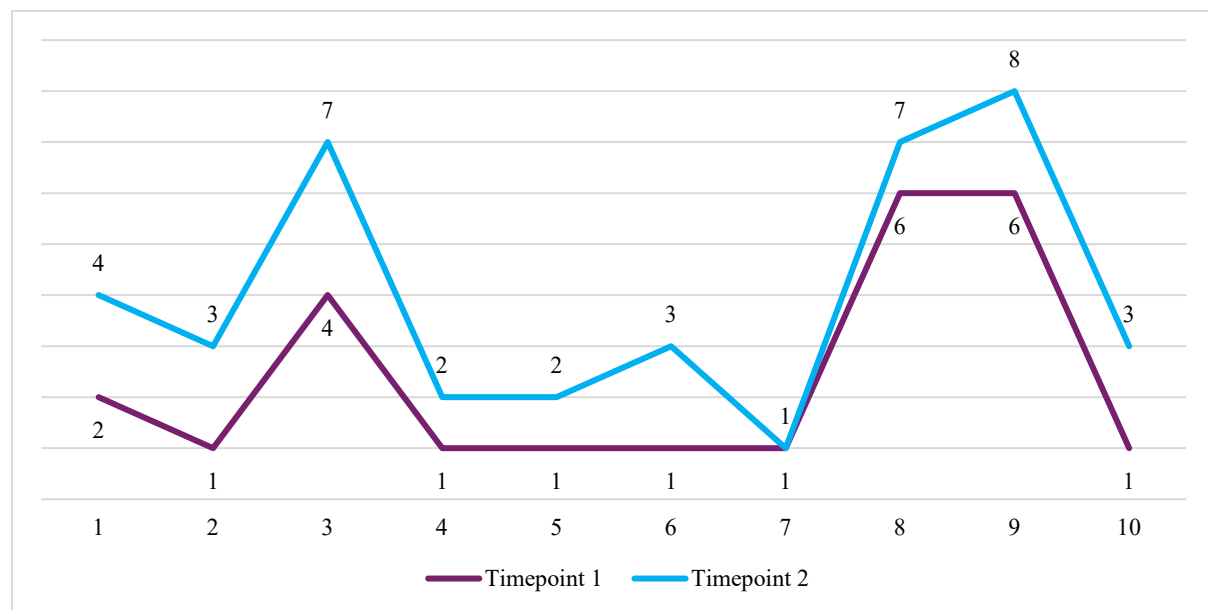


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS2 Parent Satisfaction Trends:

The overall PSS score at entry was low (i.e., 24/90) and 40/90 the exit score. This suggests only slight increase in parent satisfaction and the item-to-item pattern scores remained relatively similar from T1 to T2. As displayed in Figure 17 below, this parent provided the same or slightly higher rating for all questions, indicating no reduction in satisfaction any of the issues raised by the PSC. The largest increase in ‘satisfaction’ ratings occurred for ‘gross motor skills’, followed by ‘communication’ and ‘fine motor skills.’ The score for early learning skills did not improve and remained very low and could indicate this parent’s frustration at CS2 not meeting her expectations which might have over-estimated his current capabilities, but this is only speculation.

Figure 17. CS2 Item-to-Item Change for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS2 Changes:

The findings for CS2 reveal a mixed pattern of ‘change’ depending on the data-collection method under consideration. The parent- and educator-reported Vineland-3 data showed a general decline across adaptive behaviour (in general) and specific domains of functioning (i.e., Communication, Daily Living Skills, and Socialisation). It is worth noting that the limitations of the Vineland-3 (e.g., other-reported, norm-reference scoring) are likely to have contributed to this. In contrast, the daily programme data (which focus on achieving specific skills to support particular needs) showed steady improvement in communication and gross motor skills and acquiring important pre-requisites needed for self-regulation and social-emotional functioning. Further, CS2’s mother showed very low levels confidence, which improved across all areas of the PCS.

Findings for Case Study 3

Case Study 3 Child (CS3) was a female with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. She commenced the ACE Programme in January 2023 at 2 years of age and exited in December 2024 at 4 years old. CS3 attended the programme five days per week for a duration of 24-months.

CS3 Vineland-3 Parent and Educator Trends:

Figure 18 below, represents the change in Vineland-3 ABC Total and Domain scores for CS3 at entry to and exit from the ACE Programme as reported by CS3's caregiver. It can be seen that the ABC Total score remained relatively stable with a negligible decrease of 1.56% (T1—T2 comparison). This trend towards 'negligible decrease' was also evident for Daily Living Skills (reported skill reduction = 9.68%) and Communication (reported skill reduction = 3.17%). Only the Socialisation domain showed a small increase, of 3.23%, skill development during the intervention period.

Figure 18. CS3 Changes in Vineland-3 Scores (Parent/Caregiver)

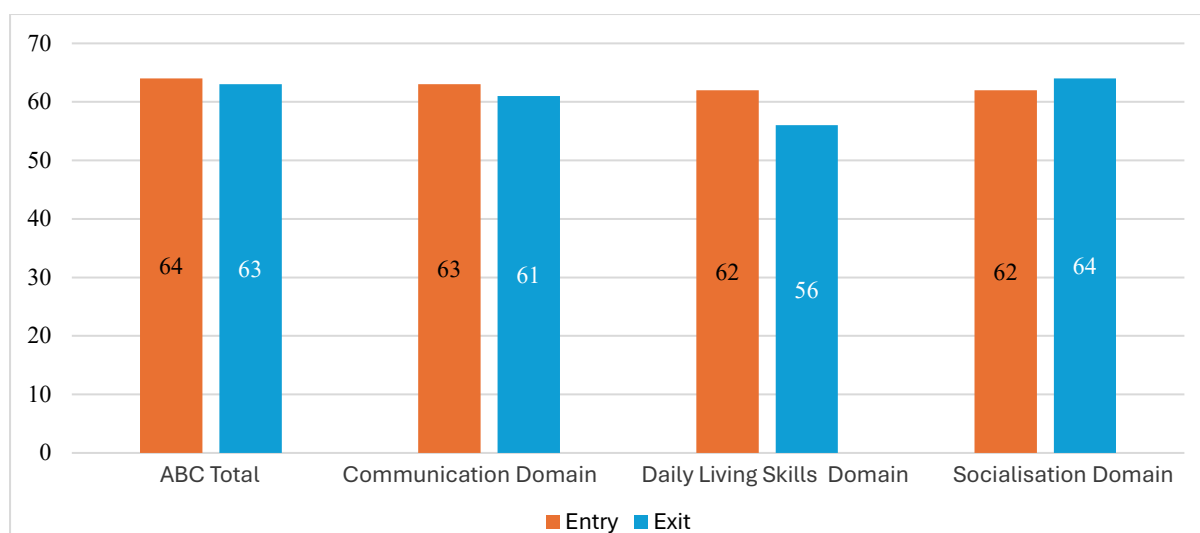
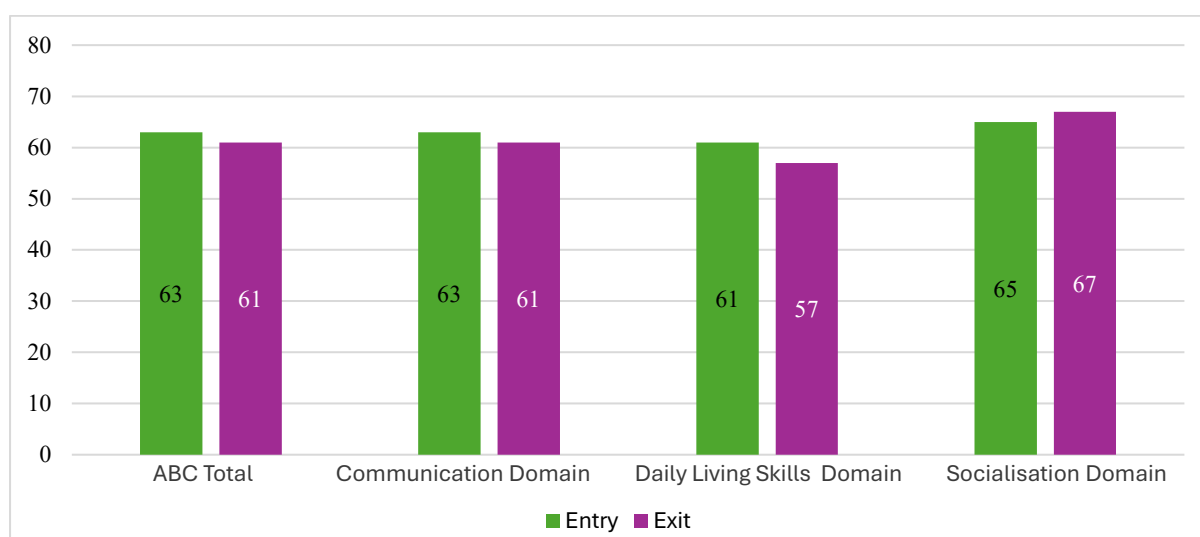


Figure 19 below summarises the educator-reported change in Vineland-3 ABC Total and Domain scores at entry to and exit from the ACE Programme. The T1—T2 score trends indicate that the ABC Total decreased by 3.17%, with similar decreases in Communication and Daily Living Skills, with reported skill reduction being = 3.17% and 6.56% respectively. The Socialisation domain showed an increase of 3.08%, indicating a very minor positive change in this area. Overall, the reported score increases/decreases are minor for the parent- and educator-reported Vineland-3 findings and, as such, cannot be used to suggest a deterioration in adaptive behaviour.

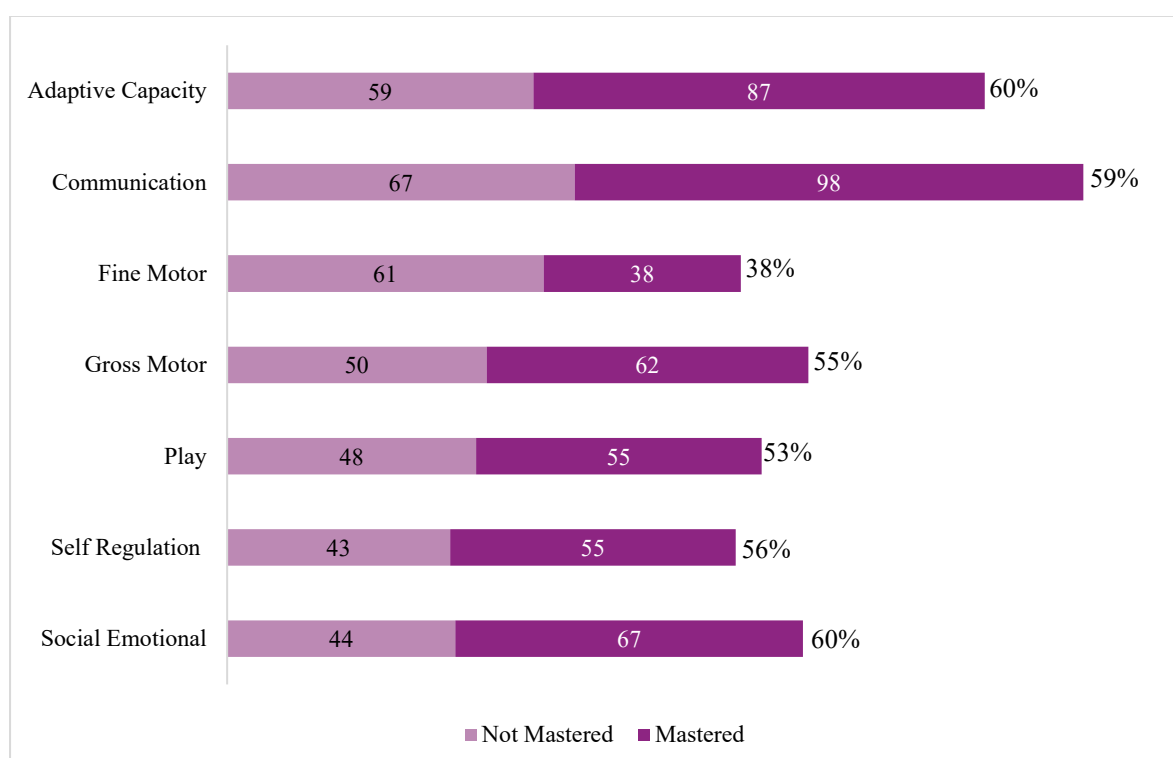
Figure 19. CS3 Changes in Vineland-3 Scores (Educator)



CS3 Daily Programme Trends:

Over the time period during which CS3 attended the ACE Programme, this child participated in a total of 834 learning steps, and she successfully completed 462 of these which resulted in an overall mastery rate of 55%. (The full list of learning steps used for this analysis of CS3 data are contained in Appendix 3). Figure 20 below shows the mastery rate for total learning steps *per* developmental domain. The greatest number of learning steps achieved occurred for Adaptive Capacity and Social Emotional, with both areas showing a mastery rate of 60%. The mastery rate of 59% for Communication indicates pleasing results in this area of development. In contrast, the mastery rate for fine motor skills was only 38%, suggesting that this aspect of development appeared to lag.

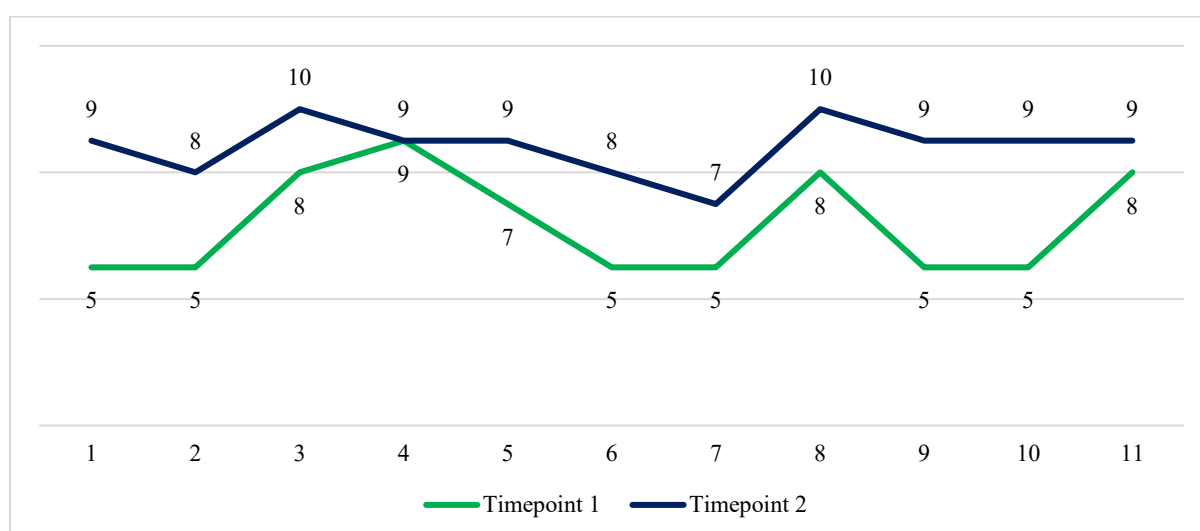
Figure 20. CS3 Mastery Rate for Learning Steps *per* Developmental Domain



CS3 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed at entry to and exit from the ACE Programme by CS3's Mother. The overall PCS score was 70/110 at entry and increased to 97/110 at this child's exit from the programme. Figure 21 below shows that relative increases in all PCS items contributed to the reported positive change in confidence. The item-to-item (or question-to-question) review reveals that increases in parent confidence occurred for questions 1 (4-point increase), 2 (3-point increase), 9 (4-point increase) and 10 (4-point increase). These findings suggest that CS3's mother reported greater certainty in understanding the reasons why her child might use stimming or sensory seeking behaviours, offering support when her child engaged in challenging behaviours, and understanding her child's sensory preferences. Importantly, this Mother reported greater confidence in possessing the skills and strategies to help her child regulate their emotions when required.

Figure 21. CS3 Item-to-Item Changes for the Parent Confidence Scale

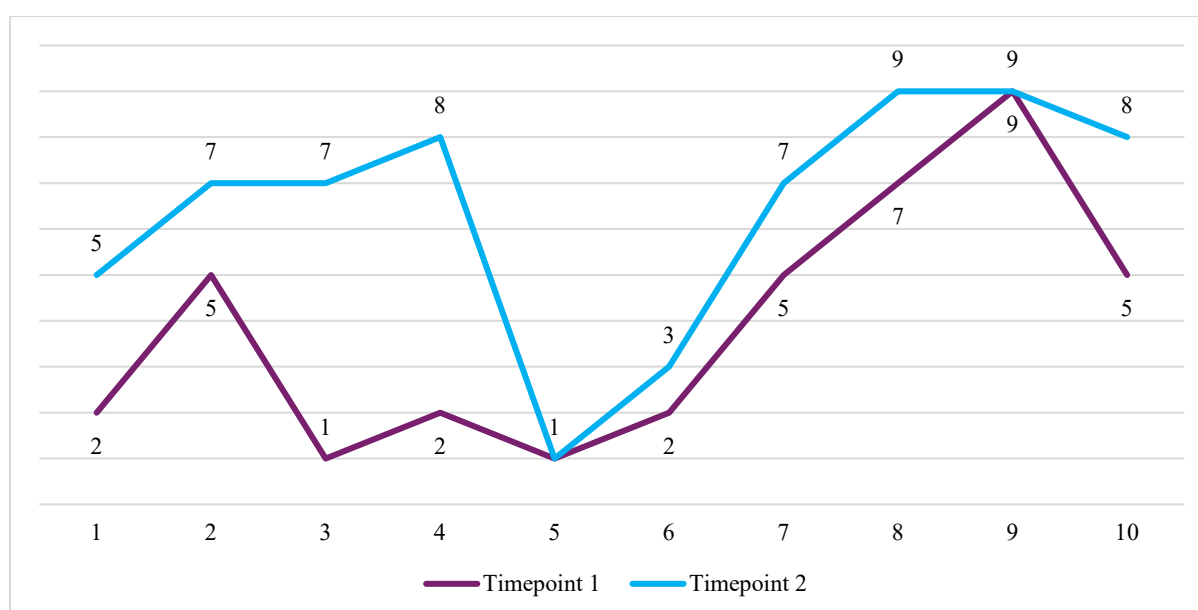


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS3 Parent Satisfaction Trends:

The overall PSS score was shown to be low for the majority of items (questions) upon enrolment of CS3 into the ACE Programme (entry PSS score = 39/90) and this improved substantially at the end of this child's participation in the programme (exit PSS score = 64/90). As shown in Figure 22 below, this caregiver provided a higher score for 6 of 7 'satisfaction' items and allocated the same very low score for the remaining item ('I am satisfied with my child's self-help/independence skills'). The largest increases in parental satisfaction occurred in the areas of gross motor skills and pretend play skills. These findings suggest that, in overall terms, this parent was very satisfied with the outcomes of the ACE Programme for her child.

Figure 22. CS3 Item-to-Item Changes for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS3 Changes:

CS3 participated in the ACE Programme over two years, with parent- and educator- Vineland-3 results revealing stable (i.e., no change) trends in adaptive functioning. However, the T1-T2 comparison for this child showed positive skill development (defined as achieving learning steps) as a result of participating in the daily programme delivered in the ACE context—especially in the domains of adaptive capacity, social-emotional ability, communication, gross motor skills, and play. Importantly, these child improvements correlated with increases in parent confidence across all PCS items, with notable positive changes in understanding sensory needs, managing challenging behaviours, and supporting emotional regulation. Parent satisfaction was also observed to increase across the majority of PSS items with particular satisfaction in the child development of gross motor and pretend play skills, although satisfaction in the child’s acquisition of self-help/independence remained low.

Findings for Case Study 4

The child described in Case Study 4 (CS4) was a male with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. He commenced the ACE Programme in January 2023 at 2 years of age and exited in December 2024 at 4 years old. CS4 attended the programme five days per week for a 24-month period.

CS4 Vineland-3 Parent and Educator Trends:

Figure 23 below shows the change in the Vineland-3 ABC Total and Domain scores for CS4 at entry to and exit from the ACE Programme as reported by CS4’s caregiver. The T1-T2 comparison shows that the ABC Total score increased by 16.28%. Inspection of changes in adaptive behaviour domains indicated a substantial increase of 58.33% in Communication, and moderate improvement in Daily Living Skills. In contrast, the Socialisation score altered from 51 (at T1) to 42 (at T2), leading to a decrease of 17.65% and indicating a lag in social-emotional skill development.

Figure 23. CS4 Changes in Vineland-3 Scores (Parent/Caregiver)

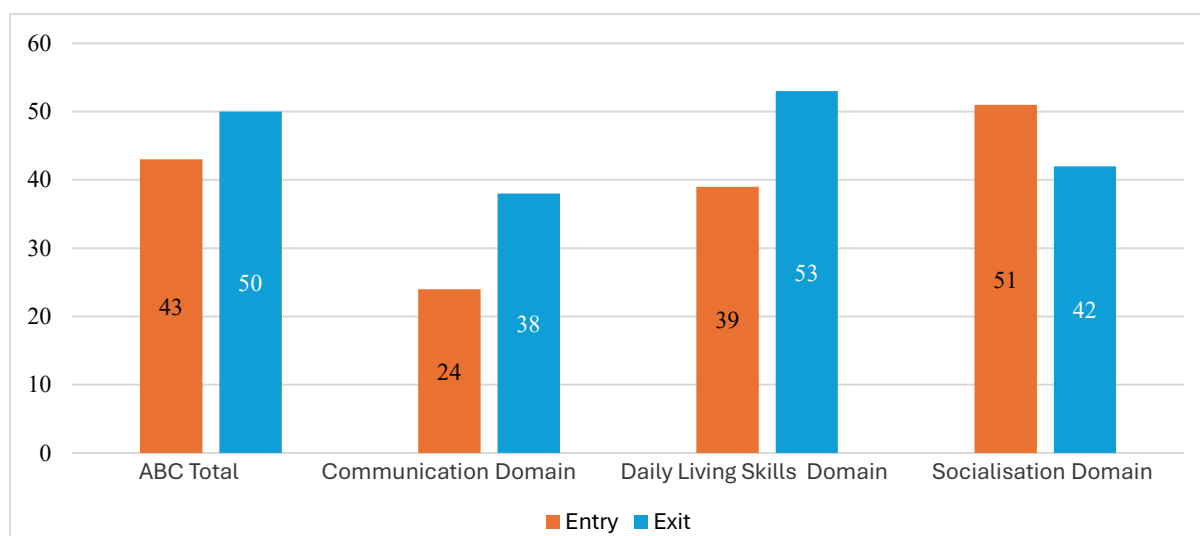
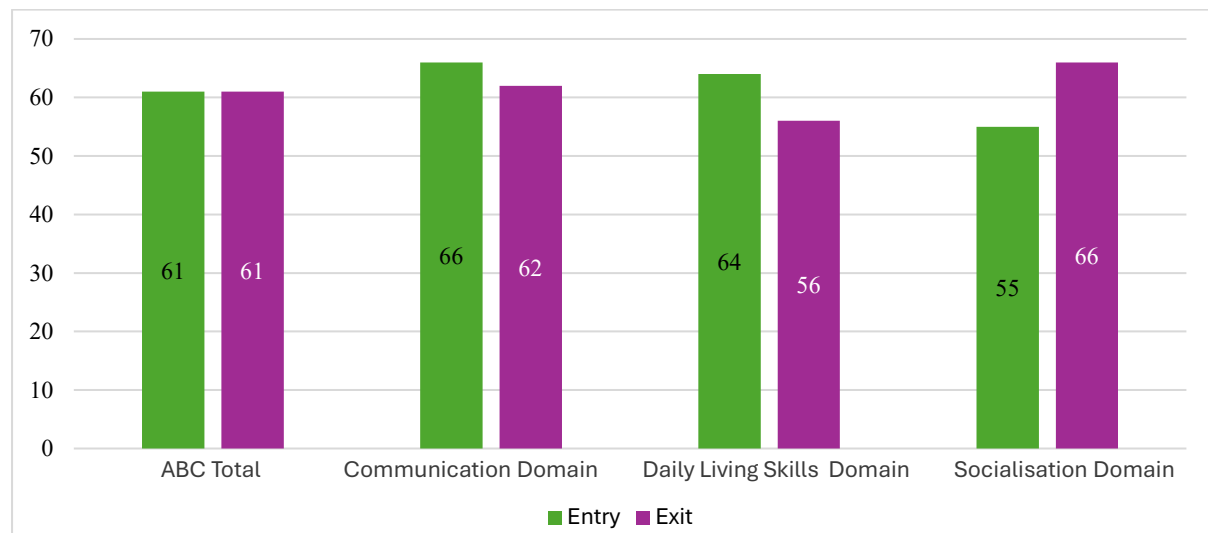


Figure 24 below summarises the educator-reported change in Vineland-3 ABC Total and Domain scores for CS4 at entry to *versus* exit from the programme. Generally speaking, the information on adaptive behaviour gathered from educators did not follow the same trends as those of the caregiver. The T1-T2 comparison showed that the ABC Total score remained fixed (i.e., 61), the Communication and Daily Living skills scores decreased by 6.06% and 12.50% respectively, and the Socialisation score increased by 20.00%. This reported home-Centre variation in skills could point to different contextual factors having an influence on the types of skills and improvements CS4 displayed.

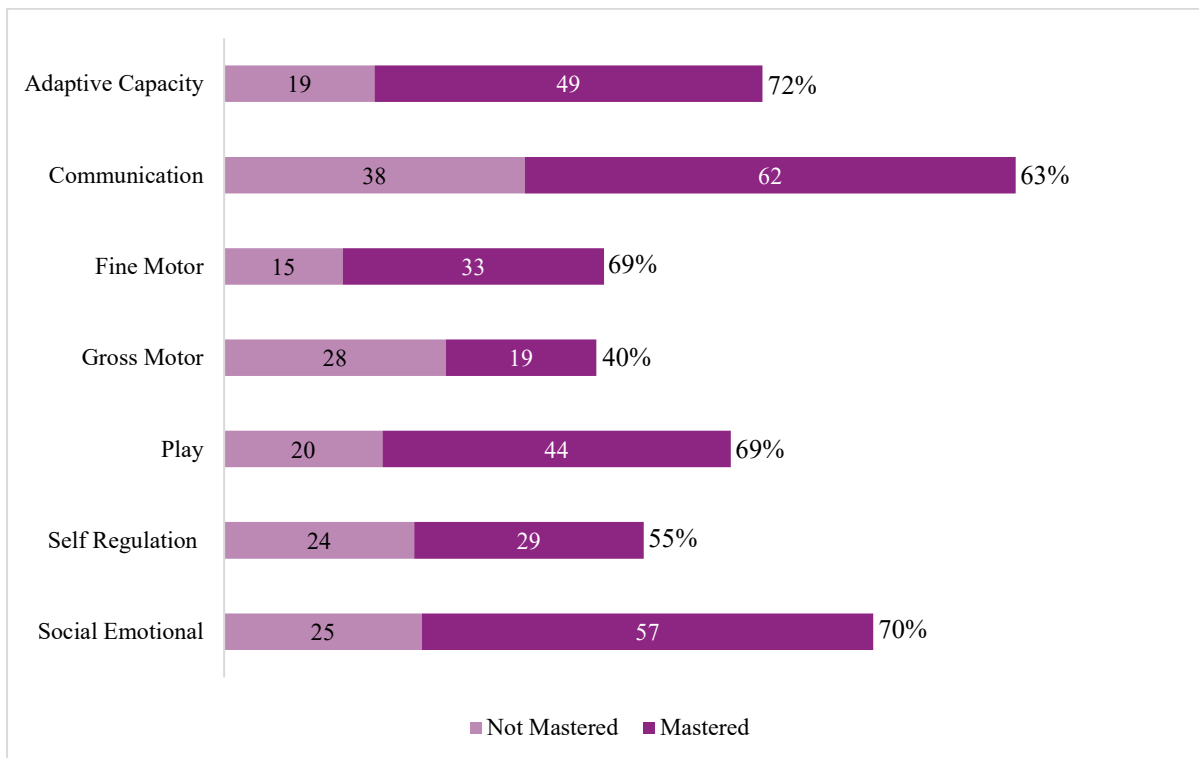
Figure 24. CS4 Changes in Vineland-3 Scores (Educator)



CS4 Daily Programme Trends:

Over the period of enrolment, CS4 participated in a total of 462 learning steps set for him during the intervention period. He was able to complete 293 of these and earned an overall mastery rate of 63%. (The full list of learning steps used in the analysis for CS4 is contained in Appendix 4). Figure 25 below presents the mastery rates for all learning steps *per* developmental domain and shows evidence of consistent skill improvement. The highest mastery rates occurred for adaptive capacity (mastery = 72%), social-emotional capacity (mastery = 70%), fine motor skills (mastery = 69%), play (mastery = 69%), and communication (63%). This child's improvements cluster around communication, social interaction, and adaptability, and would contribute greatly to positive daily functioning outcomes.

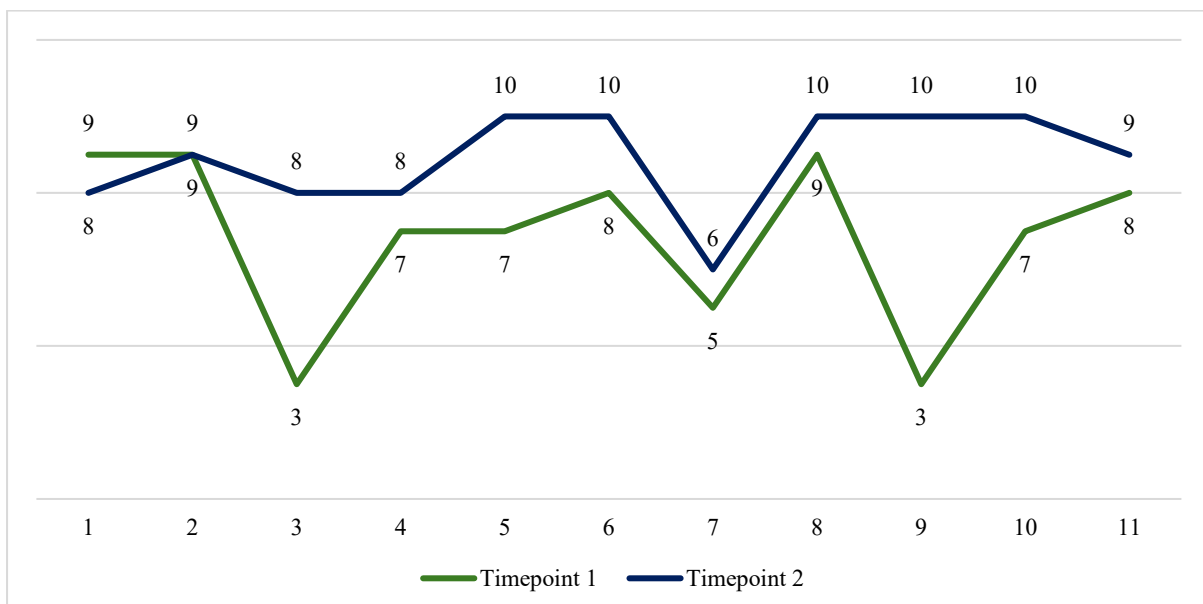
Figure 25. CS4 Mastery Rates for Learning Steps *per* Developmental Domains.



CS4 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed at entry to and exit from the ACE Programme by CS4's Mother. The overall PCS score was 75/110 at entry and 98/110 at exit, indicating a solid increase in parent confidence following her child's completion of the programme. Figure 26 below, displays item-specific changes in self-reported parent confidence. Increases occurred for item 3 (increase of 5-points) and item 9 (increase of 7 points) which demonstrate greater confidence in 'responding to negative comments from the public' and in 'understanding the child's sensory preferences.'

Figure 26. CS4 Item-to-Item Change for the Parent Confidence Scale

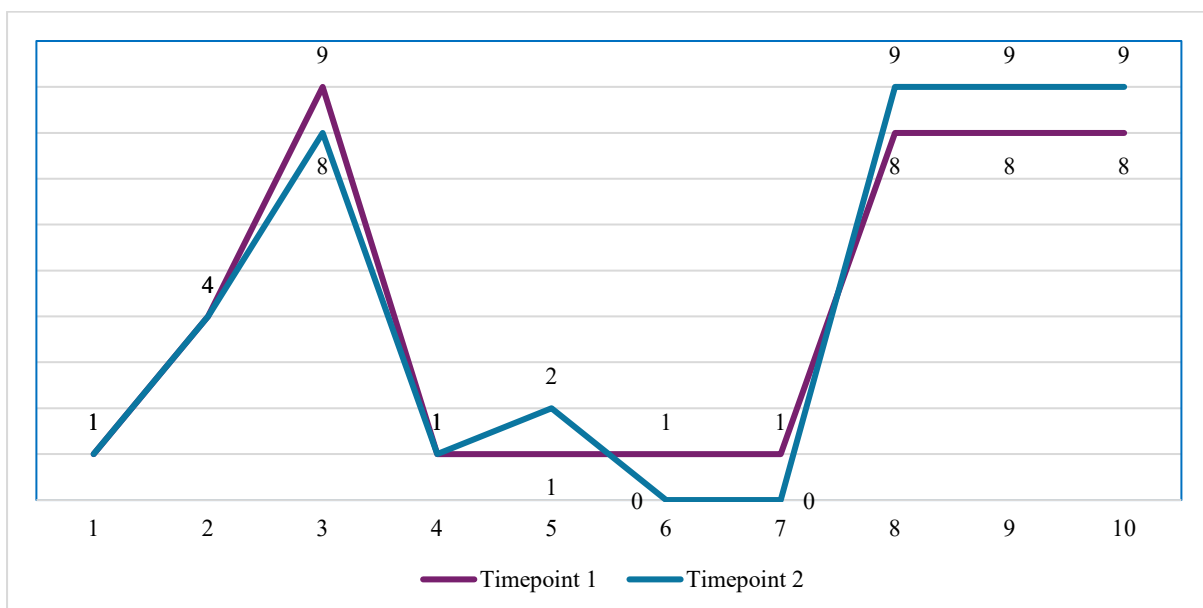


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS4 Parent Satisfaction Trends:

T1 and T2 comparison of PSS scores for the seven ‘satisfaction’ items reveals a stable pattern in parent satisfaction over the intervention period (see Figure 27). The parent reported very high satisfaction with the child’s gross motor development and very low satisfaction with social, play, communication, and play skills. These findings contradict the parent-reported improvements in the Vineland-3 communication and daily living skills and the positive strides the child made in achieving learning steps in the daily programme. It could be that other contextual or parent-related factors might have contributed to the unchanged ratings but there are no data to support this point.

Figure 27. CS4-C Item-to-Item Changes for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS4 Changes:

In summary, CS4 demonstrated parent-reported gains in Adaptive Behaviour, Communication, and Daily Living Skills. Educator-reported findings indicated that improvements in these domains were less evident in the educational setting, and that socialisation skills had increased. The child's responses to the daily programme (developed for him) were most pleasing, with strong growth in several important areas (e.g., adaptive capacity and social-emotional management). This parent reported greater confidence in 'responding to negative comments from members of the public' and 'understanding the child's sensory preferences' but her satisfaction with the child's level of skill development remained low. These findings indicate that the child's notable gains did not correlate well with maternal self-efficacy and satisfaction. The reasons for this can only be speculative; further contextual analyses would be useful.

Findings for Case Study 5

The Case Study 5 Child (CS5) was a male with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. He commenced the ACE Programme in May 2023 at 4 years of age and exited in January 2025 at 5 years old. CS5 attended the program four days per week. This child participated in the programme for a total of 20 months.

CS5 Vineland-3 Parent and Educator Trends:

Figure 28 below shows the change in Vineland-3 ABC Total and Domain scores for CS5 at entry to and exit from the ACE Programme based on parent-reported observations of daily functioning. It can be seen that the ABC Total score remained relatively stable with a slight increase of 3.64% from T1 to T2. Inspection of domain-specific findings indicates that the greatest positive change occurred for Daily Living Skills (increase = 12.50%) while the increase in Socialisation was minimal (3.85%). Further, a slight negative change was reported for Communication (decrease = 4.76%).

Figure 28. CS5 Changes in Vineland-3 Scores (Parent/Caregiver)

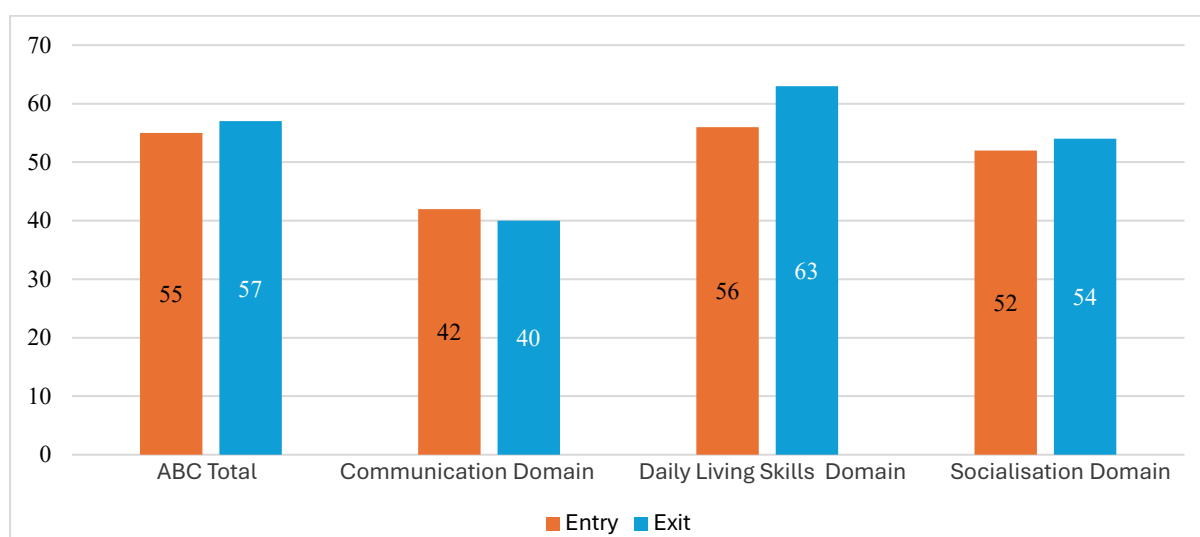
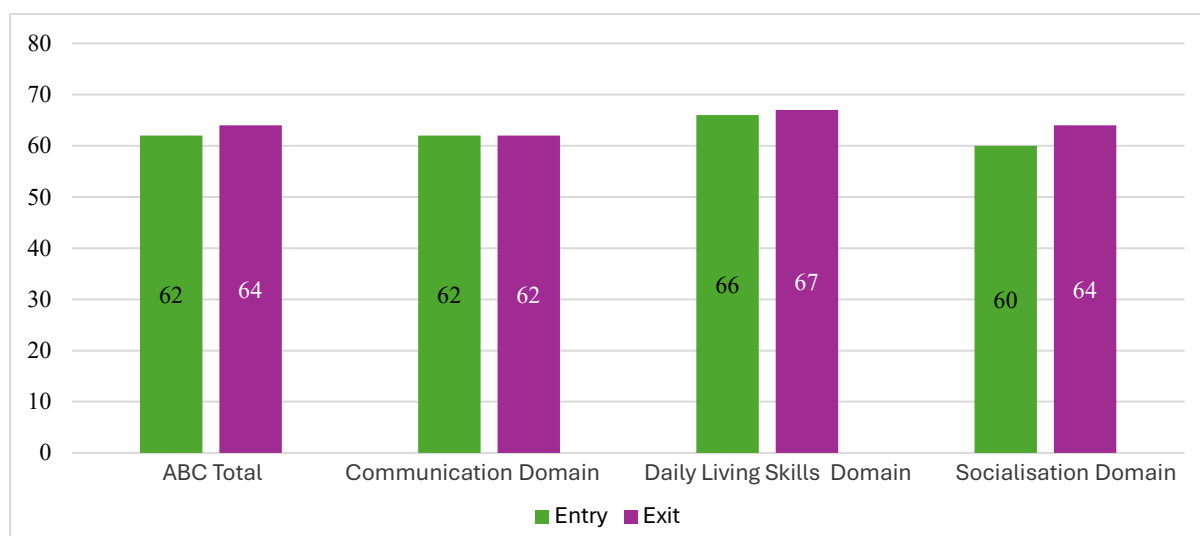


Figure 29 below shows the educator-reported change in Vineland ABC Total and Domain scores for CS5 at entry into and exit from the ACE Programme. The T1—T2 comparison for the ABC Total score shows only a slight increase of 3.23%, which is consistent with the parent-reported information. However, there was some minimal trend towards positive change at the domain level with Daily Living Skills increasing by 1.52% and Socialisation increasing by 6.67%. The Communication score remained stable across the intervention period.

Figure 29. CS5 Changes in Vineland-3 Scores (Educator)

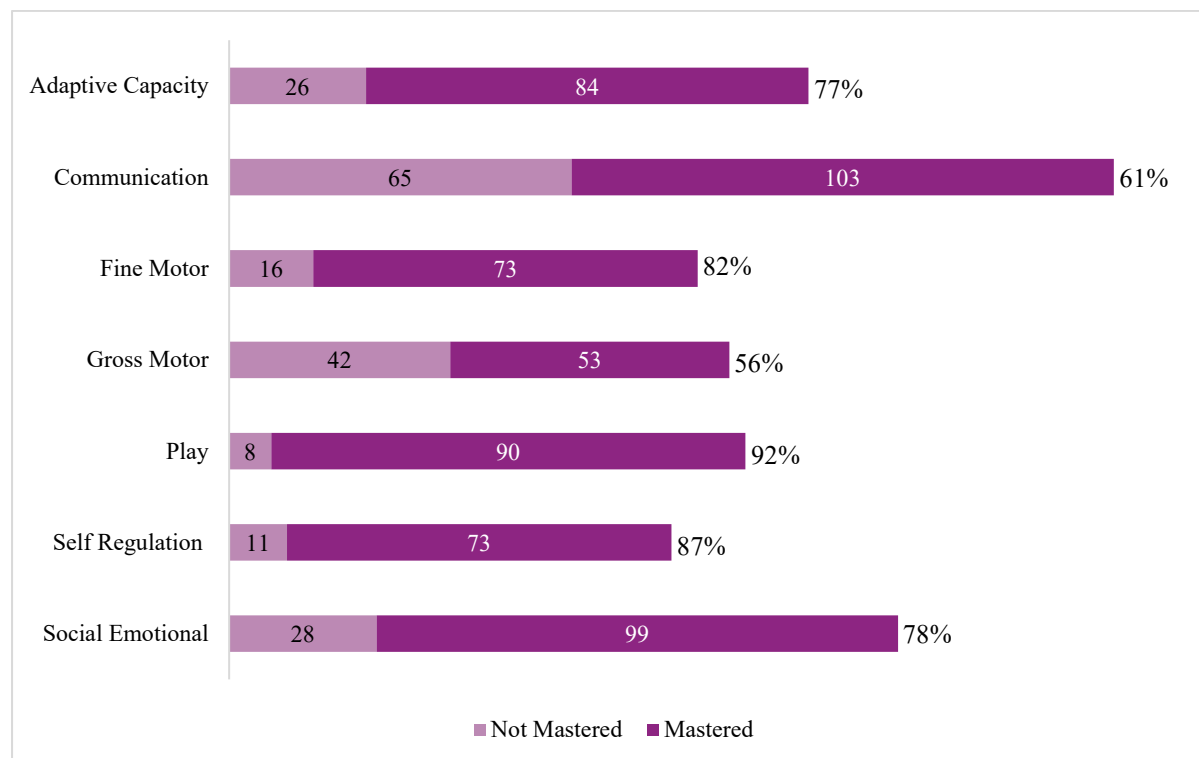


CS5 ACE Daily Programme Trends:

During the 20-month ACE enrolment period, CS5 participated in a total of 773 learning steps, and he achieved 578 of these, which resulted in an overall mastery rate of 75%. (The full list of learning steps used in the analysis for CS5 is shown in Appendix 5). Figure 30 below represents the mastery rates for the learning steps associated with targeted developmental domains. CS5 made several strong strides in achievement for the domains of play (mastery rate = 92%), self-regulation (mastery rate = 87%), and Fine Motor skills (mastery rate = 82%).

Moderate gains were made in social-emotional (mastery rate = 78%), gross motor skills (mastery rate = 56%), and communication (mastery rate = 61%). Examples of communication targets include pointing to request, making two-to four-word AAC requests and using a person's name to gain attention. CS5 clearly illustrates the importance of mapping child progress in relation to specific skills embedded in an individualised programme. It also highlights the risk of missing or under-estimating capability by taking a broad focus in assessment.

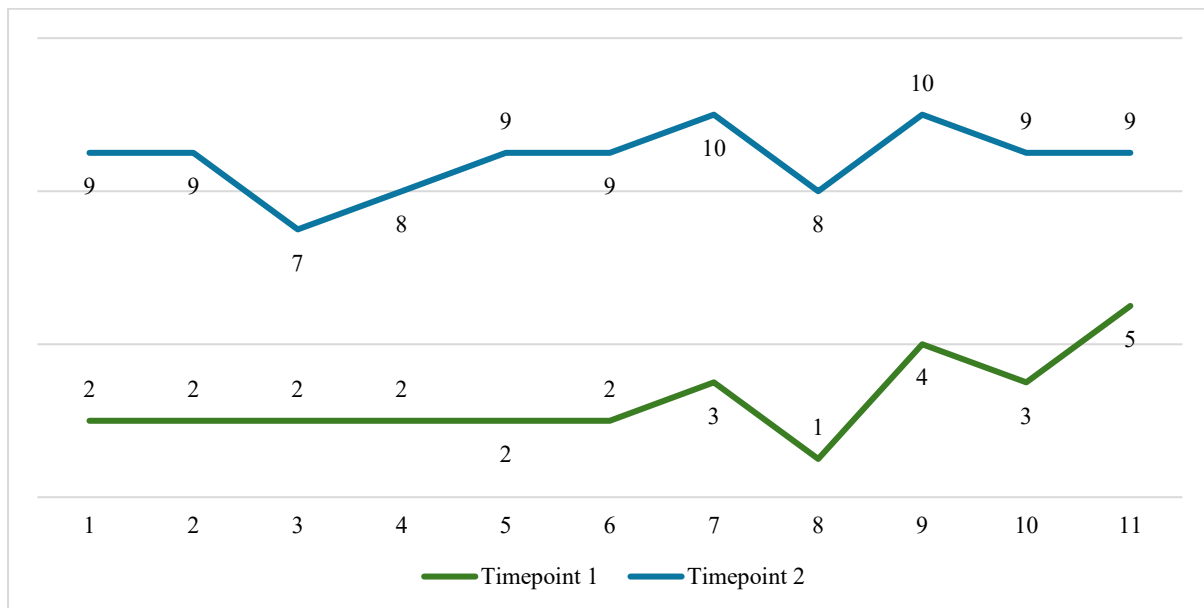
Figure 30. CS5 Mastery Rate for Learning Steps *per* Developmental Domain



CS5 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed by CS5's Mother at her child's entry to and exit from the ACE Programme. The overall PCS scores were 28/110 (entry) and 97/110 (exit) and suggest this parent experienced a substantial increase in confidence. Figure 31 below shows this parent's ratings for individual PCS items which also revealed strong positive change from T1 to T2. There was a strong positive change (i.e., average increase of 6.3 points) across all PCS items, with a seven-point increase in 6 of 11 items. The lowest positive change (i.e., 4-point increase) occurred for item 11 which tapped the mother's confidence in implementing proactive, positive behaviour support strategies.

Figure 31. CS5 Item-to-Item Changes for the Parent Confidence Scale

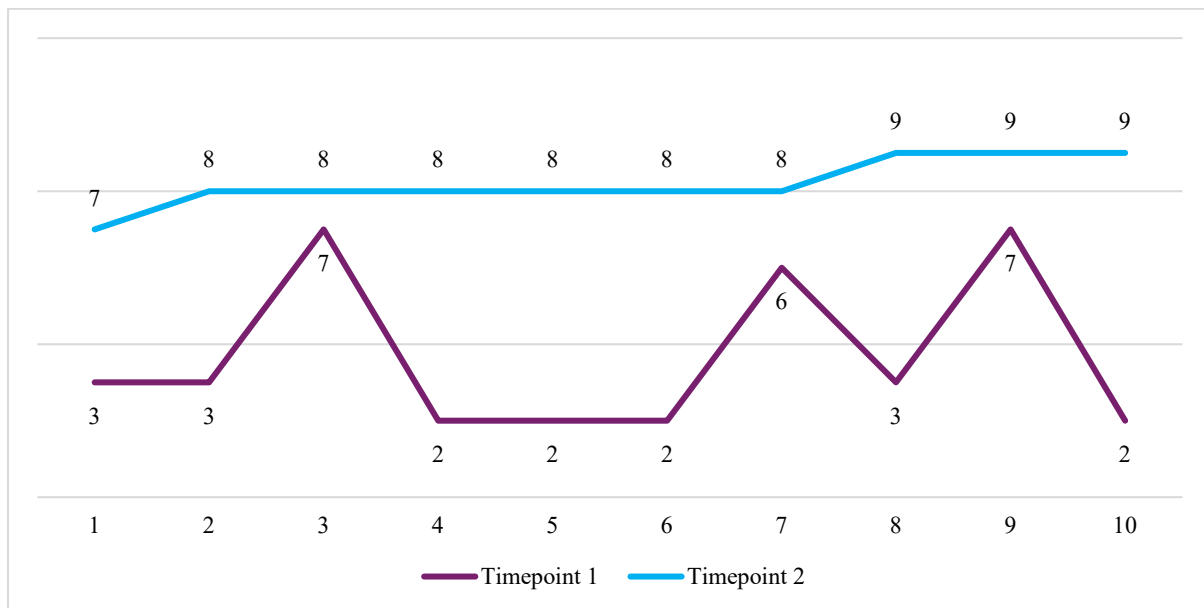


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS5 Parent Satisfaction Trends:

The overall PSS score for CS5's mother was 37/90 (entry) and 82/90 (exit), indicating a sizable increase in satisfaction with the child's progress (see Figure 32 below). All PSS item ratings at T2, were higher than those of T1, with consistently higher rating changes occurring for items 4 (satisfaction with the child's play skills), 5 (satisfaction with the child's self-help/independence skills), and 6 (satisfaction with the child's communication skills). Item 1 (satisfaction with the child's ability to engage socially) was associated with the lowest positive change.

Figure 32. CS5 Item-to-Item Changes for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS5 Changes:

CS5 presents an interesting picture of skill development that varies depending on the measure used to judge his progress. The Vineland-3 findings, based on parent- and educator-reports, provided evidence of negligible positive change but, in strong contradiction, the daily programme data clearly displayed areas of strong growth for this child with ‘very substantial support needs’. Alongside these improvements in specific skills taught to support the child’s individual needs, the mother’s self-reported data indicate strong increases in personal confidence and in CS6’s skill development (e.g., pretend play, self-help, and communication). The findings of this case study not only support the child-focused and individualised ethos of the ACE Programme, but also demonstrate that positive effects on intervention can and do generalise to parents.

Findings for Case Study 6

Case Study 6 Child (CS6) was a female with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. She commenced the ACE Programme in May 2023 at 4 years of age and exited in January 2025 at 5 years old. CS6 attended the programme four days per week. This child participated in the programme for a total of 20 months.

CS6 Vineland-3 Parent and Educator Trends:

Figure 33 maps the change in Vineland-3 ABC Total and Domain scores for CS6 at entry to and exit from the ACE Programme as reported by the parent. Inspection of the graph shows that the ABC Total score increased by 11.32% (T1-T2 comparison). Additionally, the Daily Living Skill (increase = 18%) and Socialisation (increase = 24%) scores showed modest improvement. The Communication domain remained stable over the intervention period.

Figure 33. Changes in Vineland-3 Scores (Parent/Caregiver)

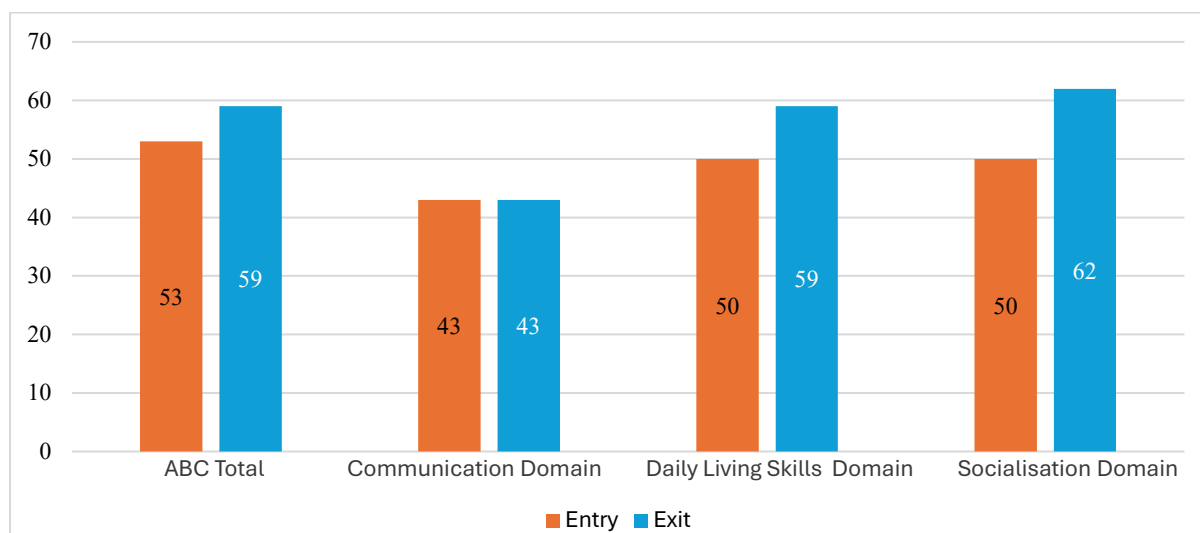
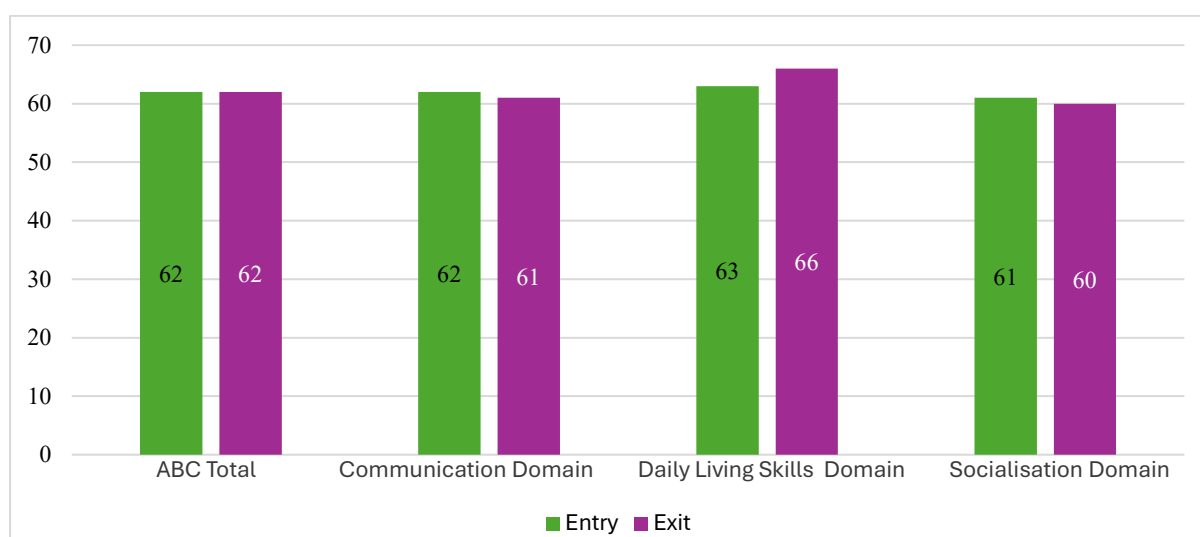


Figure 34 below presents the educator-reported change in Vineland-3 ABC Total and Domain scores for CS6 at entry into and exit from the ACE Programme. The findings show no change in the ABC Total score (reported 62 at T1 and T2). In relation to domain-level changes, Communication and Socialisation scores remained reasonably stable over time, with a negligible increase (i.e., 4.76%) occurring for Daily Living Skills. Interestingly, the parent- and educator-reported data agree on the finding of negligible change occurring in adaptive behaviour, but educators assessed CS6 as being more capable than the caregiver did.

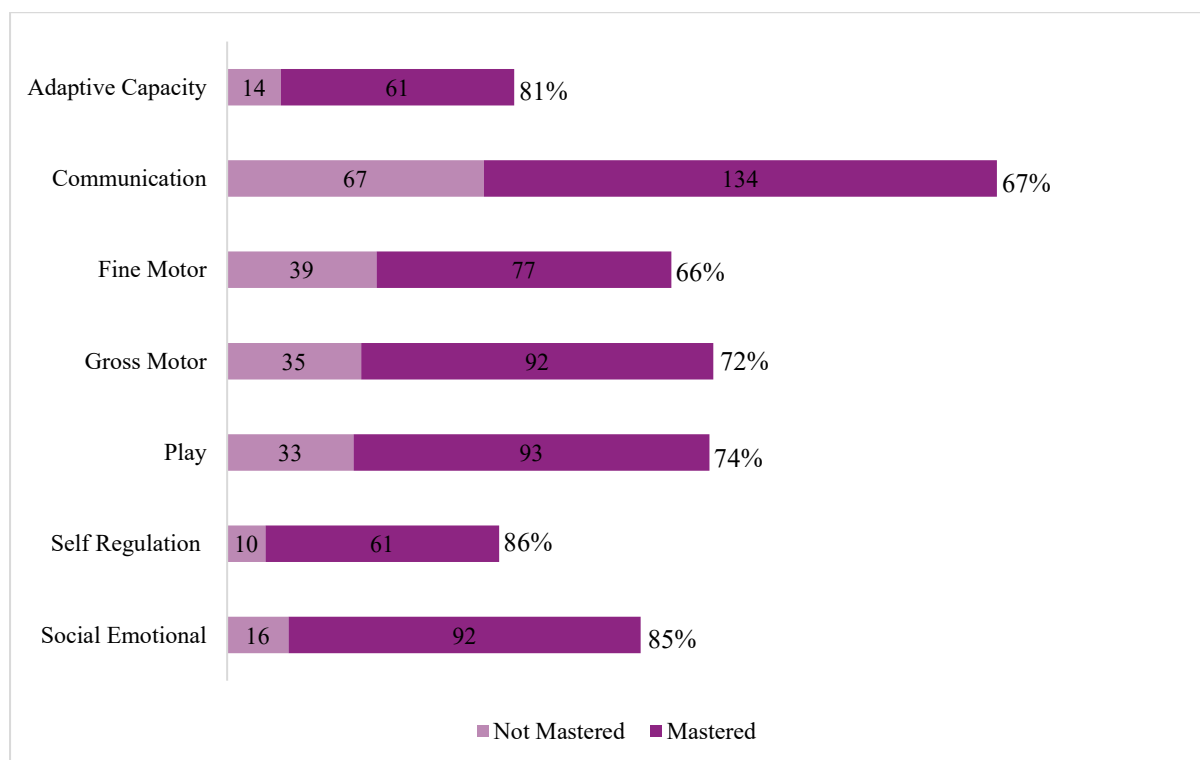
Figure 34. Changes in Vineland-3 Scores (Educator)



CS6 ACE Daily Programme Trends:

During the 20-month ACE enrolment period, CS6 participated in a total of 824 learning steps and completed 610 of these, producing an overall mastery rate of 74%. (The full list of learning steps used for the analysis of CS6 is shown in Appendix 6). Figure 35 below presents the mastery rate for learning steps *per* developmental domain. Several of the domains had substantially high achievement for self-regulation (mastery rate = 86%), adaptive capacity (mastery rate = 81%), and social emotional (mastery rate = 85%). In comparison relative gains in Communication (mastery rate = 67%) and fine motor skills (mastery rate = 66%) were moderate.

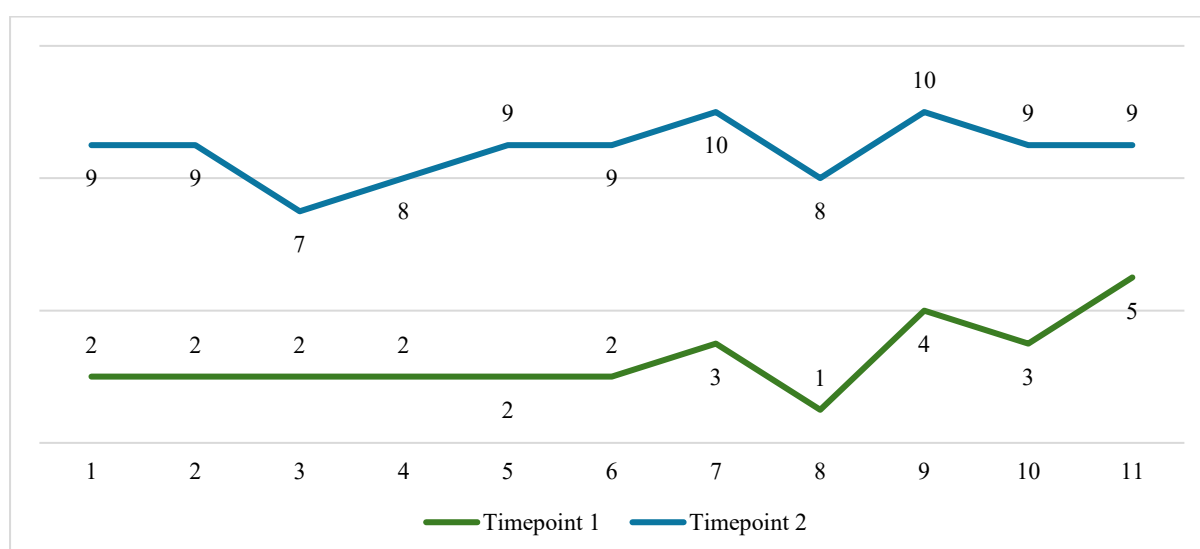
Figure 35. CS6 Mastery Rate for Learning Steps *per* Developmental Domain



CS6 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed, at entry and exit from the ACE Programme, by CS6's Mother. The overall PCS score was 28/110 (entry) and 97/110 (exit) indicating a substantial increase in overall confidence (i.e., by 69 points). substantially Figure 36 below, displays the item-to-item PCS scores which show a consistent and strong positive change in self-reported confidence. There was a substantial increase in all item scores (T1—T2 score difference range = 4 to 7 points) with the largest being 7 points. Greater increases in confidence were linked to understanding the reasons of stimming, supporting the child during episodes of challenging behaviour, and helping the child participate in play with others. The lowest change (i.e., T1—T2 point difference = 4) related to confidence in implementing positive behaviour support strategies. Because this area involves more complex parenting skills (e.g., identifying behaviour 'triggers'), this modest increase in confidence is not surprising.

Figure 36. CS6 Item-to-Item Changes for the Parent Confidence Scale

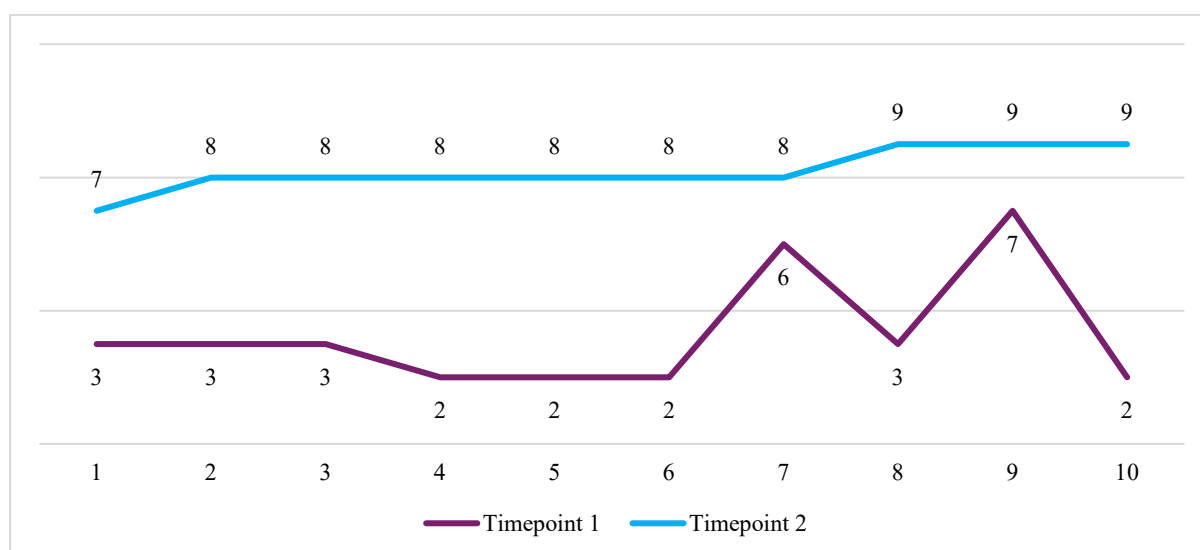


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS6 Parent Satisfaction Trends:

The overall PSS score at entry was deemed to be relatively low (i.e., 33/90) upon entry of CS6 into the ACE Programme but positive change was seen in satisfaction by a solid increase of 49 points (82/90) upon exit (see Figure 37). Particular increases in satisfaction related to growth in the child's pretend play, self-help, and communication skills. The T1-T2 score difference (i.e., 4 points) for satisfaction with the child's ability to engage socially was positive but modest.

Figure 37. CS6 Item-to-Item Changes for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS6 Changes:

Overall, CS6 showed a small positive change in adaptive behaviour, as assessed by the Vineland-3 and, while parent- and educator-derived data pointed to stability across domains, the latter viewed the child as being more capable than the caregiver—this could be associated with variations in functioning depending on context. In contrast, findings from the child's engagement with daily programmes indicated high mastery in quite complex ability areas such as adaptive capacity, self-regulation, and social-emotional skills. The parent-oriented changes associated with the child's participation in the ACE programme showed strong positive trends in relation to confidence and satisfaction.

Findings for Case Study 7

Case Study 7 Child (CS7) was a male with a diagnosis of Autism Spectrum Disorder-Severity Level 3 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. He commenced the ACE Programme in March 2024 at 4 years of age and exited in March 2025 at 5 years old. CS7 attended the programme four days per week for a period of 12 months.

CS7 Vineland-3 Parent and Educator Trends:

Figure 38 below, shows the change in Vineland-3 score ABC Total and Domain scores for CS7 at entry to (i.e., T1) and exit from (i.e., T2) the ACE Programme based on parent reports. The T1-T2 comparison of findings reveals that the ABC Total and Socialisation scores remained unchanged, a negligible positive change in Daily Living Skills (increase = 7.3%), and a small decrease of 3.7 for Communication.

Figure 38. CS7 Changes in Vineland-3 Scores (Parent/Caregiver)

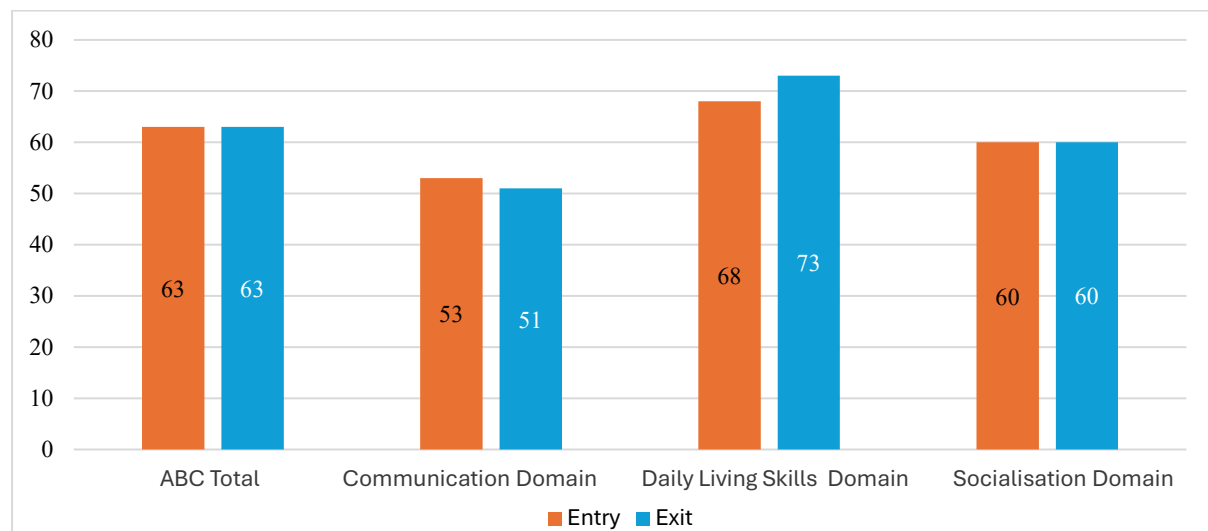
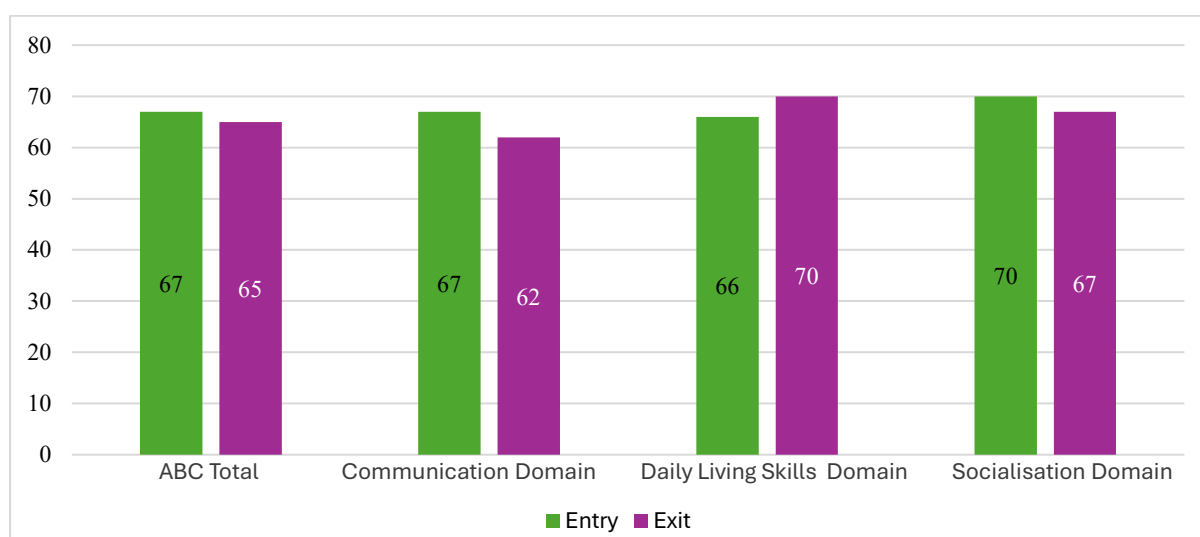


Figure 39 below displays the educator-reported change in Vineland-3 Total and Domain scores for CS7 at T1 and T2. It can be seen that negative changes occurred for the ABC Total (T1=67; T2=65), Communication domain (decrease = 7.4%), and Socialisation domain (4.2%). A small positive change was noted for Daily Living Skills (6.06%). In overall terms, these findings suggest a stable pattern of skills that persisted across the 12-month intervention period.

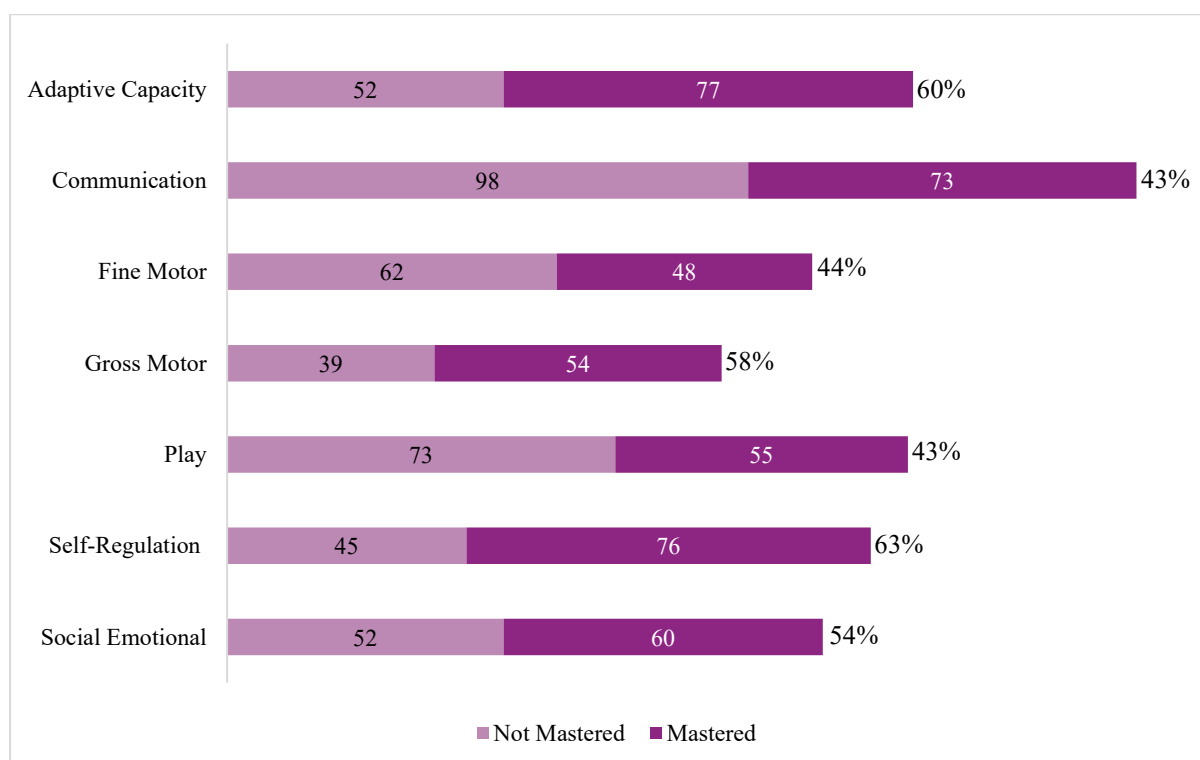
Figure 39. CS7 Changes in Vineland-3 Scores (Educator)



CS7 ACE Daily Programmes Trends:

During the relatively short 12-month enrolment in the ACE Programme, CS7 participated in a total of 864 learning steps across seven developmental domains and mastered 443 (mastery rate = 51%). (The full list of learning steps used in the analysis for CS7 is shown in Appendix 7). Figure 40 shows the mastery rate the child achieved in the learning steps (*per* developmental domain) and shows an overall modest growth in skill development. Higher mastery rates occurred for adaptive capacity (60%), self-regulation (63%), and gross motor skills (58%). Lesser positive change was seen in communication (mastery rate = 43%), fine motor skills (mastery rate = 44%) and play (43%).

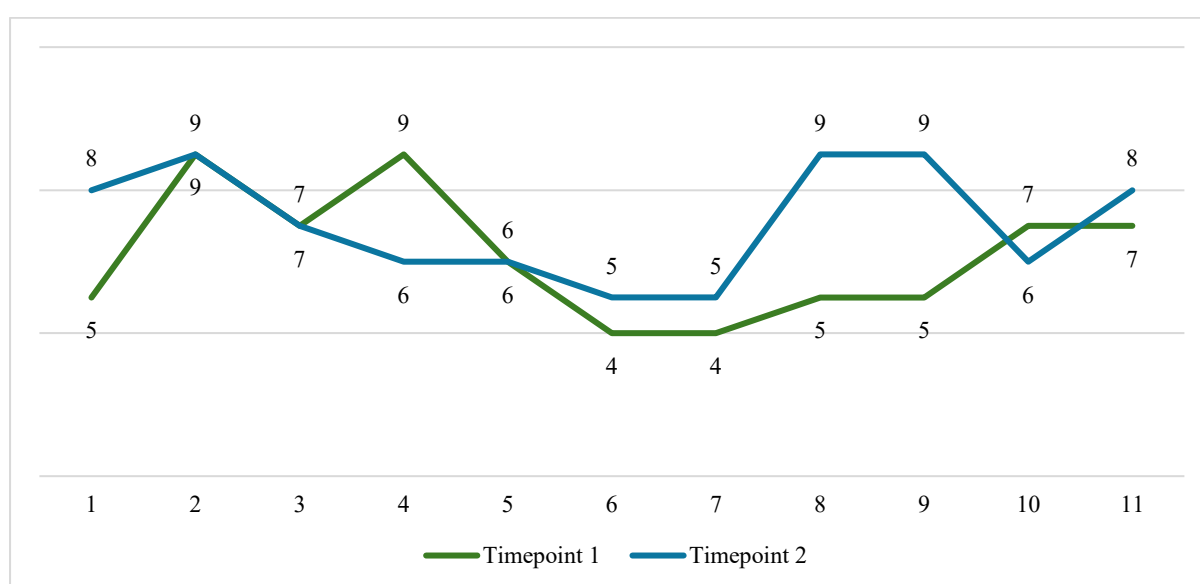
Figure 40. CS7 Mastery Rate for Learning Steps *per* Developmental Domains



CS7 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed at entry to and exit from the ACE Programme by CS7's Mother, with an overall PCS 'entry' score of 68/110 and 'exit' score of 78/110, indicating only a small increase in confidence. Figure 41 below, shows the item-specific scores in parent confidence at T1 (entry) and T2 (exit), with overall pattern of scores being uneven. Greater T1-T2 positive change occurred for PCS items 1, 8, 9, and 11, suggesting some increase in confidence relating to understanding the child's stimming responses, explaining autism to others, understanding the child's sensory preferences, and implementing positive behaviour support strategies. However, this parent also reported decreased confidence in areas such as supporting the child's needs throughout the lifespan and responding to any negative comments from members of the public about their child's behaviour.

Figure 41. CS7 Item-to-Item Changes for the Parent Confidence Scale

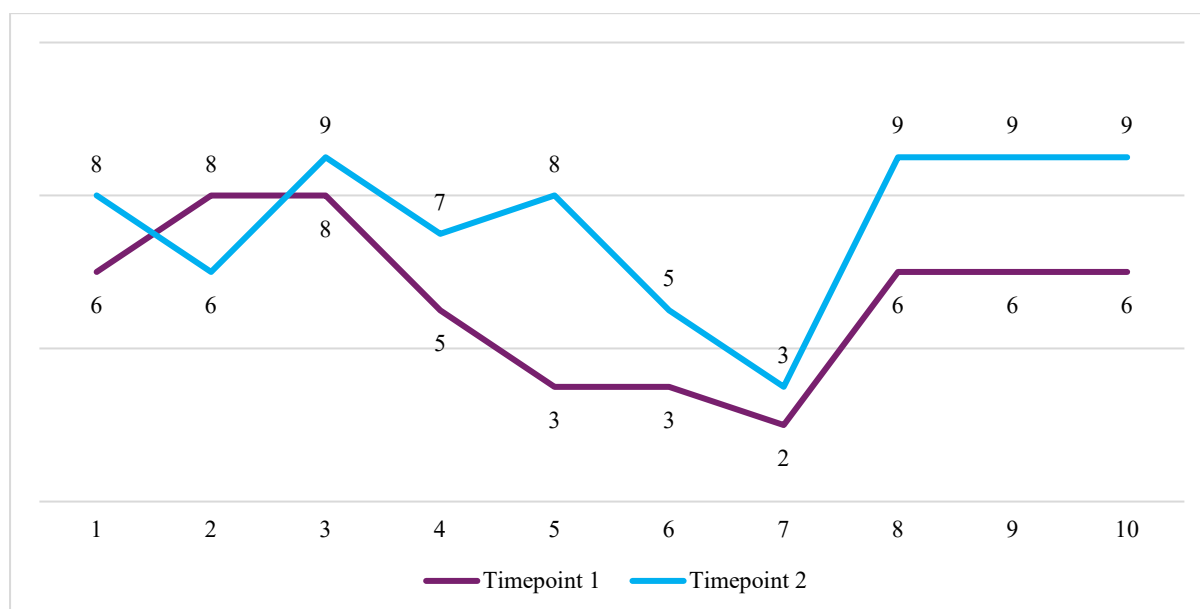


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS7 Parent Satisfaction Trends:

The overall Parent Satisfaction score (PSS) increased from 53/90 (entry) to 73/90 (exit) over CS7's 12-month of enrolment in the ACE Programme (see Figure 42 below). The pattern of PSS scores indicates a general increase in satisfaction, except for item 2 (satisfaction with the child's motor development). Items which recorded positive change included satisfaction with the child's self-help/independence skills (largest increase) and his communication skills.

Figure 42. CS7 Item-to-Item Changes for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS7 Changes:

CS7 participated in the ACE Programme for a relatively brief period considering the substantial support needed as indicated by the severity of his autism diagnosis and, while the reasons for the short enrolment are unknown, the findings indicate he most likely needed more time in the programme. Both parent- and educator-reported Vineland-3 findings suggest improvement in adaptive behaviour as this relates to Daily Living Skills but small declines in communication and socialisation. The rates of mastery, used to evaluate acquisition of learning steps, suggested greater development, with particular growth in adaptive capacity, self-regulation, and gross motor skills.

Findings for Case Study 8

Case Study 8 Child (CS8) was a female with a diagnosis of Autism Spectrum Disorder-Severity Level 2 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. She commenced the ACE Programme in October 2023 at 4 years of age and exited in March 2025 at 5 years old. CS8 attended the programme three days per week for a period of 18 months.

CS8 Vineland-3 Parent and Educator Trends:

Figure 43 below, shows the change in Vineland-3 ABC Total and Domain scores for CS8 at entry to and exit from the ACE Programme as reflected by parent reports. Comparison of findings gathered at T1 (entry) *versus* T2 (exit) suggest that the ABC Total score dropped by 4.81% over the intervention period and this trend was evident across all domains, with the greatest decline of 7% occurring for Daily Living Skills. In overall terms, these findings point to minimal change and are relatively stable.

Figure 43. Changes in Vineland-3 Scores (Parent/Caregiver)

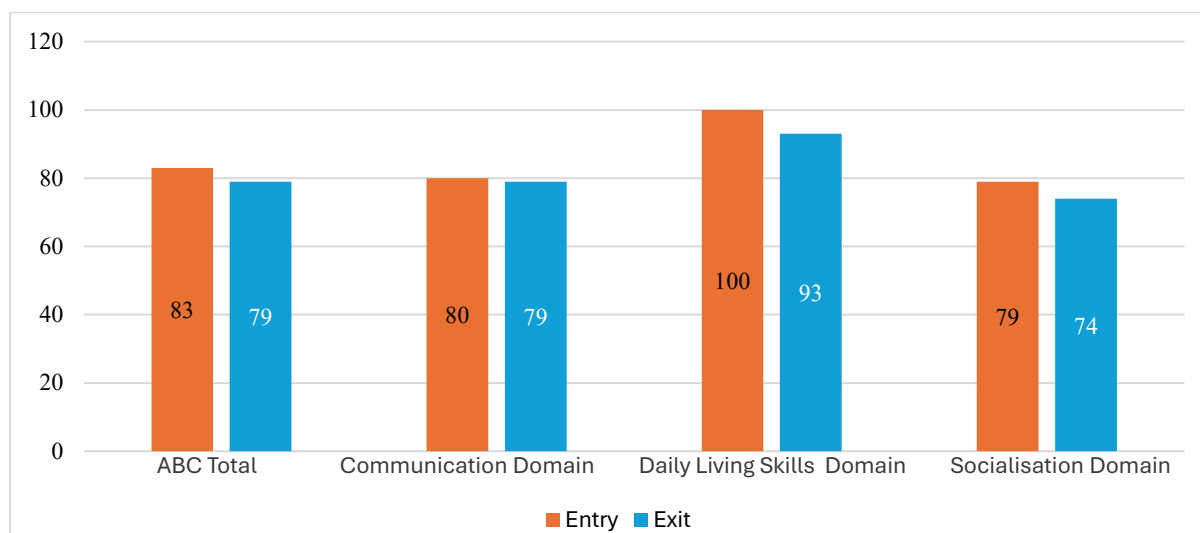
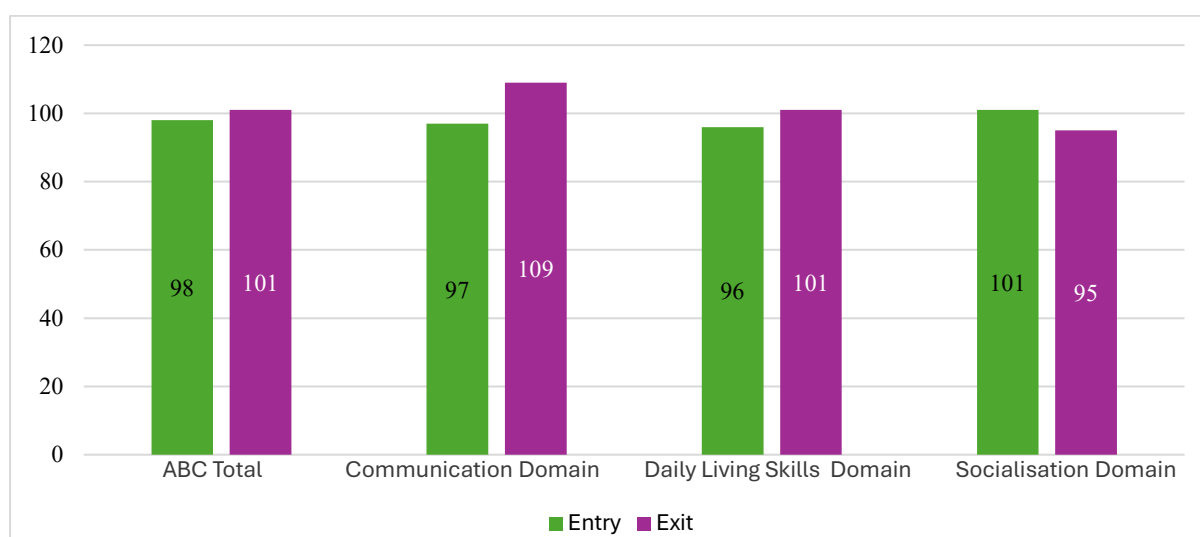


Figure 44 below summarises the changes in Vineland-3 ‘entry’ versus ‘exit’ scores obtained from educators in the ACE Programme. These findings contrast with those of the caregiver and show an increase in ABC Total, Communication, and Daily Living scores. The largest positive change occurred for Communication (increased by 12.37%) which also represented the greatest area of parent-educator disagreement (30-point difference in Communication score). This suggests possible contextual differences (e.g., communication opportunities) that might have occurred between the home and learning settings.

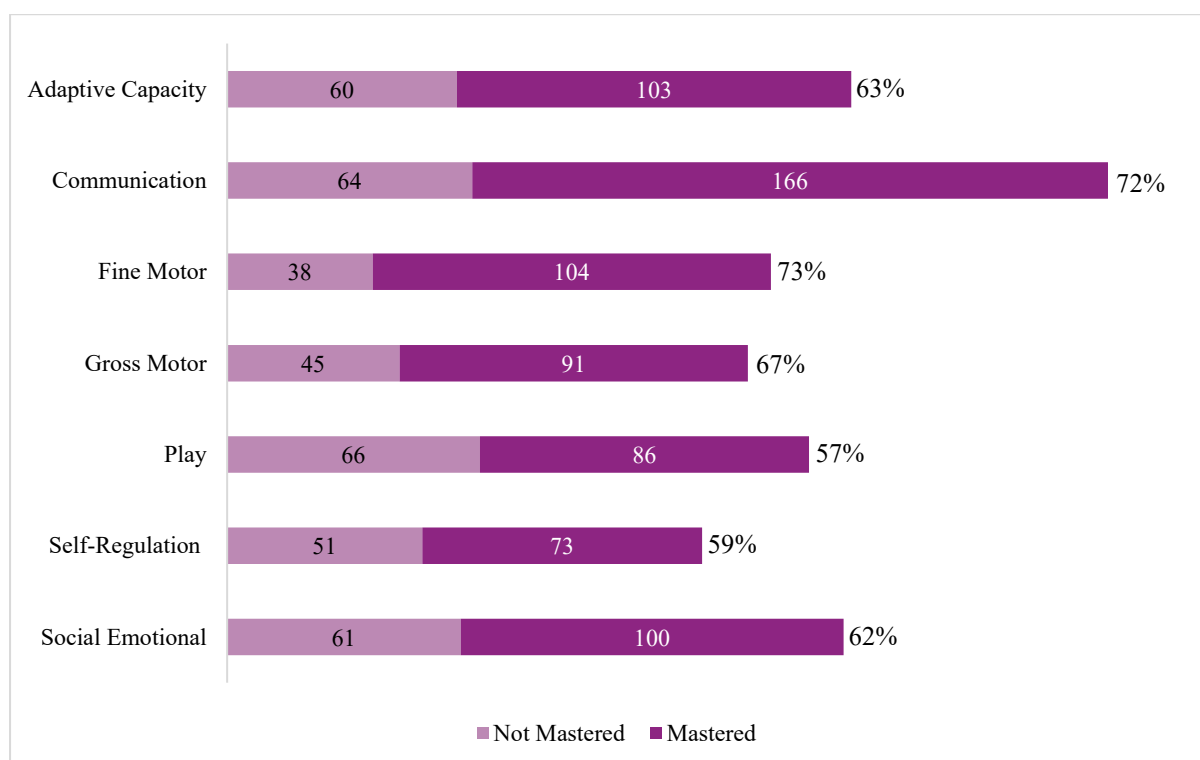
Figure 44. CS8 Changes in Vineland-3 Scores (Educator)



CS8 ACE Daily Programmes Trends:

During her 20-month enrolment, CS9 participated in a total of 1,108 learning steps across seven developmental domains, and she achieved 723 of these which resulted in an overall rate of mastery of 65%. (The full list of learning steps used in the analysis for CS8 is shown in Appendix 8). Figure 45, which summarises total mastery rate *per* developmental domain, shows very strong positive change for communication (mastery rate = 72%) and fine motor skills (mastery rate = 73%). Solid skill increases occurred in the areas of gross motor (mastery rate = 67%), adaptive capacity (mastery rate = 63%), and social emotional (mastery rate = 62%)

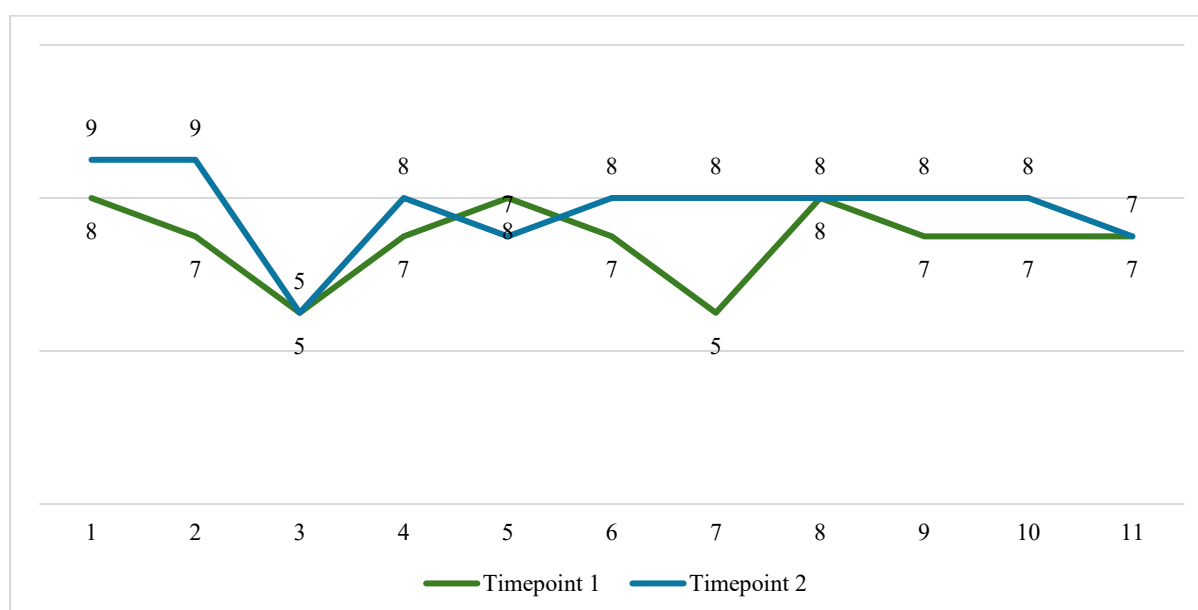
Figure 45. CS8 Mastery Rate for Learning Steps *per* Developmental Domain



CS8 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed, by CS8's Mother, at entry to and exit from the ACE Programme. The overall PCS score was 76/110 at entry (T1) and increased to 85/110 at exit (T2). Figure 46 below presents scores for the 11 items of this scale, revealing a pattern of modest increases confidence for most items, no change for item 3 (responding to negative comments from members of the public), and negative change for item 5 (predicting the child's responses in unfamiliar situations). The largest increase occurred for parent confidence in helping the child develop their ability to play with other children.

Figure 46. CS8 Item-to-Item Changes for the Parent Confidence Scale

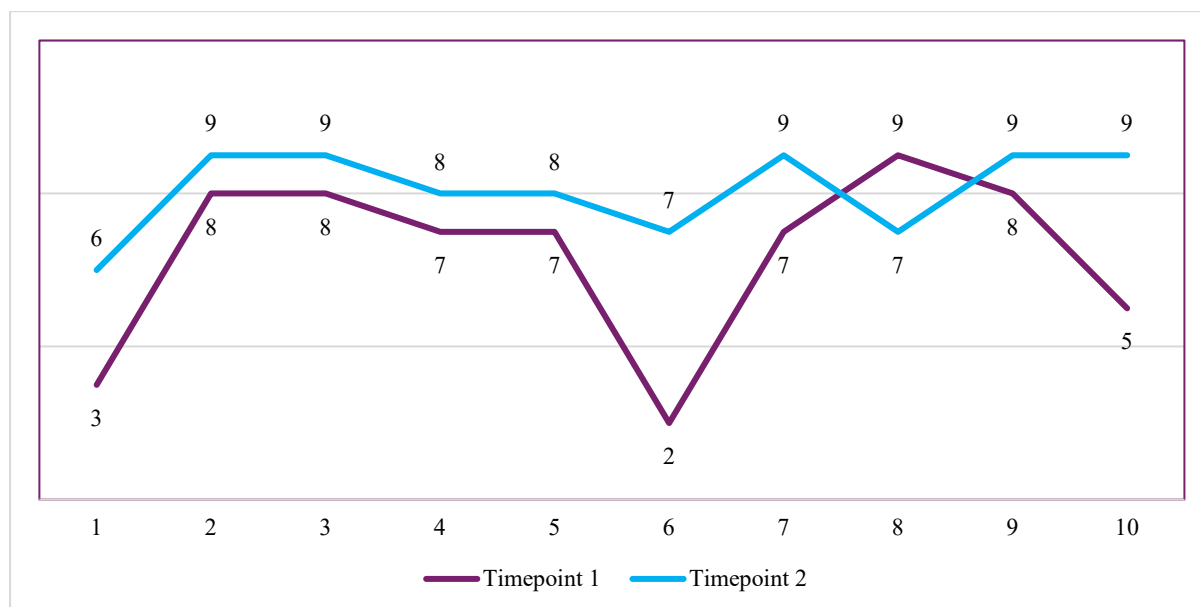


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS8 Parent Satisfaction Trends:

The Parent Satisfaction Scale (PSS) score was reported by CS8's mother to be at 64/90 (entry) and 81/90 (exit) during CS8's enrolment in the ACE Programme (see Figure 47 below). Inspection of the PSS item scores shows a trend towards greater satisfaction at T2. The largest positive change (of 5 points) occurred in relation to satisfaction with the child's communication skills.

Figure 47. CS8 Item-to-Item Change for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS8 Changes:

CS8 showed modest changes in adaptive behaviour, with educator's scores on the Vineland-3 indicating greater capabilities in communication which were reflected in the mastery rate she achieved in this developmental domain. Programme goals and learning steps focused on more complex skills (e.g., early narrative/commenting, asking/answering WH-questions, topic maintenance) which provide a basis for extending peer-based interaction and play. The parent-reported findings on confidence and satisfaction show modest but positive gains in these areas.

Findings for Case Study 9

Case Study Child 9 (CS9) was a male with a diagnosis of Autism Spectrum Disorder-Severity Level 2 for Communication and Reciprocal Interaction plus Restricted and Repetitive Behaviour. He commenced the ACE Programme in May 2024 at 3 years of age and enrolment is ongoing during 2025 during the period of this evaluation. CS9 attended the programme four days per week. Because of continued participation in the programme, the duration of May 2024 to May 2025 was selected for the evaluation and represents 12-months of intervention.

CS9 Vineland-3 Parent and Educator Trends:

Figure 48 below, presents the change in Vineland-3 ABC Total and Domain scores for CS9 during the 12-month intervention period. The parent-reported findings show a decrease in ABC Total score of 12.28% with similar declines noted across all domains.

Figure 48. CS9 Changes in Vineland-3 Score (Parent/Caregiver)

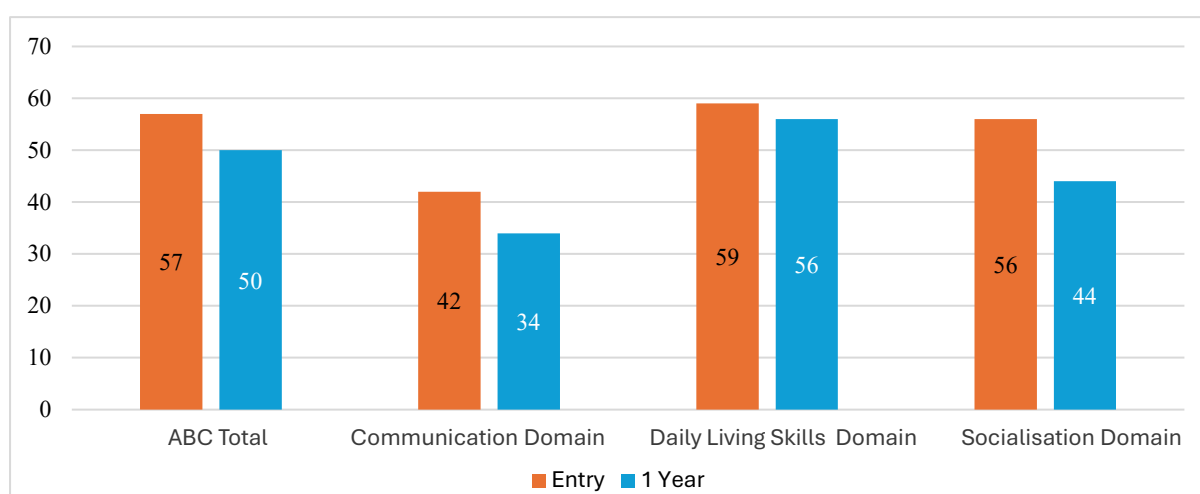
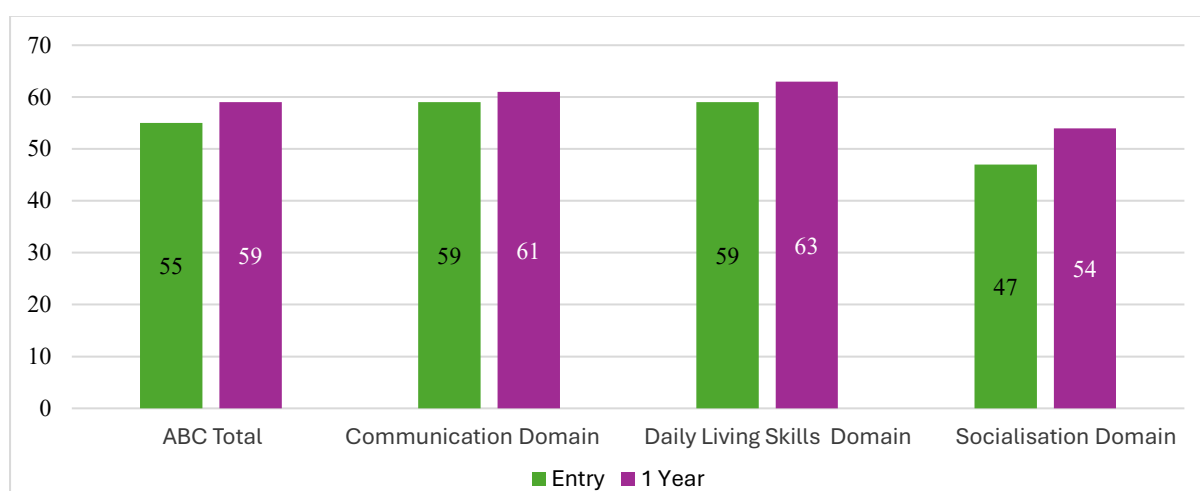


Figure 49 shows the educator-reported change in Vineland-3 ABC Total and Domain scores calculated from measures taken 12 months apart. Contrary to the parent-reported findings, there was a general increase in scores across all domains, with the largest improvement noted for the Daily Living Skills domain, which increased by 6.77%.

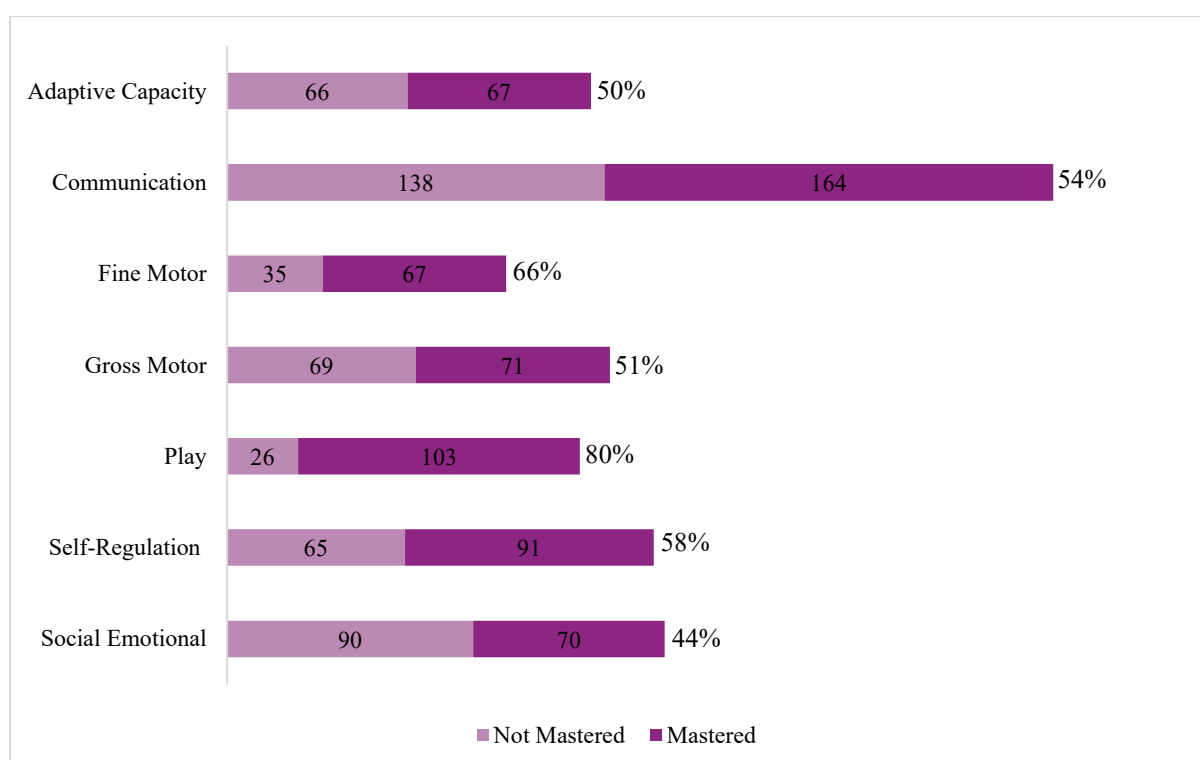
Figure 49. CS9 Changes in Vineland-3 Score (Educator)



CS9 ACE Daily Programme Trends:

During the 12 months of this evaluation, CS9 participated in a total of 1,122 daily learning steps across seven developmental domains and successfully completed 633 of these, resulting in an overall rate of mastery of 56%. (The full list of learning steps used in the analysis for CS9 is shown in Appendix 9). Figure 50 summarises the mastery rates (for learning steps) across developmental domains and indicates moderate improvements across most areas, ranging from 44% (social emotional) and 66% (fine motor skills). These rates exclude the mastery level achieved for play which was deemed to be high (mastery rate = 80%). This represents significant progress because play is considered fundamental to building social and communication skills—increasing the child’s capacity to form connections with peers.

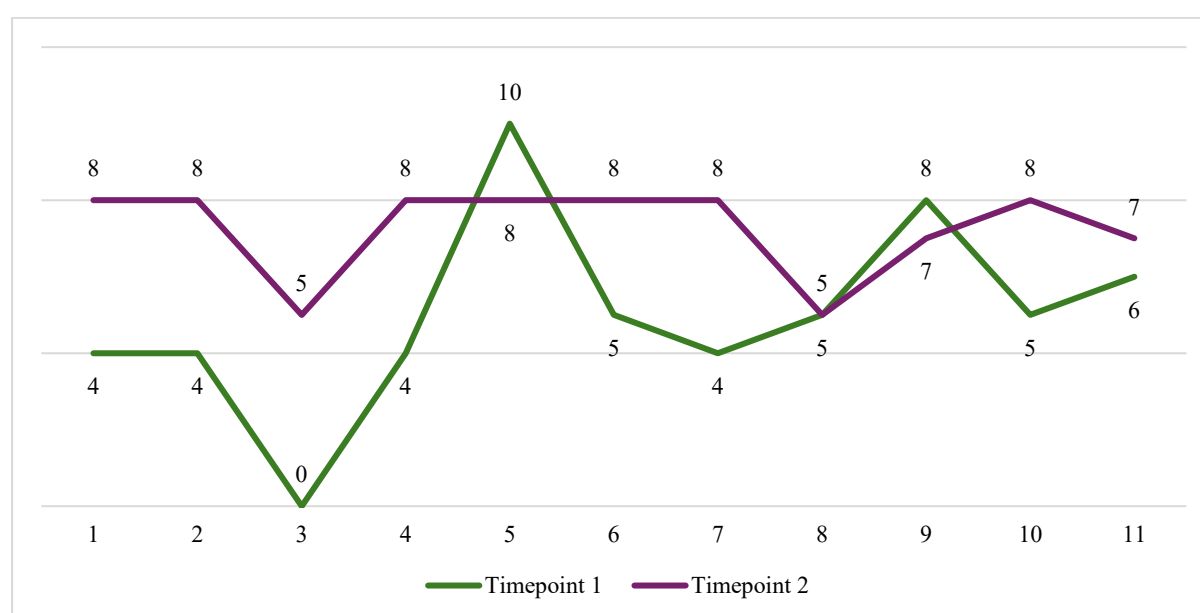
Figure 50. CS9 Mastery Rate of Learning Steps *per* Developmental Domain



CS9 Parent Confidence Trends:

The Parent Confidence Scale (PCS) was completed at T1 and T2 at the start and end of the 12-month evaluation period by CS9’s Mother. The overall PCS score was 55/110 at entry and 80/110 (post-12-months) and this represents a strong increase in confidence. Figure 51 below shows the changes in PCS item scores across the scale and reveals an increase in confidence in 8 of the 11 items. Item 8 (understanding the child’s sensory preferences) remained unchanged and items 5 and 9 moved in a slight negative direction. This indicates a decline in parent confidence as it relates to predicting how their child will respond in unfamiliar situations and in understanding of their child's sensory preferences.

Figure 51. CS9 Item-to-Item Change for the Parent Confidence Scale

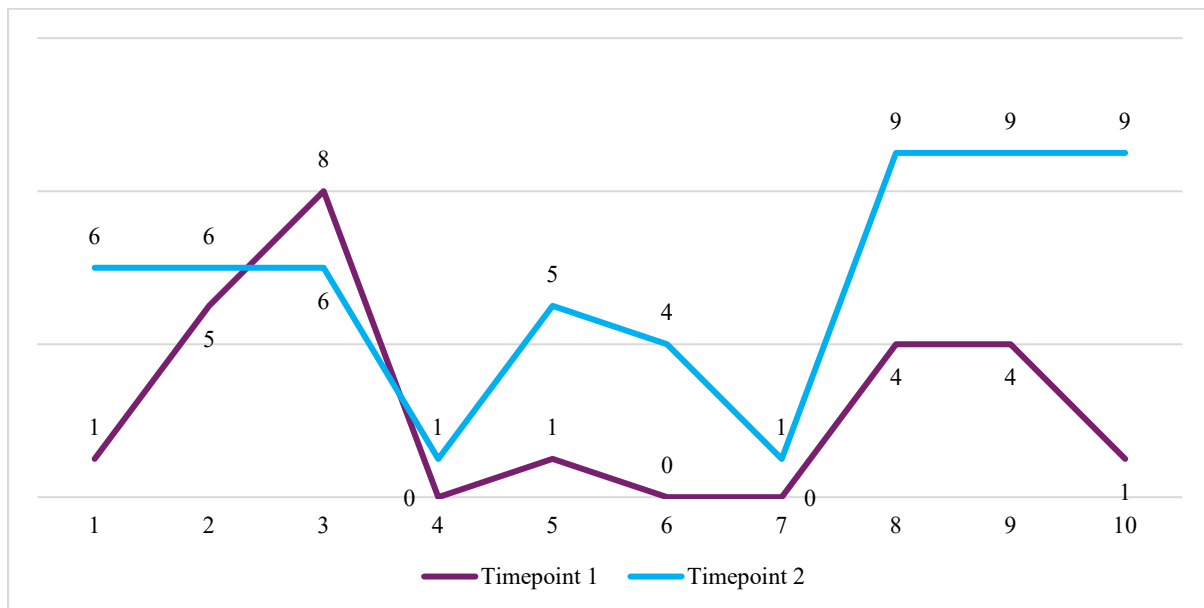


Q1	How confident are you in understanding the reasons why your child might use stimming or sensory seeking behaviours?
Q2	How confident are you in supporting your child when they are engaging in challenging behaviours?
Q3	How confident would you feel responding to any negative comments from members of the public about your child's behaviour?
Q4	How confident are you in your ability to support your child and their changing needs throughout their life?
Q5	How confident are you in predicting how your child will respond in unfamiliar situations?
Q6	How confident are you in supporting your child when they experience difficulty communicating their wants and needs?
Q7	How confident are you in helping your child to develop their ability to play with other children?
Q8	How confident are you in explaining autism to other people?
Q9	How confident are you that you understand your child's sensory preferences?
Q10	How confident are you that you have the skills and strategies to help your child regulate their emotions when required?
Q11	How confident are you that you have the skills to implement proactive, positive behaviour support strategies?

CS9 Parent Satisfaction Trends:

The Parent Satisfaction Scale (PSS) score was very low (24/90) at the start of CS9's presence in the ACE Programme and underwent a moderate increase (56/90) following 12 months (see Figure 52 below). The inspection of PSS scores for specific items suggests uneven but generally improved levels of satisfaction. Notable increases occurred for satisfaction in the child's ability to engage socially, fine motor skill development, self-help skills, and communication capacity. The one area of reduced satisfaction related to the child's gross motor skills.

Figure 52. CS9 Item-to-Item Change for the Parent Satisfaction Scale



Q1	I am satisfied with my child's ability to engage socially
Q2	I am satisfied with my child's fine motor skill development
Q3	I am satisfied with my child's gross motor skill development
Q4	I am satisfied with my child's pretend play skills
Q5	I am satisfied with my child's self-help/independence skills
Q6	I am satisfied with my child's communication skills
Q7	I am satisfied with my child's early learning skills
Q8	I know what an occupational therapist does
Q9	I know what a speech pathologist does
Q10	I know what a psychologist/positive behaviour support practitioner does

Overall Conclusions on CS9 Changes:

The 12-month evaluation of CS9's participation in the ACE Programme revealed an inconsistent but generally positive pattern of change. One form of inconsistency involved disagreement between the parent and educators on Vineland-3 ratings. While the former ratings indicated reduction in functioning, the latter reported improvements across all Vineland domains and the largest gains occurring in Daily Living Skills. These educator-reported gains are supported by moderate-to-high mastery rates across most domains.

Case Study (*n=1*) Evaluation of Educators

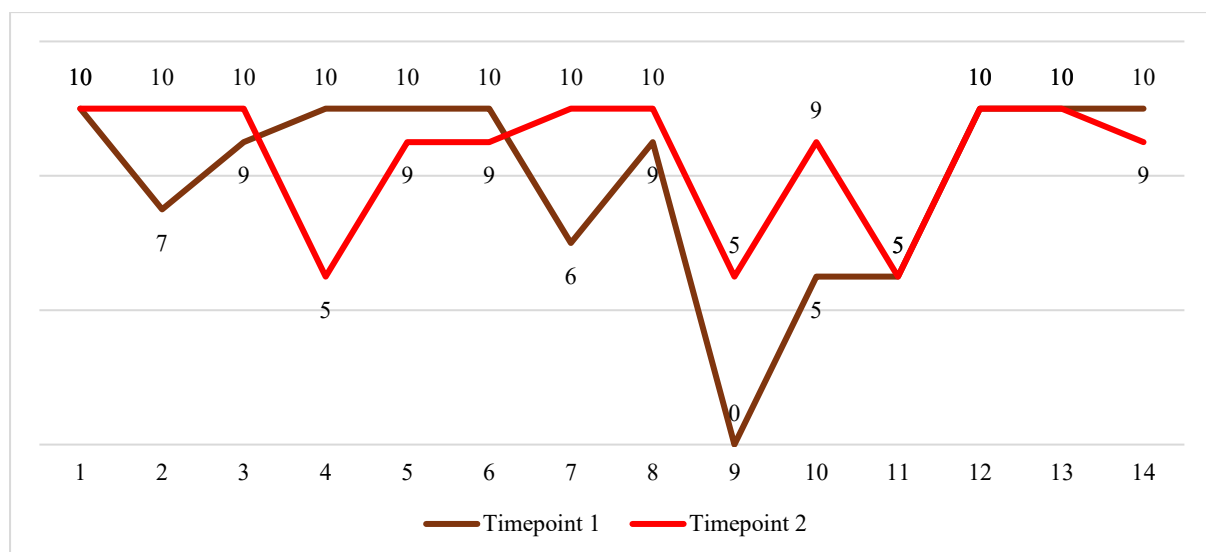
This aspect of the evaluation focused on assessing ‘change’ in educator practices within the ACE Programme in relation to confidence (using the Educator Confidence Scale; ECS), self-efficacy, and job satisfaction (using the Educator Self-Efficacy and Satisfaction Scale; ES-E&SS). The ECS comprised 14 items that examined educators’ confidence in relation to the particular needs of the autistic children they would be supporting and certainty in delivering key aspects unique to the ACE context (e.g., data-collection, implementation of individualised programmes). The ES-E&SS measured two factors within the same survey—self-efficacy (items 1-8) and job-related challenges (items 9-14). Because ‘positive change’ is indicated by higher ratings in self-efficacy and lower ratings in feeling challenged by aspects of the job, these factors are presented separately in the graphs below. The case studies are based on data sets for which all items were rated at two time points.

Findings for Case Study 1

Educator Confidence Scale Trends:

Case Study 1 (ED1) completed the ECS in term 3, 2024 and term 1, 2025. The total ECS score was 111/140 (T1) and 121/140 (T2), suggesting an increase in overall confidence. Figure 53 below represents the individual self-ratings for all 14 items of this scale and, in general terms, it can be seen that the score pattern is variable. The largest positive changes in item scores occurred for questions 7, 9 and 10 and this shows that ED1 felt considerably more confident in identifying the early signals that may indicate a child is becoming anxious or dysregulated, supporting parents to apply strategies used in the ACE Programme to assist their child at home, and collecting data on the child's progress towards individual goals. ED1 also reported several decreases in confidence (i.e., items 4, 5, 6) and the largest reduction related to advocating for the educational and social-emotional needs of autistic children within the wider childcare setting. She also felt less confident in observing the antecedents and functions of childrens’ behaviour.

Figure 53. ED1 Item-to-Item Changes in Educator Confidence on the ESC

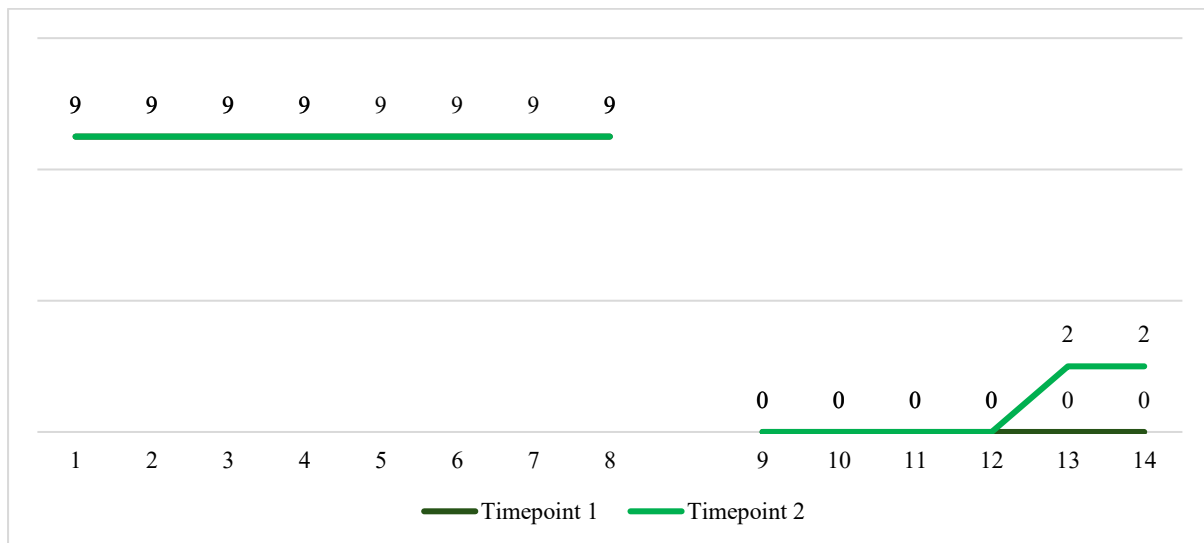


Q1	How confident do you feel in your role working as a staff/therapy assistant with Autistic children
Q2	How confident do you feel in your role implementing therapy programs with therapist guidance in a transdisciplinary team?
Q3	How confident are you in supporting Autistic children to transition between tasks or routines whilst maintaining regulation?
Q4	How confident are you in advocating for the educational and social-emotional needs of autistic children within the wider childcare program?
Q5	How confident are you in identifying the function of challenging behaviours?
Q6	How confident are you in identifying the antecedents (triggers) which might contribute to challenging behaviours?
Q7	How confident are you in identifying the early 'behaviour signals', which may indicate a child is becoming anxious or dysregulated?
Q8	How confident are you in identifying the general environmental factors that might cause children to become dysregulated or disengaged in play and/ or structured learning activities?
Q9	How confident are you in supporting parents to apply strategies you use in the ACE Programme to support their child at home?
Q10	How confident are you in recording data relating to a child's participation and progress towards their individual goals?
Q11	How confident are you in identifying and accessing resources from within the childcare centre to deliver optimal learning and individualised supports for a child?
Q12	How confident are you in your understanding of how sensory processing impacts engagement, activity regulation and behaviour?
Q13	How confident are you in using positive behaviour supports by engaging children in individualised strategies to meeting their needs?
Q14	How confident are you in implementing the sensory motor program?

Educator Self-Efficacy and Satisfaction Scale Trends:

ED1 completed the ES-E&SS in term 3, 2024 and term 1, 2025. As shown in Figure 54, the ES-E&SS items 1 to 8 received a maximum rating of 9 points at T1 and T2. A 2-point increase in ratings occurred at T2 for items 13 and 14, the educator felt slightly more overwhelmed when supporting children undergoing dysregulation/challenging behaviour and implementing therapist-directed strategies across the day. These findings suggest that ED1's participation in the ACE Programme was associated with very strong feelings of self-efficacy and minimal challenge.

Figure 54. ED1 Item-to-Item Changes in Educator Self-Efficacy and Challenge



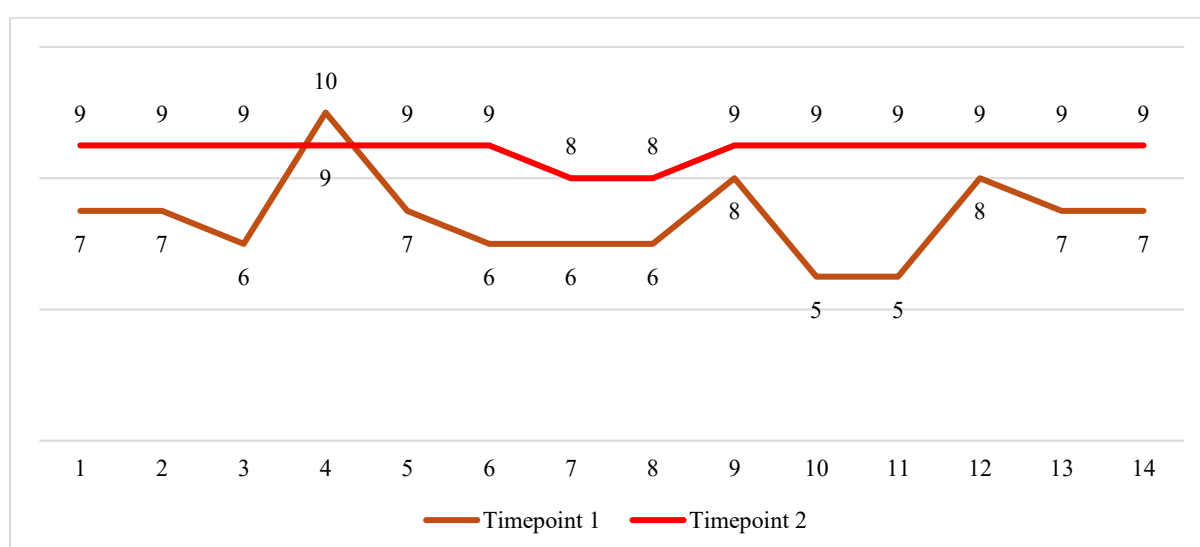
Satisfaction	
Q1	I am satisfied with what I achieve at work
Q2	I feel good at work
Q3	I feel well supported in my role at work
Q4	I am able to support children to follow the daily routine.
Q5	I can effectively support a child who is dysregulated.
Q6	I have the skills to adapt my approach based on a child's individual learning needs
Q7	How much can you do to contribute to a child's engagement in learning experiences?
Q8	How much can you do to engage children who prefer to play independently?
Challenges	
Q9	How much of a personal challenge is having too much work to do?
Q10	How frequently do you feel challenged due to extra duties/ responsibilities because of staffing changes and or absences?
Q11	How frequently do you feel challenged by the communication between the team and management within the workplace?
Q12	How much of a personal challenge is being responsible for children's progress?
Q13	How frequently do you feel challenged and or overwhelmed when supporting children who are dysregulated or exhibiting challenging behaviours
Q14	How much of a personal challenge is implementing therapist-recommended strategies across the day?

Findings for Case Study 2

Educator Confidence Scale Trends:

Case Study 2 (ED2) completed the ECS in term 3, 2023 (T1) and then in term 1, 2025 (T2), with the total ECS score undergoing positive change from T1 (total = 95/140) to T2 (total = 124/140). Figure 55 below shows that both T1 and T2 ratings for individual ECS items were reasonably high. ED2 reported greater confidence across all ECS items except for item 4 which showed a 1-point downturn and related to advocating for the educational and social-emotional needs of autistic children within the wider childcare programme. The greatest increases related to recording data on childrens' progress towards their individual goals and identifying/ accessing resources within the childcare centre to deliver optimal learning and individualised supports for children.

Figure 55. ED2 Item-to-Item Changes in Educator Confidence on the ESC



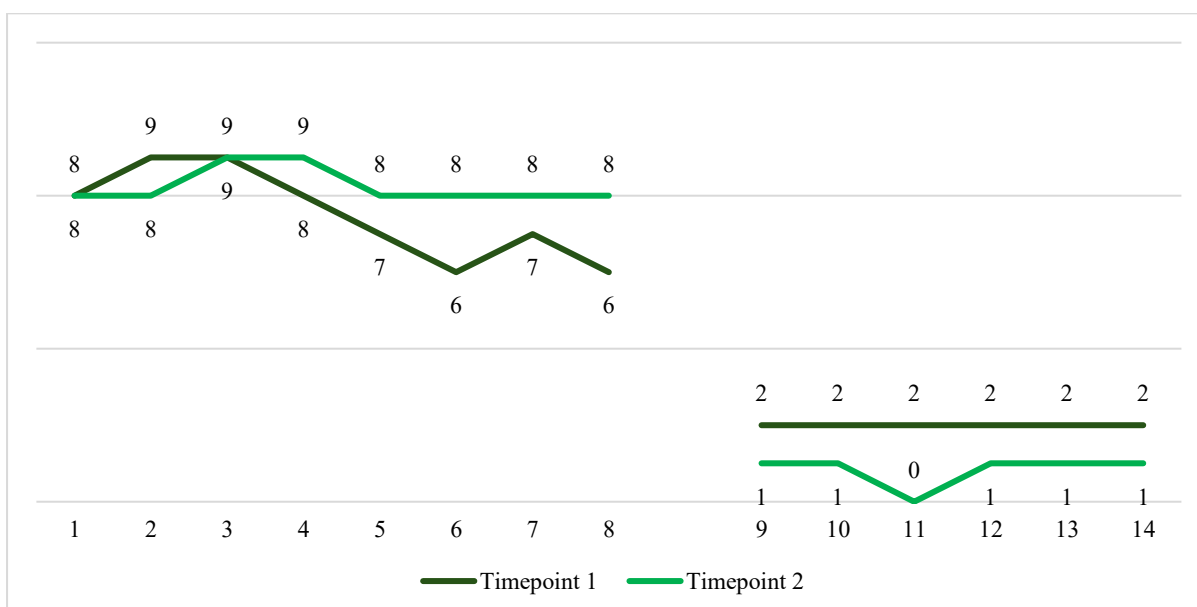
Q1	How confident do you feel in your role working as a staff/therapy assistant with Autistic children
Q2	How confident do you feel in your role implementing therapy programs with therapist guidance in a transdisciplinary team?
Q3	How confident are you in supporting Autistic children to transition between tasks or routines whilst maintaining regulation?
Q4	How confident are you in advocating for the educational and social-emotional needs of autistic children within the wider childcare program?
Q5	How confident are you in identifying the function of challenging behaviours?
Q6	How confident are you in identifying the antecedents (triggers) which might contribute to challenging behaviours?
Q7	How confident are you in identifying the early 'behaviour signals', which may indicate a child is becoming anxious or dysregulated?
Q8	How confident are you in identifying the general environmental factors that might cause children to become dysregulated or disengaged in play and/ or structured learning activities?
Q9	How confident are you in supporting parents to apply strategies you use in the ACE Programme to support their child at home?
Q10	How confident are you in recording data relating to a child's participation and progress towards their individual goals?

Q11	How confident are you in identifying and accessing resources from within the childcare centre to deliver optimal learning and individualised supports for a child?
Q12	How confident are you in your understanding of how sensory processing impacts engagement, activity regulation and behaviour?
Q13	How confident are you in using positive behaviour supports by engaging children in individualised strategies to meeting their needs?
Q14	How confident are you in implementing the sensory motor program?

Staff Self-Efficacy and Satisfaction Scale Trends:

Case Study 2 (ED2) completed the ES-E&SS at the same timepoints as for the ECS (i.e., term 3, 2023; T1 and term 1, 2025; T2). Figure 56 below, shows some minor increases in self-efficacy in relation to adapting their approach based on a child's individual learning needs and their capacity to engage children who prefer to play independently. Items 9 to 14 decreased (i.e., indicating lower feelings of challenge), with the greatest change relating to the frequency of feeling challenged by the communication between the ACE team and management.

Figure 56. ED2 Item-to-Item Changes in Educator Self-Efficacy and Challenge



Satisfaction	
Q1	I am satisfied with what I achieve at work
Q2	I feel good at work
Q3	I feel well supported in my role at work
Q4	I am able to support children to follow the daily routine.
Q5	I can effectively support a child who is dysregulated.
Q6	I have the skills to adapt my approach based on a child's individual learning needs
Q7	How much can you do to contribute to a child's engagement in learning experiences?
Q8	How much can you do to engage children who prefer to play independently?
Challenges	
Q9	How much of a personal challenge is having too much work to do?

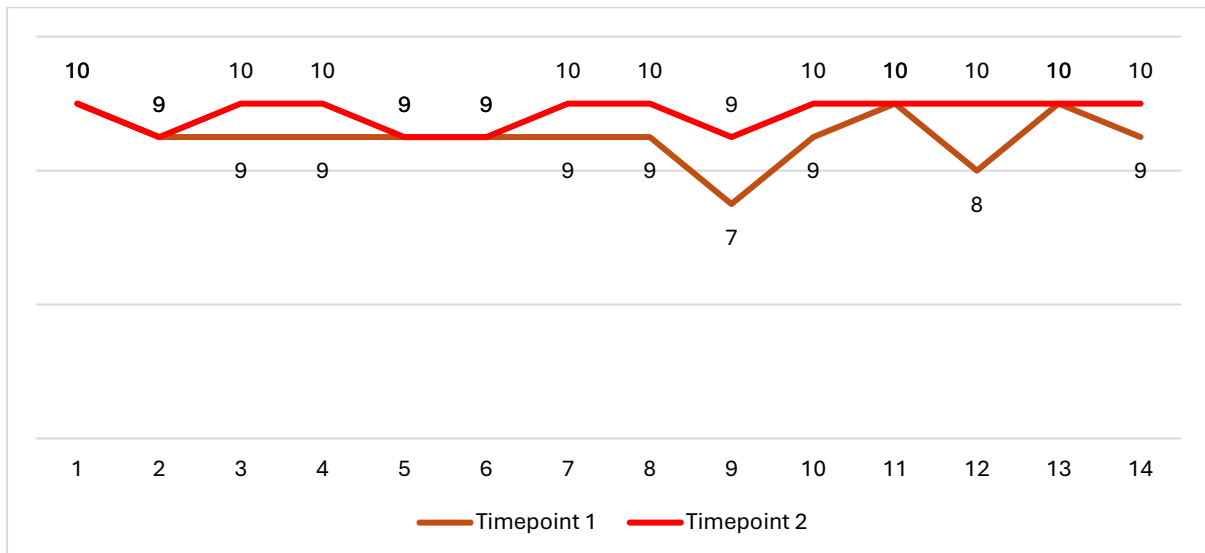
Q10	How frequently do you feel challenged due to extra duties/ responsibilities because of staffing changes and or absences?
Q11	How frequently do you feel challenged by the communication between the team and management within the workplace?
Q12	How much of a personal challenge is being responsible for children's progress?
Q13	How frequently do you feel challenged and or overwhelmed when supporting children who are dysregulated or exhibiting challenging behaviours
Q14	How much of a personal challenge is implementing therapist-recommended strategies across the day?

Findings for Case Study 3

Educator Confidence Scale Trends:

Case Study 3 (ED3) completed the ECS in term 3, 2023 (T1) and term 3, 2024 (T2), with the total scores being 126/140 and 136/140 respectively (see Figure 57). While this represents a general increase in confidence, it is worth noting that ED3 reported high ratings at T1 as well as T2. The item-to-item comparison of scores in Figure 66 shows that self-ratings for all items remained stable or increased, indicating improvement in already high confidence levels. The largest positive changes occurred for items 9 and 12, indicating increased confidence in supporting parents to apply ACE strategies to assist their child at home and in their understanding of how sensory processing impacts engagement, activity regulation, and behaviour.

Figure 57. ED3 Item-to-Item Changes in Educator Confidence on the ESC



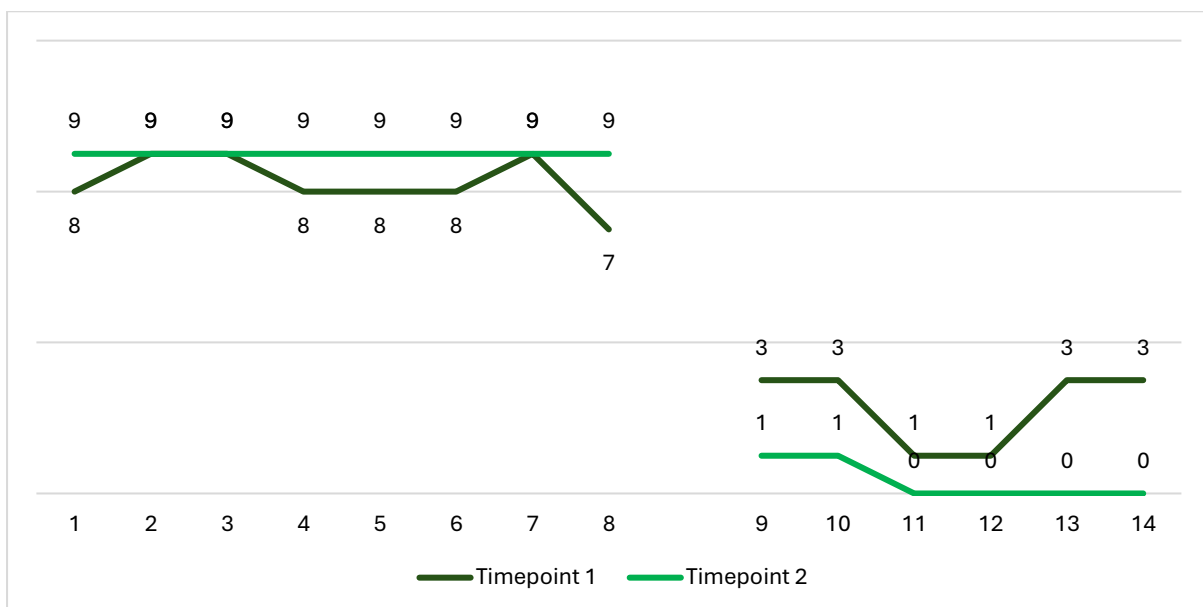
Q1	How confident do you feel in your role working as a staff/therapy assistant with Autistic children
Q2	How confident do you feel in your role implementing therapy programs with therapist guidance in a transdisciplinary team?
Q3	How confident are you in supporting Autistic children to transition between tasks or routines whilst maintaining regulation?
Q4	How confident are you in advocating for the educational and social-emotional needs of autistic children within the wider childcare program?

Q5	How confident are you in identifying the function of challenging behaviours?
Q6	How confident are you in identifying the antecedents (triggers) which might contribute to challenging behaviours?
Q7	How confident are you in identifying the early 'behaviour signals', which may indicate a child is becoming anxious or dysregulated?
Q8	How confident are you in identifying the general environmental factors that might cause children to become dysregulated or disengaged in play and/ or structured learning activities?
Q9	How confident are you in supporting parents to apply strategies you use in the ACE Programme to support their child at home?
Q10	How confident are you in recording data relating to a child's participation and progress towards their individual goals?
Q11	How confident are you in identifying and accessing resources from within the childcare centre to deliver optimal learning and individualised supports for a child?
Q12	How confident are you in your understanding of how sensory processing impacts engagement, activity regulation and behaviour?
Q13	How confident are you in using positive behaviour supports by engaging children in individualised strategies to meeting their needs?
Q14	How confident are you in implementing the sensory motor program?

Educator Self-Efficacy and Satisfaction Scale Trends:

ED3 completed the ES-E&SS at the same timepoints as the ECS (i.e., term 3, 2023; T1 and term 3, 2024; T2). The pattern of ES-E&SS item scores in Figure 58 shows an overall increase in already high scores. Self-reported self-efficacy at T2 was elevated to the maximum score for all items. Further, there was drop in how challenged ED reported feelings across all ES-E&SS items, with the greatest positive change occurring in feeling overwhelmed when supporting children exhibiting dysregulated or challenging behaviours and feeling less challenge when implementing therapist-recommended strategies.

Figure 58. ED3 Item-to-Item Changes in Educator Self-Efficacy and Challenge



Satisfaction	
Q1	I am satisfied with what I achieve at work
Q2	I feel good at work
Q3	I feel well supported in my role at work
Q4	I am able to support children to follow the daily routine.
Q5	I can effectively support a child who is dysregulated.
Q6	I have the skills to adapt my approach based on a child's individual learning needs
Q7	How much can you do to contribute to a child's engagement in learning experiences?
Q8	How much can you do to engage children who prefer to play independently?
Challenges	
Q9	How much of a personal challenge is having too much work to do?
Q10	How frequently do you feel challenged due to extra duties/ responsibilities because of staffing changes and or absences?
Q11	How frequently do you feel challenged by the communication between the team and management within the workplace?
Q12	How much of a personal challenge is being responsible for children's progress?
Q13	How frequently do you feel challenged and or overwhelmed when supporting children who are dysregulated or exhibiting challenging behaviours
Q14	How much of a personal challenge is implementing therapist-recommended strategies across the day?

Global Summary of Evaluation Findings

From its inception, the ACE project was designed as action research to examine the ‘real world’ child, parent, and educator issues associated with implementing an autism-specific early intervention programme in the childcare setting. This type of research was **collaborative** (i.e., involving researchers, coordinators, and educators), **participatory** (i.e., educators and parents involved in delivery of intervention strategies were themselves research participants), and **responsive** (i.e., methods evolved over time to meet participants’ needs). Most importantly, the purpose of action research is to find practical solutions to everyday issues, thus creating positive change. This is in contrast to traditional scientific models of investigation that are generally conducted in controlled environments and under strict/standardised conditions to answer a specific research question that, despite being focused on an important issue (e.g., health, education) might not immediately lead to practical solutions.

Despite its suitability to exploring everyday issues (especially in education), action research has a number of limitations that threaten the validity, rigour, and integrity of the research process. For example, Bialen (2025) reported that factors such as time and workload constraints, researcher bias/subjectivity (e.g., educators were required to collect information on their own practices), poor rigour (e.g., collecting inaccurate or inconsistent data), and low priority for recording/documenting activities, are common problems in action research. These issues all occurred during the ACE project and were conceptualised as ‘natural outcomes’ of guiding educators to implement a specialised programme while, at the same time, engaging in a detailed data-collection process involving children, their parents, and themselves. Therefore, the goal was to ‘move towards’ positive change and improvement while acknowledging the constraints and dynamic conditions inherent in supporting high-needs autistic children.

This evaluation centred on whether the ACE Programme produced ‘positive change’ (progress, improvement) in children, parents, and educators in line with three questions which will be addressed here.

Question 1: *Will children show evidence of skill-development in the 12 developmental domains targeted for intervention in the ACE Programme?*

The basis for evaluating ‘positive change’ in children did not focus on improvements in Vineland-3 scores for the reasons outlined earlier in this report (i.e., the limitations of standardised testing). This decision to exclude the Vineland-3 also arose from the data analysis which revealed frequent discrepancies between parent- and educator-reported data and some non-adherence to the timelines for Vineland-3 completion. Due to these factors, it was deemed that the Vineland-3 did not provide a valid basis for assessing skill-development.

Therefore, this aspect of the evaluation centred on childrens’ development of the specific skills that were determined to be essential to effective short- and long-term functioning. Those skills were identified through multiple assessment procedures (e.g., parent interviews, educator observations, the ACE Developmental Checklist) and embedded in an individualised intervention (i.e., the Daily Programme; DP). DP findings show that these children acquired important skills, with the average mastery rate for case study children (discussed earlier in this report) being 61% (range = 53% to 75%). Pleasingly, skill growth was particularly evident in the domains of communication, play, adaptive capacity, self-regulation, and social emotional engagement. All these capabilities are deemed to be fundamental to successful inclusion of autistic children in wider educational settings.

Interestingly, the total number of PD learning steps the case study children were exposed to during the intervention period ranged from 462 to 1122 (average learning steps = 796) and, if learning steps were conceptualised as sub-goals, it is clear that the ACE Programme provided children with a rich and varied pool of specialised learning opportunities that improved their daily functioning. There was no association between level of skill development and the number of days children attended the programme per week (range = 3 to 5 days) nor the overall period of time children participated in the programme (range = 12 to 24 months). In assessing the capacity for ‘positive change’ in young autistic children, it is necessary to consider ‘what they bring into the educational context in relation to assets, skills, difficulties and needs. The case study children all had a diagnosis of ASD-Severity Level 3 classifying them as ‘requiring very substantial support’ and displaying ‘severe’ difficulties for all autism-related features. This group also displayed considerable communication impairment resulting in non- to minimal-functional speaking that reduced their capacity for learning engagement. With these issues in mind and the trends towards skill acquisition in the case study children, it is fair to conclude that skill-development did occur as a result of them participating in the ACE Programme.

Question 2: *Is the ACE Programme capable of creating positive changes in parent confidence as this factor relates to their autistic child?’ and ‘How satisfied are parents with the impacts of the programme on their child’s functioning?’*

This aspect of the evaluation was based on one parent (all mothers) of the nine case study children, and the analysis was based on parent self-reported data gathered with the Parent Confidence and Parent Satisfaction scales. The findings on ‘change’ in confidence across parents show a strong increase in this factor (average T1-T2 increase = 33.25/110 points; range T1-T2 increase = 9 to 69 points [see Note 1 below]), showing that parents reported increased capacity in understanding and managing their children’s autism-related difficulties. Parents agreed in reporting substantial ‘confidence’ improvements in helping their child to play, explaining autism to others, understanding their child’s sensory preferences, supporting their child’s communication needs, and using proactive strategies to help their child in emotion regulation. Importantly, these factors were active targets for skill-development in the ACE Programme and often comprise content for the Parent Home Packs. The findings on ‘change’ in satisfaction revealed a similar trend to confidence, with PSS total scores showing strong improvement (average T1-T2 increase = 28/90 points; range T1-T2 increase = 16 to 49 points [see Note 2 below]). Parents reported being particularly satisfied with their children’s capacity to engage socially, participate in pretend play, and use self-help skills/display greater independence. Because seven PSC ‘satisfaction’ items were tied to child skill improvements, it can be concluded that the increase in parent satisfaction was associated with their child’s participation in the ACE Programme.

Note 1: CS1 parent considered an outlier and removed from analysis (showed 2-point decrease in confidence, remaining parents showed strong increase).

Note 2: CS4 parent considered an outlier and removed from analysis (showed no change in satisfaction, remaining parents showed strong increase).

Question 3: *Do educators report changes in their practices as a result of supporting autistic children in the ACE Programme?*

This aspect of the evaluation remains unclear due to paucity of complete data sets from educators during the intervention period. Despite this, the three educators who completed the two surveys developed to track ‘change’ reported increased confidence (Educator Confidence Scale), increased self-efficacy (job satisfaction), and decreased feelings of being challenged by aspects of their role in the ACE Programme. These self-report data suggest a trend towards positive change. Actual change in educator practices could not be determined due to fidelity measures not being implemented in the intervention period.

Evaluation of the ACE Programme Against National Standards

The Autism CRC lists 17 guiding principles, in its National Guidelines for ‘Supporting the Learning, Participation and Wellbeing of Autistic Children and their Families in Australia’ (see: [Supporting Autistic Children Guideline | Autism CRC](#)) and those principles were used as one basis for evaluating the ACE Programme with the overarching question being ‘*Does the ACE Programme adhere to best-practice criteria as specified by the Autism CRC?*’ This organisation is considered to represent ‘Australia’s independent national organization providing evidence-based, co-produced research and resources for autism across the lifespan’ and, as such, offers a solid basis for conducting evaluations of autism-specific early childhood programmes and services (source: CRC homepage, accessed April 2026). Table 6 below shows the ratings (rating scale spanning 0=poor; 1=satisfactory, 2=good; 3=outstanding), given by the UNE research team for implementation of the 17 Autism CRC Principles within the ACE Programme.

Overall, the ACE Programme received a rating of 3 (outstanding) for 14 of 17 principles which cluster around the areas of programme mission/focus (e.g., child and family-centred, individualised, strengths-focused, honour childhood), ethical conduct (e.g., ethics, child assent, informed consent), evidence-based practices, respect for neurodiversity and child/family needs, and appropriately timed/delivered interventions. It is worth commenting on the two CRC principles that received a rating of 1 (satisfactory) as this does not indicate ‘poor performance’ *per se* but instead ‘room for improvement.’ The ‘satisfactory’ rating for Principle 13 (Qualified Practitioners) should not be taken to suggest that the educators and therapist involved in the ACE Programme lacked appropriate qualifications. However, the ACE Programme was embedded within a transdisciplinary model of therapy in which educators were trained/coached to implement strategies within each child’s daily activities and this required formal evaluation in relation to the accuracy with which educators implemented such tactics. While UNE researchers co-developed an ACE Educator Fidelity Checklist with the ACE Coordinators, measures of fidelity were not implemented in the research period and formal comment cannot be made in the absence of data. The ‘satisfactory’ rating rests on the presence of appropriately training therapists in the ACE Programme and their development/implementation of child-focused therapy programmes. Principle 15 (Parent and Family-Affirming Focus) also received a ‘satisfactory’ rating to reflect that important aspects of including parents in data-collection processes, collaborating with them to address child needs of importance to them, and working directly on generalisation of skills into the home environment by providing access to Parent Packs. However, as the ACE Programme progressed, it became clear that parents presented

with their own complex difficulties and these might have been addressed formally by creating the new role of Parent Liaison/Counsellor.

Table 6. ACE Programme Application of Autism CRC Principles

	Standard of ACE Programme Implementation				
Autism CRC Principle	0	1	2	3	NA*
1. Child and family-centred				✓	
2. Individualised				✓	
3. Strengths-focused				✓	
4. Holistic				✓	
5. Honour childhood				✓	
6. Foundation for the future				✓	
7. Ethical				✓	
8. Culturally safe				✓	
9. Respect Australia's first nations					✓
10. Evidence-based				✓	
11. Assent (children)				✓	
12. Informed consent				✓	
13. Qualified practitioners		✓			
14. Neurodiversity-affirming				✓	
15. Parent and family-affirming		✓			
16. Timely/accessible				✓	
17. Coordinated				✓	

*NA=Not directly targeted or measured during the research and cannot be included in this evaluation.

Commendations

1. ACE Programme personnel maintained exceptional levels of respect and empathy in supporting autistic children and their parents. Educators were committed to building strong social connections with children and using these as the foundation for intervention delivery. Children were viewed as valuable human beings capable of personal growth, learning, and engagement – ‘just like everyone else’.
2. The ACE ethos centred on ‘the child’. All methods and processes within the Programme focused on strength-based strategies aimed at supporting children towards change suited to their needs and the contexts they inhabited. The intervention goal was never to ‘cure’ autism, but educators were observed to delight in the unique responses of the children they supported. In fact, the ACE implemented ‘neuro-affirming’ approaches before these became a socio-political initiative.
3. ACE personnel have succeeded in implementing a data-collection process capable of permitting continuous and robust evaluation of its frameworks, procedures, and practices. This has been a very challenging undertaking which, in large part, has occurred due to the efforts, foresight, and dedication of Liz Barclay (Director of Clinical Services) who has advocated for the contribution research can make to practice. The UNE Researchers have led action research (involving schools, classrooms, teachers, therapists) for over 50 years and can state the ACE data-collection process does not exist in other Childcare Centres in Australia.

Recommendations

1. To continue the research-focused data-gathering already developed to monitor ‘change’ in children and their parents. This will require refinement of research protocols to ensure that future projects are identified as those which will progress the field. Two suggestions for implementation are:
 - a. Extend child-focused data-collection to include contextual monitoring as this will help in explaining variations in skill-development.
 - b. Initiate the assessment of fidelity in educator practices as this will provide a basis for examining the effectiveness of the interdisciplinary model that underpins the ACE Programme.
2. To generalise ‘meaningful inclusion’ procedures/learning opportunities (previously) offered in outside play settings to inside classrooms ‘matched to’ the child’s capacity to benefit from the learning opportunities, peer play/interactions, and physical/sensory stimuli that exist in the ‘mainstream’ setting. Two suggestions for implementation are:
 - a. Use the ‘meaningful inclusion’ pillars to train educators and prepare peers in supporting the autistic child’s entry into the inclusive setting in the Imagine Centre.
 - b. Use the same approach to guide the child’s transition into a new educational setting when they leave the ACE Programme. It is understood that *ad hoc* training needs to be offered to receiving settings such as schools, and a structured training process would provide opportunities for building educators’ understanding of children (rather than being restricted to obtaining the diagnosis *per se*). This initiative could also set the basis for following children once they leave the ACE.
3. To develop a ‘parent liaison’ role to provide a direct pathway for assisting parents to address the issues that create barriers to their own mental health and general functioning. This could expand to sibling support initiatives to target their particular difficulties and possibly build positive relationships with their sibling with autism.

Appendices

Appendix 1 - Case Study 1 Daily Programme Participation

Category	Programme Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Social Emotional	Imitates actions and/or vocalisations	SE - Imitation	30	30	60	50%
	Look toward peer, small group	SE - Group Routines 05	13	12	25	48%
	Maintains engagement, sensory social routine	SE - Adult Interactions 06	18	25	43	58%
	Waits with support during turn taking	SE - Turn Taking 04	15	8	23	35%
TOTAL			76	75	151	50%
Communication	Follows instruction to complete action	C - Receptive - Follow instructions 09	4	14	18	78%
	Hands/Extends object to ask for help	C - Expressive - Gestures/Sounds/Words 02	25	32	57	56%
	Imitates 5 motor actions in songs and games.	C - Pre-linguistic 01	1	3	4	75%
	Makes eye contact to obtain object	C - Requesting 04	12	10	22	45%
	Requests help using multi-modal communication	C - Multi-modal 01	0	6	6	100%
	Requests repetition of an experience	C - Requesting 08	2	8	10	80%
	Uses PECS to request	C - AAC 04	17	20	37	54%
	Uses single word to request, protest, comment	C - AAC 01	0	4	4	100%
TOTAL			61	97	158	61%
Play	Engages in short role play	P - Pretend Play Themes 04	2	6	8	75%
	Play about life inside/outside home	P - Pretend Play Themes 03	2	3	5	60%
	Single action in pretend play	P - Pretend Play Sequences 01	11	18	29	62%
	Themes relating to themselves	P - Pretend Play Themes 01	0	3	3	100%
	Uses objects in a functional way	P - Pre-Pretend/Concrete Play 07	18	20	38	53%
TOTAL			33	50	83	60%
Self-Regulation	Follows Preparation Routine	SR - Regulation Strategies 02	9	8	17	47%
	Identifies emotions from pictures	SR - Understanding Emotions 02	14	3	17	18%
	Identifies regulating experience from choice	SR - Self-Regulation Tools 06	7	18	25	72%
	Identify known regulating experience	SR - Regulation Strategies 03	0	4	4	100%
TOTAL			30	33	63	52%
Adaptive Capacity	Carries plate, cup, spoon to tray/sink	AC - Meal times 06	18	9	27	33%

Category	Programme Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
	Packs away lunch box and clears rubbish	AC - Meal times 07	33	5	38	13%
	Will pack away resources	AC - Routines 06	10	10	20	50%
	Transitions between routine parts of the day	AC - Transitions 03	11	16	27	59%
	Removes/puts items in backpack when requested	AC - Routines 04	0	2	2	100%
	Transitions highly preferred to non-preferred	AC - Transitions 01.1	2	11	13	85%
TOTAL			74	53	127	42%
Gross Motor	Imitates GM actions e.g. Simon says	GM – Social Locomotion 03	7	23	30	77%
	Plays chase with adults	GM – Social Locomotion 02	5	3	8	38%
	Plays simple games with peers	GM - Social Locomotion 04	8	10	18	56%
	Throw/roll ball to target	GM - Throw/roll ball	10	12	22	55%
	Throws ball in direction of another person	GM - Ball Play #	5	3	8	38%
TOTAL			35	51	86	59%
Fine Motor	Imitates lines and circular scribbles	FM - Drawing, mark making 02	12	8	20	40%
	Imitates pre-writing shapes	FM - Drawing 05.1	1	4	5	80%
	Posts large plastic coins	FM - Placement fingers 05	8	13	21	62%
	Threads onto string	FM - Bilateral 09.1	0	12	12	100%
	Traces circle and cross shapes	FM - Drawing 04	10	7	17	41%
TOTAL			31	44	75	59%
OVERALL TOTAL			340	403	743	54%

Appendix 2 - Case Study 2 Daily Programme Participation

Domain	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Comes to experience when requested	AC - Learning experiences and Group time #	48	27	78	35%
	Will pack away resources	AC - Routines 06	4	7	12	58%
TOTAL			52	34	90	38%
Communication	Communicates 'finished' during routines	C - AAC 06	12	10	22	45%
	Follows instruction to complete action	C - Receptive - Follow instructions 09	36	39	75	52%
	Makes eye contact to obtain object	C - Requesting 04	20	32	52	62%
	PECS - Field of 2	C - AAC 05	1	6	7	86%
	Uses PECS to request	C - AAC 04	2	15	17	88%
	Uses single word to request, protest, comment	C - AAC 01	1	2	3	67%
TOTAL			72	104	176	59%
Fine Motor	Build block tower 4-5 pieces	FM - Block Building 01	1	1	2	50%
	Presses stamp/cutter in playdoh – 2 hands	FM - Bilateral 02	27	12	39	31%
TOTAL			28	13	41	32%
Gross Motor	Imitates GM actions e.g. Simon says	GM – Social Locomotion 03	0	2	2	100%
	Plays chase with adults	GM – Social Locomotion 02	12	39	51	76%
TOTAL			12	41	53	77%
Play	Cause and Effect toys	P - Pre-Pretend/Concrete Play 02	0	3	3	100%
	One-step toys	P - Pre-Pretend/Concrete Play 03	34	17	51	33%
	Plays with cause-and-effect toys	P - Concrete Play 02	4	11	15	73%
	Same Action Toys	P - Pre-Pretend/Concrete Play 04	0	1	1	100%
TOTAL			38	32	70	46%
Self-Regulation	Matches emotions using AAC devices	SR-Self regulation	1	0	1	0%
	Participates in offered regulation experience	SR - Supported Regulation 02	28	32	60	53%
TOTAL			29	32	61	52%
Social Emotional	Imitates actions and/or vocalisations	SE - Imitation	3	22	25	88%
	Maintains engagement, sensory social routine	SE - Adult Interactions 06	35	22	57	39%
	Participates briefly in small group game	SE - Peer Interactions 04	1	0	1	0%

TOTAL	39	44	83	53%
OVERALL TOTAL	270	300	570	53%

Appendix 3 - Case Study 3 Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Carries bag to and from ACE/home	AC - Routines 02.1	7	2	9	22%
	Eats meals with peers at table with support	AC - Meal times 03	35	41	76	54%
	Helps with table setting	AC - Meal set/clean up 02	5	18	23	78%
	Transitions between routine parts of the day	AC - Transitions 03	11	21	32	66%
	Transitions highly preferred to non-preferred	AC - Transitions 01.1	1	5	6	83%
TOTAL			59	87	146	60%
Communication	Follows instructions to give/point/show	C - Receptive - Follow instructions 08	4	14	28	50%
	Hands/Extends object to ask for help	C - Expressive - Gestures/Sounds/Words 02	14	13	27	48%
	Points to object to request	C - Expressive - Gestures/Sounds/Words 04	19	22	41	54%
	Requests repetition of an experience	C - Requesting 08	1	5	6	83%
	Single words to request, refuse, share	C - Expressive - Gestures/Sounds/Words 08	1	8	9	89%
	Two Word Combinations	C - Communicate for a variety of intentions #	23	5	28	18%
	Uses single word to request, protest, comment	C - AAC 01	2	8	10	80%
	Uses single word to request, protest, comment	C - AAC 03	3	11	14	79%
	Uses variety of single words	C - Multi-modal 03	0	12	12	100%
TOTAL			67	98	175	56%
Fine Motor	Imitates pre-writing shapes	FM - Drawing 05.1	32	24	56	43%
	Scoops, rakes, pours - sand and water play	FM - Bilateral 04	27	10	37	27%
	Stabilises with non-dominant hand	FM - Bilateral 07	2	4	6	67%
TOTAL			61	38	99	38%
Gross Motor	Catches ball at 1m/2m	GM - Ball skills 05	14	12	24	50%
	Climbs small ladder to a slide	GM – Playground 02	11	14	25	56%
	Imitates GM actions e.g. Simon says	GM – Social Locomotion 03	3	4	7	57%
	Parallel play for dancing, jumping etc.	GM - Social Locomotion 01	6	29	35	83%
	Rides and manoeuvres tricycle with control	GM – Ride on toys 04	8	2	10	20%
	Rides/manoeuvres bike with training wheels	GM – Ride on toys 05	8	1	9	11%
TOTAL			50	62	110	56%

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Play	Single action in pretend play	P - Pretend Play Sequences 01	20	40	60	67%
	Three logical steps in pretend play	P - Pretend Play Sequences 04	1	0	1	0%
	Two related actions in pretend play	P - Pretend Play Sequences 03	27	15	42	36%
TOTAL			48	55	103	53%
Self-Regulation	Awareness of body feelings	SR - Understanding Emotions 03	16	10	26	38%
	Follows Preparation Routine	SR - Regulation Strategies 02	14	1	15	7%
	Identifies regulating experience from choice	SR - Self-Regulation Tools 06	6	14	20	70%
	Identify known regulating experience	SR - Regulation Strategies 03	0	7	7	100%
	Participates in offered regulation experience	SR - Supported Regulation 02	7	23	30	77%
TOTAL			43	55	98	56%
Social Emotional	Imitates actions and/or vocalisations	SE - Imitation	13	24	37	65%
	Initiates interactions with known adults	SE - Initiate Interactions 02	7	4	11	36%
	Plays alongside peers & sometimes copies	SE - Peer Interactions 03	5	20	25	80%
	Turn taking with peer, 2/4/6/8 turns	SE - Turn Taking 03	19	19	38	50%
TOTAL			44	67	111	60%
OVERALL TOTAL			372	462	834	55

Appendix 4 - Case Study 4 Daily Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Comes to experience when requested	AC - Learning experiences and Group time	6	18	24	75%
	Removes/puts items in backpack when requested	AC - Routines 04	2	0	2	0%
	Transitions from area to area	AC - Transitions 02	0	14	14	100%
	Transitions highly preferred to non-preferred	AC - Transitions 01.1	11	17	28	61%
TOTAL			19	49	68	72%
Communication	Follows instruction to complete action	C - Receptive - Follow instructions 09	6	4	10	40%
	Points to indicate choice between objects	C - Expressive - Gestures/Sounds/Words 05	8	7	15	47%
	Requests help using multi-modal communication	C - Multi-modal 01	19	16	33	48%
	Requests repetition of an experience	C - Requesting 08	1	18	19	95%
	Uses single word to request, protest, comment	C - AAC 01	2	14	16	88%
	Uses single word to request, protest, comment	C - AAC 03	2	3	5	60%
TOTAL			38	62	98	63%
Fine Motor	Connects large blocks e.g. duplo	FM - Bilateral 05	12	27	39	69%
	Manipulate using pincer grasp	FM - Grasp patterns 03	1	6	7	86%
	Presses stamp/cutter in playdoh – 2 hands	FM - Bilateral 02	2	0	2	0%
TOTAL			15	33	48	69%
Gross Motor	Parallel play for dancing, jumping etc.	GM - Social Locomotion 01	7	11	18	61%
	Rolls ball forwards/back to another person	GM - Social ball play 02	21	8	29	28%
TOTAL			28	19	47	40%
Play	Engages in Pre-Pretend/Concrete Play 01	P - Toy/s as intended play	7	11	18	61%
	Same Action Toys	P - Pre-Pretend/Concrete Play 04	4	19	23	83%
	Stop/Go games	P - Stop/Go games	5	11	16	69%
	Uses objects in a functional way	P - Pre-Pretend/Concrete Play 07	4	3	7	43%
TOTAL			20	44	64	69%
Self-Regulation	Clear preference for regulatory experiences	SR - Supported Regulation 03	1	12	13	92%
	Identifies regulating experience from choice	SR - Self-Regulation Tools 06	21	11	32	34%
	Identify known regulating experience	SR - Regulation Strategies 03	2	6	8	75%

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
TOTAL			24	29	53	55%
Social Emotional	Contributes 2+ times in a group time	SE - Group Routines 12	12	14	26	54%
	Engages with adult in experience for 2-3 mins	SE - Adult Interaction 03	2	13	15	87%
	Imitates actions and/or vocalisations	SE - Imitation	7	21	28	75%
	Looks/Moves body towards others	SE - Initiate Interactions 01	4	9	13	69%
TOTAL			25	57	82	70%
OVERALL TOTAL			169	293	462	63%

Appendix 5 - Case Study 5 Daily Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Carries bag to and from ACE/home	AC - Routines 02.1	2	13	15	87%
	Packs away lunch box and clears rubbish	AC - Meal times 07	4	15	19	79%
	Passes food/drink to others	AC - Meal set/clean up 01	2	10	12	83%
	Removes/puts items in backpack when requested	AC - Routines 04	7	14	21	67%
	Serves self at table with utensil	AC - Meal time serve/prepare 01	8	20	28	71%
	Transitions highly preferred to non-preferred	AC - Transitions 01.1	2	12	14	86%
TOTAL			25	84	109	77%
Communication	2-4 words to request, comment, refuse - AAC	C - AAC 05.1	3	18	21	86%
	Follow 2 step instructions - familiar routine	C - Receptive - Follow instructions 17	14	17	31	55%
	Follows instructions to complete two actions	C - Receptive - Follow instructions 13	8	5	13	38%
	Follows instructions to give/point/show	C - Receptive - Follow instructions 08	9	6	15	40%
	Points to object to request	C - Expressive - Gestures/Sounds/Words 04	17	19	36	53%
	Respond to "What's happening?" questions	C - Expressive - Respond to questions 05	7	7	14	50%
	Uses person's name to get attention	C - Expressive - Social Communication 01	7	18	25	72%
	Uses single word to request, protest, comment	C - AAC 01	0	13	13	100%
TOTAL			65	103	168	61%
Fine Motor	Imitates lines and circular scribbles	FM - Drawing, mark making 02	0	8	8	100%
	Presses stamp/cutter in playdoh – 2 hands	FM - Bilateral 02	0	7	7	100%
	Rolls playdough	FM - Playdough experiences	0	12	12	100%
	Snips playdoh, spring-loaded scissors	FM - Scissors 02.1	5	15	20	75%
	Traces name	FM - Writing 01	2	17	19	89%
	Traces square and triangle	FM - Drawing 05	9	14	23	61%
TOTAL			16	73	89	82%
Gross Motor	Hops on each foot	GM - Balance and Locomotion 03	14	12	26	46%
	Plays chase with adults	GM – Social Locomotion 02	24	10	34	29%
	Sits on ride on toy and pushes with feet	GM - Ride on toys 01	0	10	10	100%
	Throws & kicks ball towards another person	GM - Ball Play #	3	14	17	82%

	Will pedal 1m on a tricycle.	GM – Ride on toys 02	1	7	8	88%
TOTAL			42	53	95	56%
Play	Completes complex construction	P - Concrete Play 07	0	15	15	100%
	Completes construction to use for play	P - Concrete play 08	3	13	16	81%
	Completes construction to use for play	P - Concrete play 08	1	16	17	94%
	One-step toys	P - Pre-Pretend/Concrete Play 03	0	15	15	100%
	Same Action Toys	P - Pre-Pretend/Concrete Play 04	0	12	12	100%
	Uses 2-step related actions in play	P - Pretend Play Actions 5.2	3	17	20	85%
	Uses single actions in play	P - Pretend Play: Actions 03	1	5	6	83%
TOTAL			8	93	101	92%
Self-Regulation	Follows Preparation Routine	SR - Regulation Strategies 02	0	15	15	100%
	Identifies regulating experience from choice	SR - Self-Regulation Tools 06	7	15	22	68%
	Identify known regulating experience	SR - Regulation Strategies 03	0	11	11	100%
	Matches emotions using AAC devices	SR-Self regulation	0	7	7	100%
	Participates in offered regulation experience	SR - Supported Regulation 02	2	12	14	86%
	Request/participate in regulating experience	SR - Regulation Strategies 04	2	13	15	87%
TOTAL			11	73	84	87%
Social Emotional	Asks "My Turn" in turn-taking experience	SE - Turn Taking 03	4	15	19	79%
	Enter and maintain play 1-2 minutes	SE - Peer Interactions 07	1	13	14	93%
	Imitates actions and/or vocalisations	SE - Imitation	5	18	23	78%
	Imitates actions and/or vocalisations	SE - Imitation	5	9	14	64%
	Look toward peer, small group	SE - Group Routines 05	3	8	11	73%
	Responds to adult's greeting - Gesture/Verbal	SE - Adult Interaction 02	3	15	18	83%
	Turn taking experience with adult 6 turns	SE - Turn Taking 01.1	7	21	28	75%
TOTAL			28	99	127	78%
OVERALL TOTAL			195	578	773	75%

Appendix 6 - Case Study 6 Daily Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Carries bag to and from ACE/home	AC - Routines 02.1	2	13	15	87%
	Packs away lunch box and clears rubbish	AC - Meal times 07	4	15	19	79%
	Passes food/drink to others	AC - Meal set/clean up 01	2	10	12	83%
	Removes/puts items in backpack when requested	AC - Routines 04	7	14	21	67%
	Serves self at table with utensil	AC - Meal time serve/prepare 01	8	20	28	71%
	Transitions highly preferred to non-preferred	AC - Transitions 01.1	2	12	14	86%
TOTAL			25	84	109	77%
Communication	2-4 words to request, comment, refuse - AAC	C - AAC 05.1	3	18	21	86%
	Follow 2 step instructions - familiar routine	C - Receptive - Follow instructions 17	14	17	31	55%
	Follows instructions to complete two actions	C - Receptive - Follow instructions 13	8	5	13	38%
	Follows instructions to give/point/show	C - Receptive - Follow instructions 08	9	6	15	40%
	Points to object to request	C - Expressive - Gestures/Sounds/Words 04	17	19	36	53%
	Respond to "What's happening?" questions	C - Expressive - Respond to questions 05	7	7	14	50%
	Uses person's name to get attention	C - Expressive - Social Communication 01	7	18	25	72%
	Uses single word to request, protest, comment	C - AAC 01	0	13	13	100%
TOTAL			65	103	168	61%
Fine Motor	Imitates lines and circular scribbles	FM - Drawing, mark making 02	0	8	8	100%
	Presses stamp/cutter in playdoh – 2 hands	FM - Bilateral 02	0	7	7	100%
	Rolls playdough	FM - Playdough experiences	0	12	12	100%
	Snips playdoh, spring-loaded scissors	FM - Scissors 02.1	5	15	20	75%
	Traces name	FM - Writing 01	2	17	19	89%
	Traces square and triangle	FM - Drawing 05	9	14	23	61%
TOTAL			16	73	89	82%
Gross Motor	Hops on each foot	GM - Balance and Locomotion 03	14	12	26	46%
	Plays chase with adults	GM – Social Locomotion 02	24	10	34	29%
	Sits on ride on toy and pushes with feet	GM - Ride on toys 01	0	10	10	100%
	Throws & kicks ball towards another person	GM - Ball Play #	3	14	17	82%

	Will pedal 1m on a tricycle.	GM – Ride on toys 02	1	7	8	88%
Total			42	53	95	56%
Play	Completes complex construction	P - Concrete Play 07	0	15	15	100%
	Completes construction to use for play	P - Concrete play 08	3	13	16	81%
	Completes construction to use for play	P - Concrete play 08	1	16	17	94%
	One-step toys	P - Pre-Pretend/Concrete Play 03	0	15	15	100%
	Same Action Toys	P - Pre-Pretend/Concrete Play 04	0	12	12	100%
	Uses 2-step related actions in play	P - Pretend Play Actions 5.2	3	17	20	85%
	Uses single actions in play	P - Pretend Play: Actions 03	1	5	6	83%
TOTAL			8	93	101	92%
Self-Regulation	Follows Preparation Routine	SR - Regulation Strategies 02	0	15	15	100%
	Identifies regulating experience from choice	SR - Self-Regulation Tools 06	7	15	22	68%
	Identify known regulating experience	SR - Regulation Strategies 03	0	11	11	100%
	Matches emotions using AAC devices	SR-Self regulation	0	7	7	100%
	Participates in offered regulation experience	SR - Supported Regulation 02	2	12	14	86%
	Request/participate in regulating experience	SR - Regulation Strategies 04	2	13	15	87%
TOTAL			11	73	84	87%
Social Emotional	Asks "My Turn" in turn-taking experience	SE - Turn Taking 03	4	15	19	79%
	Enter and maintain play 1-2 minutes	SE - Peer Interactions 07	1	13	14	93%
	Imitates actions and/or vocalisations	SE - Imitation	5	18	23	78%
	Imitates actions and/or vocalisations	SE - Imitation	5	9	14	64%
	Look toward peer, small group	SE - Group Routines 05	3	8	11	73%
	Responds to adult's greeting - Gesture/Verbal	SE - Adult Interaction 02	3	15	18	83%
	Turn taking experience with adult 6 turns	SE - Turn Taking 01.1	7	21	28	75%
TOTAL			28	99	127	78%
OVERALL TOTAL			195	578	773	75%

Appendix 7 - Case Study 7 Daily Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Eats meals with peers at table with support	AC - Meal times 03	7	19	26	73%
	Eats meals with peers at table with support	AC - Meal times 03	2	16	18	89%
	Packs away lunch box and clears rubbish	AC - Meal times 07	5	2	7	29%
	Packs away lunch box and clears rubbish	AC - Meal times 07	10	11	21	52%
	Packs away lunch box and clears rubbish	AC - Meal times 07	5	4	9	44%
	Removes/puts items in backpack when requested	AC - Routines 04	10	17	27	63%
	Removes/puts items in backpack when requested	AC - Routines 04	13	8	21	38%
TOTAL			52	77	129	60%
Communication	Follows instruction to complete action	C - Receptive - Follow instructions 09	12	18	30	60%
	Imitates 5 motor actions in songs and games.	C - Pre-linguistic 01	16	19	35	54%
	Point to 2-4 words on Proloquo2go	C - AAC 07	12	9	21	43%
	Request an activity from choice of options	C - Request object/ activity from choice of options	3	5	8	63%
	Request an activity from choice of options	C - Request object/ activity from choice of options	16	3	19	16%
	Request an activity from choice of options	C - Request object/ activity from choice of options	5	1	6	17%
	Uses simple words/sign/symbol for 3 functions	C - Simple words for different functions	14	5	19	26%
	Uses simple words/sign/symbol for 3 functions	C - Simple words for different functions	6	6	12	50%
	Wants/Needs using multi-modal communication	C - Multi-modal 02	14	7	21	33%
TOTAL			98	73	171	43%
Fine Motor	Opens/Closes scissors using 2 hands	FM - Scissors 01	22	6	28	21%
	Places 1, 2, 4, 6, 12 pieces in puzzle	FM - Placement fingers 03	12	5	17	29%
	Posts large plastic coins	FM - Placement fingers 05	5	6	11	55%
	Posts smaller items	FM - Placement fingers 06	3	2	5	40%
	Scoops, rakes, pours - sand and water play	FM - Bilateral 04	7	22	29	76%
	Scoops, rakes, pours - sand and water play	FM - Bilateral 04	13	7	20	35%
TOTAL			62	48	110	44%
Gross Motor	Imitates actions in variety of positions	GM – Social Locomotion 03	5	1	6	17%
	Imitates actions in variety of positions	GM – Social Locomotion 03	4	2	6	33%
	Imitates actions in variety of positions	GM – Social Locomotion 03	8	9	17	53%

	Jumps forwards with 2 feet	GM – Jumping 06	1	16	17	94%
	Jumps forwards with 2 feet	GM – Jumping 06	8	13	21	62%
	Throws ball in direction of another person	GM - Ball Play #	13	13	26	50%
TOTAL			39	54	93	58%
Play	One-step toys	P - Pre-Pretend/Concrete Play 03	6	3	9	33%
	One-step toys	P - Pre-Pretend/Concrete Play 03	5	6	11	55%
	One-step toys	P - Pre-Pretend/Concrete Play 03	8	14	22	64%
	Play about life inside/outside home	P - Pretend Play Themes 03	27	4	31	13%
	Same Action Toys	P - Pre-Pretend/Concrete Play 04	5	16	21	76%
	Themes relating to themselves	P - Pretend Play Themes 01	22	12	34	35%
TOTAL			73	55	128	43%
Self-Regulation	Clear preference for regulatory experiences	SR - Supported Regulation 03	4	20	24	83%
	Identify known regulating experience	SR - Regulation Strategies 03	6	3	9	33%
	Identify known regulating experience	SR - Regulation Strategies 03	5	6	11	55%
	Identify known regulating experience	SR - Regulation Strategies 03	9	14	23	61%
	Identify known regulating experience	SR - Regulation Strategies 03	19	17	36	47%
	Participates in offered regulation experience	SR - Supported Regulation 02	2	16	18	89%
TOTAL			45	76	121	63%
Social Emotional	Contributes 2+ times in a group time	SE - Group Routines 12	19	10	29	34%
	Imitates actions and/or vocalisations	SE - Imitation	11	12	23	52%
	Imitates actions and/or vocalisations	SE - Imitation	3	18	21	86%
	Imitates actions during interactions	SE - Adult Interactions 11	12	9	21	43%
	Imitates actions during interactions	SE - Adult Interactions 11	2	7	9	78%
	Imitates actions during interactions	SE - Adult Interactions 11	5	4	9	44%
TOTAL			52	60	112	54%
OVERALL TOTAL			421	443	864	51%

Appendix 8 - Case Study 8 Daily Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Makes a snack requiring 2 steps	AC - Mealtime Participation 14	6	3	9	33%
	Prepares simple foods for eating	AC - Meal time serve/prepare 03.1	4	7	11	64%
	Removes/puts items in backpack when requested	AC - Routines 04	3	25	28	89%
	Serves self at table with utensil	AC - Meal time serve/prepare 01	9	11	20	55%
	Use playground/classroom equipment safely	AC - Safety 06	38	57	95	60%
TOTAL			60	103	163	63%
Communication	Describes 2-3 event sequence of activities	C - Expressive - Social Communication 10	10	23	33	70%
	Follows instruction to complete action	C - Receptive - Follow instructions 09	7	15	22	68%
	Follows instructions, early spatial concepts	C - Receptive - Follow instructions 10	3	18	21	86%
	Identify relationships between words	C - Receptive - Understand concepts 11	4	4	8	50%
	Imitates 5 motor actions in songs and games.	C - Pre-linguistic 01	10	10	20	50%
	Sort/Identify opposites and analogies	C - Receptive - Understand concepts 07	12	27	39	69%
	Understand/Interpret sequences	C - Receptive - Understand concepts 09	2	5	7	71%
	Understands correct gender pronouns	C - Receptive - Understand concepts 03	2	13	15	87%
	Understands simple "Wh" questions	C - Receptive - Understand questions 01	0	12	12	100%
	Understands temporal concepts: now/next/later	C - Receptive - Understand concepts 08	13	27	40	68%
	Words/Symbols to protest	C - Expressive - Gestures/Sounds/Words 09	1	12	13	92%
TOTAL			64	166	230	72%
Fine Motor	Copies/Writes letters and numbers	FM - Writing letters/numbers 03	12	16	28	57%
	Draws a person	FM - Drawing shapes/pictures 02	4	12	16	75%
	Draws detailed pictures	FM - Drawing shapes/pictures 04	1	9	10	90%
	Holds pencil in functional pencil grasp	FM - Pencil Grasp 02	1	17	18	94%
	Traces circle and cross shapes	FM - Drawing 04	9	19	28	68%
	Writes first and last name	FM - Writing 05	4	9	13	69%
	Writes name	FM - Writing #	7	22	29	76%
TOTAL			38	104	142	73%
Gross Motor	Follow instructions in Gross Motor Groups	GM - Social Locomotion 06	40	38	78	49%

	Imitates standing on one foot	GM - Balance 05	0	10	10	100%
	Parallel play for dancing, jumping etc.	GM - Social Locomotion 01	1	15	16	94%
	Plays games with ball	GM - Ball skills: Social 05	2	14	16	88%
	Plays more complex games with peers	GM - Social Locomotion 05	2	14	16	88%
TOTAL			45	91	136	67%
Play	Develop play idea	P - Pretend Play Experiences 02	12	12	24	50%
	Dramatic play routine with a peer	P - Social Play 01	17	8	25	32%
	Introduces problems in play	P - Pretend Play Themes 06	11	24	35	69%
	Less frequently experienced events.	P - Pretend Play Themes 05	4	13	17	76%
	Plays several roles with peers	P - Social Play 02	17	12	29	41%
	Uses complex imagination	P - Pretend Play Objects 07	5	17	22	77%
TOTAL			66	86	152	57%
Self-Regulation	Awareness of body feelings	SR - Understanding Emotions 03	3	14	17	82%
	Clear preference for regulatory experiences	SR - Understanding Emotions 03	4	18	22	82%
	Communicate need for regulation support	SR - Understanding Emotions 05	8	22	30	73%
	Identifies and labels own emotions	SR - Understanding Emotions 06	51	58	109	53%
	Participates in offered regulation experience	SR - Supported Regulation 02	0	15	15	100%
TOTAL			51	73	124	59%
Social Emotional	Cooperates and Negotiates in Play	SE - Peer interaction 03	3	14	17	82%
	Participates in turn taking conversation x3	SE - Conversation with Peer	7	18	25	72%
	Play in parallel and exchange toys	SE - Turn Taking 02	7	17	24	71%
	Plays alongside peers & sometimes copies	SE - Peer Interactions 03	4	13	17	76%
	Take turns following ideas of peer	SE - Turn Taking 06	26	18	44	41%
	Uses simple conversation starters	SE - Conversation starters	14	20	34	59%
TOTAL			61	100	161	62%
OVERALL TOTAL			385	723	1108	65%

Appendix 9 - Case Study 9 Daily Programme Participation

Category	Program Title	Subtitle	Not Mastered	Mastered	Total	Rate of Mastery
Adaptive Capacity	Carries plate, cup, spoon to tray/sink	AC - Meal times 06	36	13	49	27%
	Eats meals with peers, minimal support	AC - Meal times 04	28	40	68	59%
	Remember where frequently used objects are	AC - Routines 01	2	14	16	88%
TOTAL			66	67	133	50%
Communication	Follows 1 step routine instructions with cues	C - Receptive - Follow instructions 06	19	14	33	42%
	Follows 1 step routine, verbal instructions	C - Receptive - Follow instructions 07	6	13	19	68%
	Follows instruction to complete action	C - Receptive - Follow instructions 09	7	10	17	59%
	Hands/Extends object to ask for help	C - Expressive - Gestures/Sounds/Words 02	7	18	25	72%
	Imitates high frequency words	C - Verbal 03	6	19	25	76%
	Points to object to request	C - Expressive - Gestures/Sounds/Words 04	14	20	34	59%
	Request an activity from choice of options	C - Request object/ activity from choice of options	29	20	49	41%
	Smiles, looks, reaches, pulls adult towards	C - Consenting 01	0	6	6	100%
	Wants/Needs using multi-modal communication	C - Multi-modal 02	14	16	30	53%
	Words/Symbols to protest	C - Expressive - Gestures/Sounds/Words 09	36	28	64	44%
TOTAL			138	164	302	54%
Fine Motor	Developing tripod grasp	FM - Grasp patterns 04.2	15	8	23	35%
	Imitates pre-writing shapes	FM - Drawing 05.1	4	14	18	78%
	Places ball/car in run/track	FM - Placement hand 01	0	12	12	100%
	Places pegs in peg board	FM - Placement fingers 02	10	26	36	72%
	Posts large plastic coins	FM - Placement fingers 05	6	7	13	54%
TOTAL			35	67	102	66%
Gross Motor	Maintains momentum on swing	GM – Swing 04	32	23	55	42%
	Parallel play for dancing, jumping etc.	GM - Social Locomotion 01	34	29	63	46%
	Plays chase with adults	GM – Social Locomotion 02	3	19	22	86%
TOTAL			69	71	140	51%
Play	Cause and Effect toys	P - Pre-Pretend/Concrete Play 02	3	18	21	86%
	Engages in Pre-Pretend/Concrete Play 02	P - Toy Manipulation	1	12	13	92%

	Motor Actions	P - Pre-Pretend/Concrete Play 05	4	15	19	79%
	One-step toys	P - Pre-Pretend/Concrete Play 03	4	20	24	83%
	Plays with cause-and-effect toys	P - Concrete Play 02	4	16	20	80%
	Toys requiring several motor actions	P - Pre-Pretend/Concrete Play 06	10	22	32	69%
TOTAL			26	103	129	80%
Self-Regulation	Allows trusted adult into personal space	SR - Supported Regulation 01.1	2	16	18	89%
	Clear preference for regulatory experiences	SR - Supported Regulation 03	1	17	18	94%
	Follows Preparation Routine	SR - Regulation Strategies 02	41	46	87	53%
	Identify and seek out regulation experience	SR - Self-Regulation Tools 07	21	12	33	36%
TOTAL			65	91	156	58%
Social Emotional	Imitates sounds/gestures during play	SE - Adult Interactions 08	12	22	34	65%
	Looks/Moves body towards others	SE - Initiate Interactions 01	1	12	13	92%
	Maintains engagement, sensory social routine	SE - Adult Interactions 06	7	15	22	68%
	Shares resources in parallel play	SE - Turn Taking 01	21	12	33	36%
	Turn taking with peer, 2/4/6/8 turns	SE - Turn Taking 03	21	8	29	28%
	Waits with support during turn taking	SE - Turn Taking 04	28	1	29	3%
TOTAL			90	70	160	44%
OVERALL TOTAL			489	633	1122	56%