

The background of the cover is a photograph of a young boy with dark hair, smiling broadly. He is wearing a dark blue school polo shirt with a red eagle logo on the chest and dark trousers. He is sitting on a blue and black play structure. To his left, another child in a similar uniform is partially visible, with their hands clasped. The background shows a wooden fence and greenery.

Pan London Autism Schools Network-Research

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**“Forget the ‘Health and Care’ and
just call them Education Plans”**

The Pan London Autism Schools Network (PLASN) is a network of schools from across London that all specialise in autism. The PLASN-Research group is a subgroup of **PLASN** that provides links between **schools** and autism **researchers** (from a range of **universities**). This research-practice link enables us to identify topics for research that have a **positive** impact on the educational experiences of autistic children and young people. By working collaboratively, we ensure that we provide **evidence-based practice** in our schools.

In this **third** issue of the PLASN-Research newsletter, members share the latest findings from some of the research studies they are currently working on....

Working with Robots

At Russet House School, we have two Nao robots, which the children named 'Russet' and 'Tik-tok'. When they first arrived, Russet and Tik-tok were used to teach programming skills to autistic pupils who were working at National Curriculum Levels in Computing. The pupils were able to use Aldebaran's Choregraphe software on a laptop to control movements and create sequences for the robots to perform. Most of this work took place during a lunchtime **Robot Club**, supported by staff and our IT Technician. The club was popular and successful but only catered for a small group of pupils who had the capability and motivation to engage with the programming tasks.

Through PLASN-R, we learned of other schools and researchers using robots as teaching tools for children on the autism



spectrum. For example, the Centre for Research in Autism and Education (CRAE) at UCL Institute of Education, use Zeno the robot as part of the **DE-ENIGMA** Horizon 2020 project, partnering with institutions across Europe, to help autistic children understand their own and others' facial expressions and emotions. Further, Speech and Language Therapists at Prior's Court School were also using **Nao** robots but in a different capacity - to work on language, communication and interaction skills with their pupils. We were keen to learn more in this context and members of our staff visited Prior's Court School. Sharing their practice and experiences, we were able to apply newly acquired skills back at Russet House to set up a similar programme.

In the summer term of 2017, six pupils had weekly, individual sessions with the robot. They were encouraged to: greet the robot by waving at it, choose actions for it to perform and imitate its actions. Staff noted anecdotally that all of these pupils demonstrated better **attention skills** with the robots than they often did with an adult. Some children developed their imitations skills and attempted to copy the robot's movements (and dances!). All six pupils



were motivated to use a choice board to indicate what they wanted the robot to do and this was useful in extending their use and understanding of verbs. All pupils in the lunchtime Robot Club, and in the language and interaction group, have appeared intrigued by Russet and Tik-tok. They show **care and gentleness** when touching them; more so than they usually do with toys and equipment in school.

As with all technology, there are technical **challenges** when working with the robots. These can include losing wifi connection, errors in robot response to spoken commands, needing input from a laptop or the robot falling over and 'hurting' itself! Problems are not always easy to overcome unless additional support is available. Our Robot sessions have worked best when our IT technician has been able to provide technical support for the robot and the teacher has been able to focus on teaching and learning with the children.

Rachel Walker, Assistant Head of Russet House School

Forest School

At College Park School we developed a methodology to evaluate differences between the impact of indoor (classroom) and outdoor (Forest School) learning environments on the length of autistic pupils **engagement** when participating in a 'Magic Potion' activity.

Autistic, non-verbal children between the ages of 7-10 years old were observed and filmed once a week in the two settings over a seven-week period. Analysis of the footage revealed that all pupils engaged with the same activity for significantly **longer** periods of time, almost doubling, when in Forest

School compared to inside the classroom; on average, 10 minutes outside versus 5 minutes inside. Being engaged for longer periods of time may have wider benefits on their **learning** outcomes.

The study also found that there was no difference in the number of '**negative affect**' occurrences (e.g. shouting, running away from the groups, hitting) between the two environments but teachers and teaching assistants that took part in the study noted that pupils "appeared **calmer**" and "more **focused**" during their time in Forest School.

Tanya Zeljic, Assistant Head of College Park School



TACPAC Study

Finding ways to support young people to **self-regulate** their sensory needs, and helping them with levels of arousal, is a very important part of the work carried out at Hatton Special School. As part of this, we have been trialling a small scale study of the **Tactile Approach to Communication Pack** (TACPAC™ Ltd) since April 2017.

TACPAC is a programme that combines the sensory world of **touch** and **music** through social interaction. The main aim of the programme is to support the development of interaction between two people. Each pupil works with a specific staff member in every session to develop their focus and concentration skills, early receptive and expressive communication skills, and to provide support in sensory regulation, giving tactile feedback and helping desensitise children who are tactile defensive.

A total of 38 children took part in the trial, within four class groups. Pupils who took part in the **TACPAC programme** had a diagnosis of either autism, Down syndrome

or Global Developmental Delay (GDD). Their communication skills ranged from non-verbal to the early acquisition of language. Pupils were also identified as requiring sensory input during the day, either in the form of sensory diets or regular, short movement breaks.

Sessions were delivered on a daily basis for an eight-week period. These were



initially delivered by the **Occupational Therapy Assistant** before being led by class teachers. Sessions were timetabled for the same time of day, three to four times a week to establish a routine. The children's response to the activities were assessed prior to and at the end of the programme and their progress measured using the 5P Approach framework to provide pre- and post-evaluation. Informal and formal

observations showed that, in general, the pupil's **focus**, and anticipation of each activity had improved greatly, with children being able to **engage** and **participate** for the full 30-minute length of the session by the end of the programme. Further, they began to anticipate and identify which piece of equipment they required for each activity, i.e. a blanket or a sponge, following the cue of the music. The level of **anxiety** amongst all children participating reduced dramatically during the sessions, as noted via informal observations carried out throughout the sessions and formal observation carried out at selected time intervals at the beginning, middle and end of the programme. Pupils also began requesting TACPAC as a **relaxation tool** when they were feeling anxious or upset.

We are now rolling out the use of TACPAC across the school, introducing it to three classes simultaneously. Sessions will be led by an identified member of staff for a six-week period before being handed over to class staff. The identified TACPAC lead will monitor its use and the progress children are making within the classroom.

Beverley Calder, Senior Deputy Head of Hatton School

Occupational Therapy Project

The Occupational Therapy (OT) project at Phoenix School aims to work with one student from every class across Primary and Secondary-aged pupils (3 to 19 years old). Those selected by their teacher and **Occupational Therapist Assistant** were identified as having challenging behaviours that may impact on participating in activities in the classroom or create difficulties in accessing the curriculum due to potential **sensory regulation**, i.e. poor postural control and spatial awareness, hitting objects and walls, self-harming, locking knees and seeking or avoiding behaviours.



The aim of the project is to deliver high quality, **individualised** sensory integration therapy within a clinic and school-based setting. Each class has a range of OT equipment including therapy putty, therabands, weighted small blankets, massage tools and motivating toys. Each child is pre-assessed

through a questionnaire devised by the Occupational Therapist and teachers help identify key goals for the student to achieve as a result of the therapy, e.g. attend to an activity for a period of 5 minutes or sit to eat lunch. Goals can be linked to the students **Personal Education Plan** (PEP) targets and success toward these goals will be reviewed through termly meetings. Parents are also consulted and complete a sensory profile for their child.

The Therapist will work with the class teacher and teaching assistant (TA) to support the delivery of an individualised session over a term. The TA will run a daily programme, overseen by the therapist, to ensure the student has as much input as possible over the term. Progress will be measured through observations and a data summary sheet that feeds into the student's profile. At the end of the term, pre- and post-assessments will be reviewed and recommendations for the home and classroom provided.

Veronica Armson, Associate Head of Phoenix School

SENCOs' views on Education Health & Care (EHC) plans

Recently replacing Statements of Special Educational Needs (SEN), **Education Health and Care (EHC) plans** are used to identify the educational, health and social needs of children and young people, and describe the additional support required to meet those needs.

A recent study from the Centre for Research in Autism and Education (CRAE), UCL Institute of Education, examined Special Educational Needs Coordinators' (SENCOs) views on EHC plans. Analysis of 16 interviews with SENCOs revealed that EHCPs were still being perceived as 'education documents' and were not yet the wraparound care plans that had been envisioned. Despite frustrations with the process (e.g., regional disparities, a lack of involvement from health and care professionals), when things worked well, experiences and outcomes were encouragingly **positive**. Overall, SENCOs felt that EHCPs had the potential to be powerful tools.

Laura Crane, Deputy Director of the Centre of Research Autism and Education (CRAE)

Who's involved..?

Current PLASN-R School Members



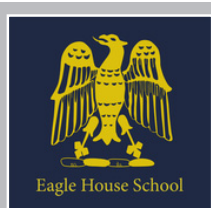
Kestrel House School
North London



College Park School
Central London



Hatton School
North London



Eagle House School
North London



Sybil Elgar School
Middlesex



Durants School
North London



Phoenix School
East London



Prior's Court
Berkshire



Spa School
South London



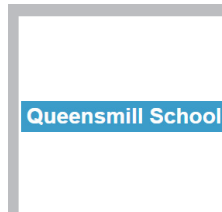
TreeHouse School
North London



Springhallow School
West London



Russet House School
North London



Queensmill School
West London



Manor School
North London

Current PLASN-Research Members

Dr Laura Crane

Chair of PLASN-Research group, Laura is Deputy Director at the Centre for Research in Autism and Education (CRAE), UCL Institute of Education.

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Dr Catherine Carroll

Catherine is a Senior Research Officer in Education & Psychology at the UCL Centre for Inclusive Education, UCL Institute of Education.



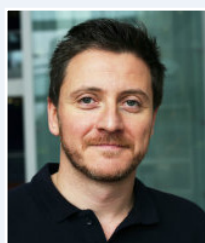
Prof Patricia Howlin

Patricia is Professor of Clinical Child Psychology at the Institute of Psychiatry, in autism and other developmental conditions.



Dr Sebastian Gaigg

Seb is a Senior Lecturer in the Autism Research Group based in the Department of Psychology at City University London.



Dr Vicky Slonims

Vicky is a Senior Consultant Speech and Language Therapist at the Newcomen Centre & Honorary Senior Lecturer at King's College London.



Dr Kerstin Wittmeyer

Kerstin is a Lecturer and Researcher in the School of Education at the University of Birmingham, specialising in autism.

