

St Nicholas School, a specialist school for cognition and learning in Chippenham, has opened a new hydrotherapy complex after seven years of planning and fund-raising initiatives that generated £700,000.

THE 7X7 METRE pool accommodates 15 users at any one time and assistance and interaction for those in the water can also be provided by teachers from the sunken walkway alongside one end of the pool. This useful feature enables support staff to communicate with those in the pool at eye level without the need to enter the water. The pool's shallow constant depth of 1.2 metres makes it a safe place to swim for most abilities.

A ramp featuring raised hand rails and very wide steps with non-slip tiles provides easy access for those with limited mobility. Other design features include black tile edging to assist those who are visually impaired. For those who cannot manage steps at all then there is a mechanical hoist for easy and secure access suspended from rails running between the high dependency shower/changing facilities and the pool.

audiovisual effects are controlled by floating waterproof switches

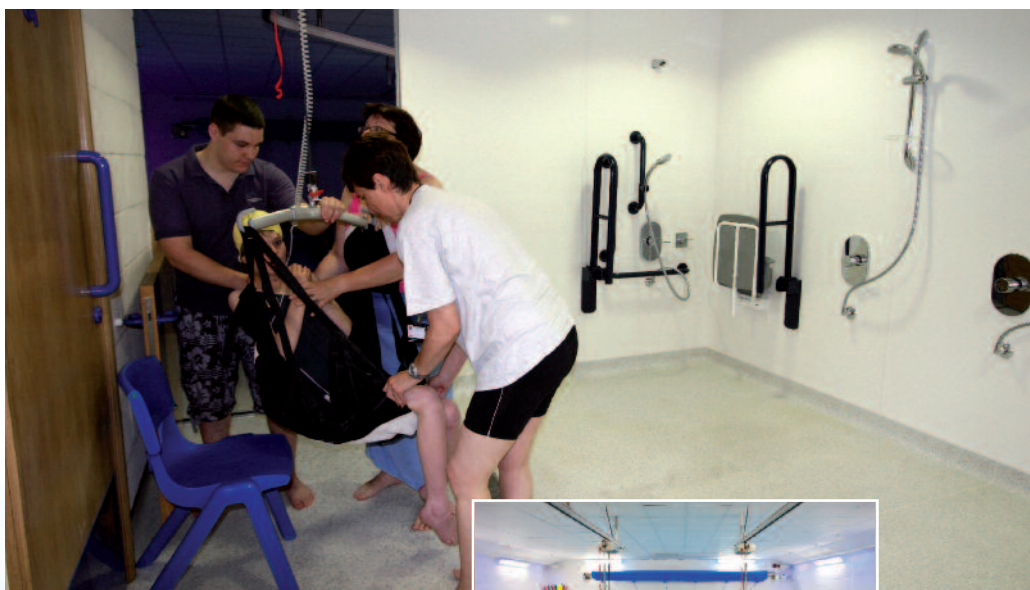
Once in the pool, the children can enjoy the ambient audiovisual effects of an interactive sensory system which is controlled by pressing floating waterproof switches. Activating and changing the coloured LED lights and music is not just fun for the users but will encourage children with severe learning difficulties to exercise.

Freedom

Since the pool opened in the summer, regular sessions are increasing self-confidence and motivation amongst the children and having a positive impact on behaviour, according to Jo Poole, who has worked at St Nicholas for the past 15 years. "It is such an uplifting experience to support our most



Hydrotherapy aids physical and mental wellbeing



profoundly disabled pupils in the water where their independence is maximised and they have the freedom of movement that we have every day.”

Hydrotherapy aids physical and mental wellbeing, recuperative and healing benefits due to its thermal effects. The support of the water on the body, and in particular the joints, can be very liberating for those who are suffering from a chronic condition such as arthritis, osteoporosis or back problems or can make exercise easier or even possible as well as increase the range of movement.

The design operating temperature of the hydrotherapy pool at the School is 34°C and the warm water helps relax muscles, relieve and reduce the sensitivity to pain, stiffness and discomfort and improves blood flow and circulation. At the same time, water offers gentle resistance to effectively build up and train muscles and tendons with small movements. The benefits of hydrotherapy can speed up recovery from illness, injuries and surgery. For one child who had undergone a hip operation, the pool has speeded the process of her regaining movement according to therapists.

The building phase of the scheme was led by Bailey Partnership and London Swimming Pool Company. Hydrotherapy pools require a high capacity water treatment system due to the warmer temperature and this is managed by two deep bed filter units, eight skimmers four sumps and six returns in the pool walls and four inlets in the floor. The comprehensive plant installation results in the 45.5 m³ of water turning over in less than one hour with a filtration velocity of 25m³/hour/m³.

A UV water treatment system improves

water quality and ensures that children with respiratory difficulties, such as asthma, can enjoy the pool without irritation. The Triogen Ultra-Violet plant and the Aquatrol precision chlorine and PH controller ensure that the water is always clear and safe to use. To help reduce the carbon footprint, solar heating panels have been located on the roof of the pool building.

www.baileypartnership.co.uk

www.londonswimmingpools.com

Spec sheet

UV water treatment - **Triogen**
 PH controller - **Aquatrol**
 Filter units - **Astral UK**
 Air handling - **Heatstar**
 Motorised heat retention cover - **Plastica**
 Sensory interactive systems - **OM Interactive**
 Solar array system - **Southern Solar**
 Disabled hoist system - **Hill-Rom**
 Ceramic mosaics - **Waxman**
 Anti-slip step and pool edging tiles - **Domus**
 Pool controls and electrical - **PTE**
 Tanking out materials - **Saint-Gobain Weber**