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ORIGINAL ARTICLE

Creating effective teaching and learning environments: Building a positive behavioural support (PBS) model for UK special schools

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Abstract

The importance of reducing restraint and restrictive interventions in special schools has been recognised across the four nations of the UK. Government guidance for England and Wales, and recommendations produced by Restraint Reduction Scotland, both reference Positive behavioural support (PBS) as an evidence-based approach that can be used to proactively support pupils with, or at risk of, behaviours that challenge. The Department of Education of Northern Ireland recommends the development of behaviour support plans to support children with special education needs and disabilities. Special schools, however, also have a responsibility to set high expectations for every pupil, to provide access to the respective national curricula and to meet individual needs. School-wide positive behavioural support (SW-PBS), originated in the USA in the 1990s in response to a body of evidence that showed improved social and academic outcomes when behavioural interventions were implemented across whole school settings. It is increasingly being adopted in the UK. Drawing upon examples from schools in England and Wales with which the authors are familiar, this paper outlines the rationale for a special schools' model of SW-PBS and illustrates the ways in which this can be adjusted to meet the specific needs of each setting.

KEY WORDS

academic outcomes, learning disabilities, positive behavioural support, special schools

Key Points

- Reducing restraint and restrictive interventions in schools is a high priority across all four nations of the UK.
- Special schools also have a responsibility to provide children with special education needs and disabilities positive learning environments that maximise learning opportunities and meet individual needs.
- School-wide positive behaviour support (SW-PBS) provides a useful framework to help special schools meet these expectations.

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INTRODUCTION

A considerable number of cases are reported where children with special educational needs and disabilities (SEND) have been subjected to restrictive interventions in schools across the four nations of the United Kingdom (England, Northern Ireland, Scotland and Wales), commonly in response to behaviours that challenge (BBC 5 Live Investigates, 2017; Centre for Mental Health, 2020; Challenging Behaviour Foundation & Positive and Active Behaviour Support Scotland, 2020; Weale, 2022). Restrictive interventions used include physical restraint, mechanical restraint, chemical restraint and seclusion, resulting in serious negative impacts on children, such as physical injuries and trauma.

Political devolution across the UK over the past two decades is such that each of the four jurisdictions has their own educational system, set of rules and regulation. However, whilst this has resulted in differences, especially in terms of policy, there are still many structural similarities compared to other countries worldwide (Machin et al., 2013). There are approximately 351,000 children aged 0–17 with a learning disability across the UK (Mencap, 2022). Whilst most attend mainstream schools, pupils whose needs cannot be met within the mainstream are often educated within special schools. In England in 2020, 9.3% of pupils with SEND attended special schools (UK Government, 2020). Similar figures were reported for Northern Ireland (10.3%) and slightly lower for Scotland (6.8%) and Wales (5.3%) (Northern Ireland Statistics and Research Agency, 2022; Scottish Government, 2021; StatsWales, 2020). There is also an emerging consensus on ways of supporting pupils with learning disabilities without the use of restraint.

Positive behavioural support (PBS) is an evidence-based approach that can be used to proactively support pupils with or at risk of behaviours that challenge. It is cited in government guidance for England and Wales on reducing restraint and restrictive interventions in special schools (HM Government, 2019; Welsh Government, 2021). In Scotland and Northern Ireland, whilst there is currently no national guidance on the use of restraint in education other than to protect child safety or the safety of others, Restraint Reduction Scotland (RRS) was established in 2020 with a stated aim to produce such guidance and include PBS in its recommendations (Scottish Commission for People with Learning Disabilities, n.d.), and in March 2022, the Department of Education of Northern Ireland produced a set of recommendations to inform statutory guidance including an understanding of behaviours of concern and the development of behaviour support plans to support people with learning disabilities (Department for Education Northern Ireland, 2022).

Expectations of schools are high. The SEND code of practice (Department for Education & Department of Health, 2015) which provides statutory guidance for organisations in England that support children with SEND expects all schools including special schools to ‘set high expectations for every pupil, whatever their prior attainment’ (p. 92), to provide all pupils with ‘access to the national curriculum’ and to ‘ensure that the approaches used are based on the best possible evidence’ (p. 25). Schools across the four nations also have a statutory responsibility to keep children safe (e.g., Department for Education & Department of Health, 2015). Meeting these expectations whilst addressing the individual needs of pupils in special schools is demanding. Children with learning disabilities have an increased risk of developing behaviours that others may find challenging (Hastings et al., 2013). In school settings, mainstream and special, these behaviours can disrupt planned activities and have a negative impact on staff and pupils (Axup & Gersch, 2008; Rae et al., 2017). Supporting pupils displaying behaviours that challenge takes up a disproportionate amount of time (Sugai et al., 2000; Taylor-Greene et al., 1997) and can include supports that require the involvement of other professionals, family and community members (Eber, 1996; Eber & Nelson, 1997). Behaviours that challenge have also been shown to have an impact on academic attainment (Kremer et al., 2016) serving as a barrier to learning and limiting participation in classroom activities.

Creating positive learning environments and thereby improving academic and behaviour outcomes is about ensuring all pupils have access to the most effective instructional and behavioural practices and interventions possible (Austin et al., 2016). But with every pupil within a special school having specific and individual special educational needs, and given the vast number of potential interventions, how do schools prioritise what is available; and how do they embed them into existing school structures?

PBS is being used in schools in the USA, Australia, Europe and the UK, not primarily to reduce the need for restraint (although this is reported to be one of the outcomes), but to help create supportive learning environments for whole school populations. The approach, school-wide positive behavioural support (SW-PBS), originated in the USA in the 1990s in response to a body of evidence that showed improved social and academic outcomes when behavioural interventions were implemented across whole school settings (Sugai & Horner, 2002, 2006). Horner et al. (2010) describe SW-PBS as ‘a set of intervention practices and organisational systems for establishing the social culture and intensive individual behavior supports needed to achieve academic and social success for all students’ (p. 4).

To date, much of the research around SW-PBS has come from mainstream primary school settings in the USA. With a few exceptions, experience of PBS within UK schools has focused on interventions used to address the behaviours that challenge specific pupils (Jackson Brown et al., 2014), and in many cases, these interventions have been conducted

in special school settings (Paris et al., 2019). A recent international systematic review of PBS in special education contexts identified significant decreases in behaviours that challenge and increases in alternative behaviours, if increasing alternative behaviours was part of the interventions, across all PBS intervention research (Beqiraj et al., 2022). Increasingly, schools with some experience of PBS are beginning to look at academic and behavioural interventions across the whole school setting, adopting key elements of the SW-PBS model adapted to their own environments. There are compelling reasons for doing this. Drawing upon examples from schools in England and Wales with which the authors are familiar, this paper outlines the rationale for a special schools' model of SW-PBS and illustrates the ways in which this can be adjusted to meet the specific needs of each setting.

WHAT IS SW-PBS?

SW-PBS is a decision-making framework which draws upon our understanding of how we learn and factors that influence our behaviour and uses this understanding to help pupils develop skills, communicate their needs and wants, and help them reach their potential (Austin et al., 2016). It assumes that all pupils have the right to an effective education and that this is best achieved in a positive school culture or environment which fosters individual potential. SW-PBS is relevant to all schools—primary and secondary, mainstream and special. Whilst the academic and behavioural practices chosen for each setting will be different because of the differing needs of pupils, the guiding principles and process of the decision-making framework are applicable to any school setting.

SW-PBS depends on establishing a positive social culture throughout the school into which everyone buys in and participates. Our experience suggests (see case studies, below) that this is most likely to happen when the senior leadership team is fully committed to driving the process forward and in bringing everyone across the school community on board; governors, teachers, pupils, support and administrative staff and parents. It helps to have SW-PBS 'champions' whose role is to ensure that the approach is implemented with fidelity.

The approach is proactive. It is guided by a schools' specific needs and objectives and involves the whole school community. School environments are arranged to promote learning and to prevent the development and occurrence of behaviours that challenge. Decision making and problem solving within the SW-PBS framework are data-driven and evidence-informed—this keeps it relevant to a school's initial and ongoing needs and ensures a clear focus on evaluation. The framework starts by first considering the changes that are the simplest and easiest to implement (see below) and, once in place, prioritises additional needs for specific pupils, behaviours or academic skills. Changes are supported by evidence-based academic and behaviour interventions.

SW-PBS uses a three-layered 'triangle of needs' approach to decision making (Figure 1).

Universal supports

The first level of support, 'Universal supports', is school or classroom-wide systems that apply to the whole school or class population as part of standard provision. The aim is to create a supportive teaching and learning environment

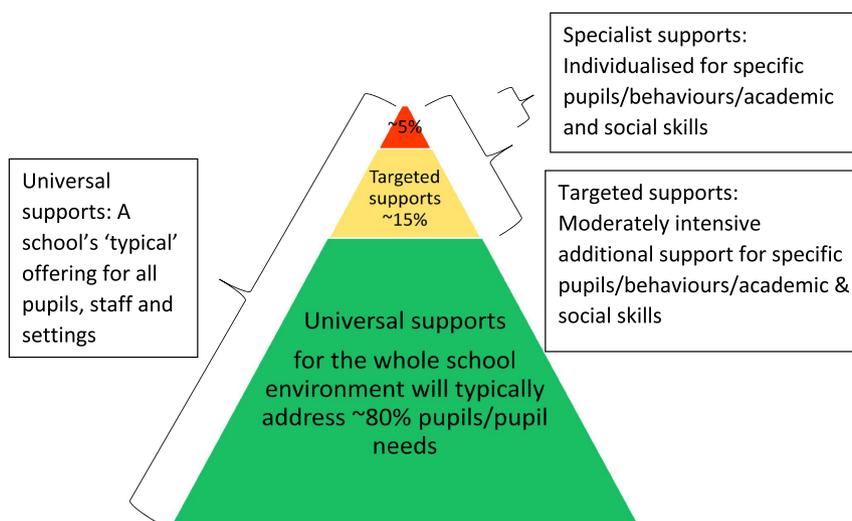


FIGURE 1 Triangle of needs of support.

Our Golden Goals
Autism

To be...	Classroom	Playground	Dinner Hall	Corridors (transitions around school)	Toilet
Safe  I will...	<ul style="list-style-type: none"> Sit down calmly when working 	<ul style="list-style-type: none"> Put on my coat before I go outside 	<ul style="list-style-type: none"> Use cutlery in the right way 	<ul style="list-style-type: none"> Walk slowly around school 	<ul style="list-style-type: none"> Close the door to the cubicle when using the toilet
Respectful  I will...	<ul style="list-style-type: none"> Ask for what I need in a task 	<ul style="list-style-type: none"> Take turns with my peers 	<ul style="list-style-type: none"> Clear my plate away after I have finished eating 	<ul style="list-style-type: none"> Keep hands to self 	<ul style="list-style-type: none"> Wash my hands after I have been to the toilet
Ready to learn  I will...	<ul style="list-style-type: none"> Follow an instruction 	<ul style="list-style-type: none"> Follow an instruction to go back into school when break finishes 	<ul style="list-style-type: none"> Use my communication strategy to request food/drink 	<ul style="list-style-type: none"> Follow a visual schedule 	<ul style="list-style-type: none"> Request to go to the toilet

FIGURE 2 Our golden goals.

for all staff and pupils. By supportive learning environment, we mean a school culture which gives every pupil the opportunity to achieve the best of their abilities and in which the emphasis is placed on encouragement and reward rather than on sanctions and punishment. This is achieved by identifying the outcomes that are most important to the whole school community (pupils, parents, teaching staff, non-teaching staff, school governors) and then selecting the evidence-based practices that will deliver this across the whole school population. The underlying assumption behind universal support is the idea that simple approaches can often have a reliable effect on outcomes (Embry & Biglan, 2008). Examples relevant to a special school context include visual prompts used for indicating transitions (Abbott et al., 1998), using a behaviour matrix (Ohkubo et al., 2022) and activity schedules to promote independence and autonomy (Koyama & Wang, 2011). Experience in mainstream settings suggests that universal supports are likely to meet 80% of children's needs overall (Horner, 2007) and are relatively easy to implement both from a time and cost perspective.

The process of implementing SW-PBS starts with agreeing and defining a set of behavioural expectations for everyone within the class or school (see Figure 2). Agreed behaviours are positively stated. Rather than 'no running in the corridor', the expectation may be 'stay on the left-hand side of the corridor'. The way that expectations are presented may be adapted to meet pupil needs—using images instead of words for example. Behaviour expectations may need to be demonstrated and taught—it is not sufficient to assume that everyone will implicitly understand what they mean, have the skills to meet the expectations or that failure to meet expectations is somehow a behavioural deficit. School or class-wide systems of acknowledging expected targets and behaviours are established. Staff are 'tuned in' to positive achievements and behaviours. This is accompanied by a consistent, supportive, non-confrontational system for interrupting, correcting and redirecting behaviours that do not meet expectations, and establishing a system of collecting, recording and using data to guide decision making. It is possible to achieve expected behaviour without the need for formal assessments or investing in expensive or complicated interventions. However, it is important to remember that while universal supports are likely to benefit the majority of pupils, a minority will require differentiation. Even within one school, there may be differences across classes within the universal supports that correspond to pupil needs (Figure 2).

Case study—Universal supports at Calthorpe Academy

Calthorpe Academy is a large special school in the UK supporting pupils with severe learning disabilities, profound and multiple learning disabilities and autism, from primary to post 16 education. The teaching model used consists of a combination of whole class group instruction, small group work and individualised 1:1 teaching. The senior leadership team decided to adopt universal supports initially across the autism department (85 children, 12 different classes, all age groups). A PBS team was established to champion the approach, including external experts and staff from the senior leadership team and heads of department. This team's first tasks were to identify observable, measurable and achievable outcomes (e.g., increase in attainment, increase in appropriate behaviours) and to ensure that there was 'buy-in' from staff for implementing the approach.

The PBS team compiled a brief statement of purpose relative to the development and support of the social and behavioural climate of the school (*To develop the skills we need for the life we want*). It then identified three positively stated expectations (*be safe, be respectful and be ready to learn*) and involved all staff in the development of a teaching matrix that defined the behaviours associated with each expectation in relation to the school settings (classroom,

playground, dinner hall, corridors, toilet). For each expectation and setting, one observable indicator was provided (e.g., being safe in the playground meant putting coat on before going outside; being respectful in the classroom meant asking for what was needed to complete a task (see [Figure 2](#)).

Lesson plans were developed by the PBS team covering these expectations around appropriate behaviours. They were initially taught during lessons twice a week by all staff. These included identified procedures for prompting and encouraging appropriate behaviour and standardised visual resources to support teaching. Behavioural expectations were also practised (e.g., during play times, going to the toilet) to ensure pupils were able to generalise skills. From the outset, all staff used praise to acknowledge appropriate behaviours. Due to the wide range of needs of pupils, this acknowledgement was adapted for different pupils ranging from verbal praise or 'high five' to a more tangible acknowledgement for appropriate behaviours where needed. Data-based systems were developed to monitor the effectiveness of universal supports. Teachers used the existing Assessment for Learning system to rate pupils' achievement against the behaviour expectations. Pupils were given a score at the end of each lesson ranging from 1 to 4 (with 4 being the highest) for achieving the expectations (based on what would be a good achievement for each individual pupil). The data were regularly reviewed with staff to ensure the ongoing effectiveness of the universal support model. Early indications showed this was successful in encouraging staff to focus on teaching skills needed and rewarding positive behaviour as it occurred. Constant feedback was useful in adapting this to ensure it met the needs of the school population. Calthorpe Academy continues to develop universal supports across the school and embed these into the curriculum.

Targeted supports

At the second level of SW-PBS, '**Targeted supports**' are moderately more intensive supports for that proportion of pupils or for an identified collection of behaviours or learning needs across the school, for which universal supports may not be enough. Targeted behaviour supports focus on practices that address the most common needs of pupils with behaviours that are barriers to their (and potentially others') learning. Examples include providing pupils with additional structure throughout the day, more intensive teaching of appropriate behaviours or academic skills, a greater level of prompting of those behaviours and a higher rate of recognition. Check-in/check-out (Todd et al., 2008) and First Step to Success (Carter & Horner, 2007) are examples of targeted behavioural supports being used effectively in mainstream education.

Targeted academic supports include providing additional support to small groups of pupils who are having difficulty with whole class teaching in specific subjects—this may be simply by providing small group teaching in which tasks are broken down into smaller and more manageable tasks or by using an intervention specifically designed for pupils in a subject area such as Handwriting without Tears® for handwriting skills (Grindle et al., 2017) or Mathletics for numeracy skills (Nansen et al., 2012).

Case study—Targeted supports at Abbey School

Abbey School is a day and residential special school in Chester, Northwest England, supporting pupils aged between 4 and 19 years with autism, some of whom may have additional learning disabilities and behaviours that challenge. Provision at Abbey School is highly individualised to meet the complex learning and support needs of each pupil. Although the provision of such individualised support brings a clear strength to the educational experience and achievements of young people, it can also bring challenges at a school-wide level in meeting the schools' responsibilities to monitor and evaluate consistent quality of provision for all pupils whilst maintaining the high levels of personalisation required to meet their diverse needs. Establishing and embedding a robust tiered decision-making framework of SW-PBS has supported Abbey School to overcome this challenge.

An audit of the practices across the school which led to good outcomes for pupils, combined with knowledge of evidence-based practices in autism education, initially prompted the discrimination of what would be included at which level of support. From this, universal supports were identified. These were considered as the 'non-negotiables' that must be in place for all pupils and classes all the time. Once consistent universal supports were successfully established, the PBS team (leadership of which lies within the school senior leadership team) began to develop the targeted supports level of the school-wide model. These aim to provide efficient and time-limited intervention support to pupils who are exhibiting low-to-moderate severity/frequency behaviours that challenge, are not making expected progress in specific areas, or who have important individualised social, emotional or health goals that require some short-term focus beyond that provided by universal supports or the general school curriculum. Some examples described below include academic interventions, social communication groups, desensitisation programmes, check-in/check-out systems and family support goals.

Academic interventions are selected for pupils who are not making expected progress within core areas of the curriculum through typical universal supports. Focused subject-specific interventions may be delivered such as Handwriting without Tears® (Grindle et al., 2017) or the Headsprout Early Reading® programme (Grindle et al., 2021; Tyler et al., 2015) either in small groups or on a 1:1 basis. Other examples include adding additional structure into a young person's day through a personalised timetable, the development of more structured learning plans than are required at the universal level and altering the frequency with which pupils engage with specific elements of teaching/areas of the curriculum or increased access to subject-specialist teachers. Academic interventions are time bound for the purpose of evaluating impact and typically occur over the period of one term although these timeframes will be flexible based on the needs of each pupil.

Social communication and interaction groups are facilitated by speech and language therapists for pupils' who require support in developing peer interactions or for whom current levels or types of peer interactions are acting as a barrier to their learning or inclusion. In terms of design and delivery, the groups follow a 'top-down' and 'bottom-up' approach; in that a developmental social skill curriculum designed for children and young people with autism is followed which provides opportunity for direct 'in vivo' practice of the skills that support children's interactions with each other, whilst also responding to the challenges that pupils have faced within the week (such as peer confrontations) and providing personalised activities around these. Pupil progress is measured within sessions and via a checklist completed on a weekly basis by the class teacher.

Desensitisation is a highly individualised intervention for pupils requiring such support in specific areas of their lives. For example, children who require medication may be fearful of the standard medical tests required to maintain a safe dosage such as having their blood pressure taken; children may not access dental care due to a lack of understanding of what is required (e.g., sit in the dentist chair, open your mouth) resulting in behaviours that challenge and the possibility of requiring sedation to access appropriate treatment. An individualised plan is developed by the transdisciplinary support team and delivered by the pupil's key worker for a period each day.

Check-in/Check-out (CICO) is an opportunity for a pupil and learning mentor to work together on agreed behaviour expectations (Todd et al., 2008). The goal of this strategy is to prevent future behaviours that challenge by checking in with a pupil daily to share clear expectations, feedback and support. CICO is utilised for pupils who are struggling with social interactions, low-level disruptive behaviours or whom need additional motivation to engage with their lessons. Upon arriving at school, the pupil will meet for five minutes with a learning mentor on a 1:1 basis to clarify the expectations for the day and the possible privileges that can be accessed should these expectations be met. Any particular self-management strategies that the pupil is working on to help them meet these expectations are practised. The pupil then meets with the same learning mentor for five minutes at the end of the school day to reflect on the day as to whether expectations have been met and therefore privileges awarded or whether the pupil has struggled to meet an expectation. In these instances, a reflection exercise is completed to support the young person to identify what they will try to change the following day and any suggested strategies are rehearsed. These then form the focus of the check-in session the following morning.

Family support goals are targeted supports involving individualised, short-term interventions to support a pupil in the context of their family life. For example, Geeta (pseudonym), a 5-year pupil, was scheduled to travel to her home country on an 8-hour flight during the school holiday. An individualised plan was established to teach Geeta to use an activity schedule involving appropriate activities that can be completed on the plane (e.g., to wear headphones and watch a movie on her iPad, to play cause and effect games on a portable game console). This short-term intervention ran for two terms and supported Geeta and her family's successful flight to their home country.

Specialist supports

At the third level of the SW-PBS approach, '**Specialist supports**' are individualised interventions based upon pupil assessment. Pupils have individual support plans that address their specific needs including academic, behavioural, physical and mental health and well-being and consider the context in which support is given. The underlying ethos is that all pupils have an equal right to access the education and engagement with the community as their peers—targeted supports are there to ensure that access happens. As already noted, data-driven decision making is a characteristic of all levels of support. With targeted supports, as well as using data to monitor the effectiveness of an intervention, it is also important to assess that it is being effectively implemented.

Case study—Specialist supports at Ysgol Y Gogarth

Ysgol Y Gogarth is a special school in North Wales. Ysgol Y Gogarth has a behaviour analysis team on site and certified behaviour analysts conduct functional assessments and collaborate with teachers to design behaviour plans. This case study describes specialist supports Ysgol Y Gogarth put in place for a pupil named Meghan (pseudonym).

Meghan was referred for a specialist supports behaviour plan when she enrolled in Ysgol Y Gogarth at age 10. Meghan was autistic and had a mild learning disability. Prior to attending Ysgol Y Gogarth, Meghan had been excluded from two mainstream schools and spent a few months in a pupil referral unit. Behaviours that challenge included absconding from the classroom, property damage, physical aggression towards peers and staff and self-injury. A functional assessment revealed that Meghan displayed behaviours that challenge following difficult or confusing social situations. Meghan was able to read and write well, but struggled to pay attention during group lessons, and when faced with difficult academic work would engage in behaviours that challenge. Teachers sometimes overestimated Meghan's understanding and attributed poor academic results to behaviours that challenge rather than recognising those behaviours as a means of seeking help.

Megan benefited from universal and targeted supports within the school. Meghan's behaviour plan included teaching her to ask for break so she could leave stressful situations. The school initially lowered academic expectations to allow her the opportunity to be successful and conducted a thorough evaluation of her academic skills. She was given more accessible targets, and academic demands progressed slowly to allow staff to teach to gaps in knowledge and understanding.

Meghan found it difficult to follow instructions or to speak to a staff member when she was upset, such as when she did not understand what was expected of her or when a social situation was confusing. A few key staff spent time engaging Meghan talking about preferred topics, sharing preferred activities and working on relationship building.

Meghan often challenged new staff members. She had a pattern of initially having a very positive relationship with staff and then would become upset and display aggressive behaviours following a minor disagreement. During these challenges, staff explicitly reminded Meghan that they liked her even when she was engaging in behaviours that challenge her. This was important for Meghan but also for staff who support her.

Meghan is now in her fifth year at school and accessing all lessons within the classroom. She engages in behaviours that challenge very rarely, and when she does, the episodes are often short and less intense prior to the specialist supports. Meghan attends educational trips and social events and clubs outside of school and has taken part in parent training sessions and school events such as Eisteddfod (a Welsh competitive festival of the arts). Meghan can now access sessions with the school counsellor, piano lessons in school, and is working towards setting some of her qualifications in a mainstream school.

The rationale for a special schools' model of SW-PBS for the UK

Arguably, the need for a decision-making framework to help identify and prioritise needs and find evidence-based practices to address these needs is all the more pertinent in a special school setting. Several special schools in the UK already have experience of working within a PBS framework to support individual children, offering behavioural interventions typically associated with the specialist supports described above at the third level of the PBS framework. Although it is quite possible that most pupils within a special school may present with needs similar to those that fall into the 5% level in mainstream school settings, our experience suggests that the logic and key characteristics that underpin SW-PBS as a whole are equally applicable to special schools. We know that there is a strong relationship between behaviours that challenge and the social environment (Hastings et al., 2013). Adopting, therefore, a proactive systems approach, including everyone within the schools' community and being guided by a school's specific needs, makes sense. These needs are likely to be very different from one school to another. Correspondingly, so are the priorities that each school identify and the interventions that are chosen. Decision making, however, can still be driven by the same processes.

The triangle shape (see [Figure 1](#)) within a special school does not necessarily change. The principle of adopting school or classroom-wide supports that address the majority of pupils' learning and behaviour needs and starting with those changes that are the simplest and easiest to implement are just as relevant within a special school setting. What is likely to be different are the behavioural or academic needs that universal supports address, the intensity of support needed, the time needed to embed that support and the need for adaptations to interventions or additional supports to help put them in place. These adaptations can vary even within the same setting. For example, teaching the agreed set of behaviours to a class of pupils with autism may involve different strategies to those used in a class of pupils with profound and multiple learning disabilities (see universal supports case study, above).

Once universal supports are in place, it is easier to identify pupils, behaviours or academic needs that have not been addressed by universal supports and require more intensive intervention. As with universal supports, targeted supports in a special school likely require adaptations and may sometimes be closer in intensity to, or even a hybrid of, specialist supports seen in mainstream settings—but the principle of targeted supports holds true: they are the next level of intervention in place, address a proportion of needs of pupils, are easier to implement and require relatively fewer resources than specialist supports (see targeted supports case study, above).

TABLE 1 Examples of evidence-based interventions that might be appropriate for a special school setting.

Domain	Intervention	Description	References
Curriculum	Headsprout Early Reading®	Online reading programme focused on teaching phonics and reading comprehension that can be used with pupils with SEND	Grindle et al. (2021), Tyler et al. (2015)
	Teaching early numeracy to individuals with developmental disabilities (TEN-DD)	An approach for teaching early numeracy skills to children with a developmental disability adapted from Mathematics Recovery®	Apanasionok et al. (2021), Grindle et al. (2020), Tzanakaki et al. (2014)
	Handwriting without Tears®	An approach to teaching handwriting skills in early learners adapted for pupils with SEND	Grindle et al. (2017)
Communication and social skills	Functional communication training	The teaching of an alternative and appropriate means of getting a child's needs met as a replacement of an inappropriate behaviour	Durand and Carr (1991)
	Picture Exchange Communication System	An Alternative and Augmentative Communication System	Frost and Bondy (2002)
Behaviours that challenge	Joint attention teaching	Establishing an early-developing social-communicative skill which is a pre-requisite to communication	Paparella and Freeman (2015)
	Antecedent manipulation	Changes to the environment which reduce the likelihood of behaviours that challenge	Kennedy (1994)
	Differential reinforcement-based strategies	The reinforcement of an alternative and appropriate behaviour whilst not reinforcing the behaviour that it is designed to replace	Athens and Vollmer (2010)
	The Good Behaviour Game	A behaviour management strategy designed to encourage prosocial behaviour and reduce disruptive behaviour	Groves and Austin (2017)

Abbreviation: SEND, special educational needs and disabilities.

It has already been noted that specialist supports are those with which special schools are most likely to be familiar. The difference with implementing specialist supports within a whole school model or framework is that those changes needed to create a supportive environment should, by dint of the universal and targeted supports, already be in place, and individual interventions become embedded within a proactive whole system approach rather than being a stand-alone and often reactive intervention. The importance of having a supportive environment for specialist interventions cannot be overemphasised (see specialist supports case study, above).

Across all levels of supports, universal, targeted and specialist, there are several evidence-based interventions that might be appropriate for a special school setting. These include behavioural, curriculum and communication and social skills interventions. [Table 1](#) highlights a few examples. Some of these may be individualised and part of specialist supports, some may be group-based teaching and a part of targeted supports, or they may be applied across the whole school setting as universal supports. For example, when teaching reading, universal supports may be in place to facilitate group reading in class, and Headsprout Early Reading®, an online reading phonics programme, may be used as a targeted support for those pupils who struggle with group learning, and for those pupils who still need extra support, Headsprout Early Reading® may be supplemented with one-to-one teaching in which tasks are broken down into easier and smaller steps (Grindle et al., 2021; Tyler et al., 2015). It is important to note that using the triangle of needs as a decision-making tool should not lead to labelling. A pupil requiring targeted supports is unlikely to require the same level of intense support across all domains; for example, a pupil may need targeted supports for numeracy but universal supports for personal, social, health and economic (PSHE) and behaviour ([Table 1](#)). Thus, an individual pupil is not a ‘Level 3 child’.

CONCLUSION

In this paper, we sought to describe a special schools' model of SW-PBS for the UK and presented it as a decision-making framework that can be used to help all schools create positive learning environments relevant to the needs of all pupils. We have drawn upon examples from special schools in England and Wales of how this can work in practice. The challenge for all of us is to make sure that SW-PBS does not just become an intervention focused on restraint reduction, indeed even on reduction of behaviours that challenge, and that the focus remains instead on maximising every child's potential.

FUNDING INFORMATION

No funding was received for this work.

CONFLICT OF INTEREST STATEMENT

The authors have declared no conflict of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ETHICS STATEMENT

Ethics approval is not required for this work.

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How to cite this article: Denne, L.D., Grindle, C.F., Sapiets, S.J., Blandford-Elliott, M., Hastings, R.P., Hoerger, M. et al. (2023) Creating effective teaching and learning environments: Building a positive behavioural support (PBS) model for UK special schools. *Support for Learning*, 00, 1–11. Available from: <https://doi.org/10.1111/1467-9604.12459>