Texas Focus: Learning From Near to Far

Learning Through Touch

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Presented by

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INTRODUCTION

Those of us with useful vision for near as well as distance activities will know what a powerful sense this can be for learning and development. Such assumptions cannot be made however for children who, in the absence of consistent visual information, are more reliant on others to structure their learning experiences and assist them in making sense of the world.

In this session we examine the role of touch in learning and development with a particular focus on children and young people with multiple disabilities and visual impairment (MDVI). The main purpose of the session is to explore how potential barriers to learning and participation can be reduced through structuring appropriate teaching and learning experiences. We draw upon a real-life scenario situated in a special school for children with learning difficulties and use this to explore key themes relating to learning through touch.

CONTEXT

The introductory scenario takes place in a day school for children with a range of learning difficulties. Within the school there are six children who are supported by a visiting qualified teacher of children with visual impairment (QTVI). The focus of the scenario is on two of the children
with a visual impairment, Rosie and Raphie each of whom are in ‘Dolphin’ class.

INTRODUCTORY SCENARIO

It is 9.30am on a Wednesday morning and the first lesson is about to begin for nine-year-old Josie and ten year old Rafie. Although the lesson is timetabled as ‘Great Explorers’, the focus is not on traditional explorers who have discovered new and exciting lands but rather on Josie and Rafie themselves, each of whom is provided with carefully crafted opportunities to become a ‘great explorer’ of their own. The session has been planned through close liaison between the QTVI, the class teacher and the class Teaching Assistant Dave who is supporting the two children in the session this morning.

Dave introduces himself to each child and then shakes the two metal bangles on his wrist asking each child if they want to reach out to feel them. The bangles are used as Dave’s personal signifier and each child in turn is provided with an opportunity to feel around them. Dave then informs the children in turn that he will be putting their ‘exploring tray’ and their ‘treasure chest’ onto their respective wheelchair trays. The treasure chest contains a number of hand held objects that the children have experienced before. These include a digital talking watch, a metal serving spoon, a sponge ball and a set of keys on a key ring. Each chest also contains a novel object introduced as ‘new treasure’: for Josie this is hairgrip, for Rafie a small leather purse with a Velcro opening.

Dave sits alongside the children and carefully supports each child in feeling the contours of the empty tray and the outside of their treasure chest. He then invites the children to select some treasure from their chest, jointly exploring the object’s distinctive features and placing it onto the tray for further manipulation. Dave informs the children that he will sit quietly alongside them while they play with their treasure only talking to show them something really interesting about the object or to help them locate another object from their chest. He ensures he is positioned so that his right arm gently touches Rafie’s left side to
provide a reassuring presence, and observes the children carefully, noting down how each child explores the distinctive features of the selected object.

The session continues for approximately 20 minutes following which each child is asked to select one piece of treasure that they have enjoyed playing with and to pass it directly to the other child. Josie smiles and passes the hairgrip to Rafie to hold. With support from Dave, Rafie is able to open and close the hairgrip and places it onto Dave’s hair. Dave then places the hairgrip onto Rafie’s hair at which point he begins to laugh. Rafie then feels within the contours of his own tray seeking out the talking watch and hands this to Josie. Joise takes the watch and with support from Dave places it onto her wrist. She pushes a button and on hearing the clock telling the time begins to laugh.

Dave informs the children that is nearly time to end the lesson and supports them in returning the objects from their tray to their treasure chest. Each child is then encouraged to check inside their tray to ensure it is empty and close their treasure chest.

COMMENTARY

On reading the scenario you may have noticed the care with which the Dave introduced objects to the children and how he ensured appropriate time was provided for each child to locate and explore the object. You may also have been struck by the careful planning that had been put into the design of the session to ensure it was appropriate for each child’s individual needs with particular attention to the learning environment itself. We now consider this scenario in further detail drawing on a broad framework that highlights the significance of a child’s adult partners when supporting the child’s learning experiences through touch (McLinden and McCall 2002). Within this framework, we have identified four broad themes which we expand with reference to the opening scenario.
APPRECIATING THE ROLE OF TOUCH IN LEARNING AND DEVELOPMENT

Theme 1. The learning experiences of a child who has MDVI will incorporate a range of sensory information, some of which will be distorted in quality and/or quantity. In order to work effectively with the child, the adult partners require knowledge and understanding of a child’s level of sensory function, namely how the child receives, interprets and consequently acts upon different types of sensory information during a given task.

This first theme highlights the importance of different sensory experiences in learning and development and the need for the adult partners to understand how each child is able to make sense of the world through his or her senses. The QTVI who supports the school has carried out a detailed assessment of the functional vision of all the children with a visual impairment in the school with the findings used to assist in planning the child’s curriculum.

The visual assessment revealed that although Rosie is registered as ‘blind’ she has some useful vision in certain environments (for example, she can see bright lights in a darkened room) and occasionally brings an object she is particularly interested in close to her eyes for visual inspection. Whilst she has limited independent mobility, she has good fine motor control in her hands and fingers and is usually very keen to explore objects that are presented to her on her tray.

Rafie also has some vision although it is not clear how much use he is able to make of this for everyday tasks. He does not appear interested in using his vision to view faces or objects although he does appear to enjoy watching the changing colours of the optic fibres lights in the multisensory room. Rafie is hemiplegic and is unable to manipulate small objects independently with both hands. It is not clear how much enjoyment he gets from using touch to find out about his world and he requires frequent reassurance and support from an adult partner to assist and encourage him.
This type of information was very useful to the class teacher in planning the session and highlights that whilst there may be common needs created by multiple disabilities that include visual impairment (examples in this scenario include: the need for well defined contours within which the child can independently manipulate an object; the time required to allow a child to process the information through touch; alerting the child to what is going to be happening next prior to the event taking place etc), the particular approaches adopted will need to be structured to ensure they are appropriate to the child’s unique blend of needs.

**Theme 2.** In considering how a child processes and acts upon sensory information, a broad distinction can be made between information received from a distance (for example through vision and hearing), and information received close to the body (for example through touch and taste). In the absence of consistent information through the distant senses, the information received through the close senses increases in significance in a child’s learning experiences.

This second theme highlights a broad distinction commonly made in the literature between sensory information which is relatively distant to our bodies (for example vision and/or hearing) and information received through senses that provide us with information about the world that is ‘close’ to the body (for example, touch and taste). In the absence of consistent information through the sense of vision (often referred to as an ‘integrating’ or ‘coordinating’ sense), information received through the sense of touch will increase in significance in a child’s learning experiences. Consider for example how you might find out about the features of a novel object if you are not able to view it through vision (for example if reaching into a dark cupboard to find a jar of honey where there is no light). You may have an overall impression of the object in your hand through touch, as well as information about some of its distinctive features (ie the fact that it is a jar rather than a pot), however without additional supporting information (for example through an additional sense such as smell) you may struggle to make sense of what the object is. Indeed, if you have useful vision and it is light
enough, the temptation may well be to bring the object towards your eyes to check if it is indeed a jar of honey. If you do not have useful vision, or are unable to see the object you may draw upon additional close senses to help you – in this case your sense of smell, or indeed taste would be very useful!

**Theme 3.** For a child who is more reliant on information received through the close senses, his or her learning experiences can provide imprecise information about the world if they are not mediated at a level appropriate to the child’s needs. This can have an important bearing on the child’s knowledge and understanding of the world at critical stages in early development.

This third theme highlights therefore the need for the child’s adult partners to appreciate the unique ways in which each of the senses function. Given the distinctive ways in which information received through touch is processed in the absence of consistent visual information, it is possible that a child’s learning experiences will provide imprecise information about the world unless they are ‘mediated’ at a level appropriate to the child’s needs. This can have an important bearing on the child’s knowledge and understanding of the world at critical stages of development, and each adult partner will need to have knowledge and understanding of his or her role in supporting (or mediating) the child’s learning experiences through touch to ensure that these are appropriate to the child’s individual needs. Consider for example how you might respond to somebody suddenly placing a hand onto your right shoulder while you are sitting down with only the following verbal information about what this person wants from you - ‘Hello there, its time to go now’. Your immediate reaction might be to turn around to confirm through vision who this hand (or voice) belongs to. However, if you have a severe visual impairment and are unable to see this person, you will be reliant on your other senses to find out further information. This might include touching the person’s hand (or other part of the person’s body), asking the person to identify themselves, or waiting until he or she speaks further in an attempt to identify the voice. What if however, in addition to a severe visual
impairment you also have limited gross and fine motor abilities which means you are confined to a wheelchair, unable to move your arms independently and have very limited speech. You may wish to consider how much more of a challenge it would be to identify this mystery person and to know where you are meant to ‘go now’ and ‘who’ you are meant to be going with.

Theme 4. The child’s adult partner will need to have knowledge and understanding of his or her role in mediating the child’s learning experiences through each of the senses to ensure that these are appropriate to the child’s individual needs.

We have already noted the careful planning that had been put into the session described in the scenario. This involved close liaison between the QTVI, class teacher and teaching assistant prior to the session to ensure it had a clear focus in allowing the children to find out about the world in a safe and structured environment that is both engaging as well as fun.

It is all too easy to think that effective learning through touch for a child with a severe visual impairment can only occur through direct adult contact with the child, for example introducing an object to a child using ‘hands-over-hands’ guiding strategies. It is important to consider however whether opportunities can be provided for less directive approaches – when for example, the child has the chance to examine an object without always being physically guided by the adult – in short to consider carefully approaches to learning which include both ‘hands-on’ as well as ‘hands-off’ strategies (Hodges and McLinden 2004). This suggests a key role for those involved in supporting and developing the learning experiences of children who have MDVI through touch, and practitioners will need to consider carefully how they are able to mediate these experiences to ensure a child is afforded with opportunities to engage with the world to the best of his or her unique and distinctive abilities.
Despite an increased interest in the role of touch in the learning experiences of children with complex needs, we actually know very little about how touch is used with the classroom environment with individual children. Evidence from a small-scale research study explored this issue in relation to a child with MDVI in a special school (Hodges and McLinden 2004). We can use a number of the key points developed from this study to describe the use of touch for each of the two children in this scenario. These key points may also be of use in helping practitioners who work with children with MDVI to assess their own practice.

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<td><strong>1. Purposeful touch</strong></td>
<td>Within the session, touch always had a clear purpose, relating to access to the curriculum, communication with the children or to management tasks. Further, touch was respected as an intimate interaction which was designed to be acceptable to each of the children.</td>
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<td><strong>2. Cued touch</strong></td>
<td>Touch interactions were signalled through verbal cues, so that each child was not surprised by an unexpected touch. The touch was also accompanied by additional cues, so that it was part of a sequence of events which assisted each child in making sense of the experiences (for example drawing Rafie’s attention to distinctive features of the watch while he manipulated it in his tray).</td>
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<td><strong>3. Social touch</strong></td>
<td>Touch was not only used to find out about objects and sensory experiences. ‘Social’ touch was also used during the session, for example for the TA to introduce himself, through providing structured opportunities for the children to make contact with each other.</td>
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<td>4. Independent touch</td>
<td>Although ‘hand over hand’ guiding strategies were used (for example to draw Rafie’s attention to particular features of an object) opportunities were also provided for him to feel objects independently without adult support. Additional guiding strategies included ‘hand under hand’ with the adult’s hand placed under the child’s hand.</td>
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<td>5. Meaningful touch</td>
<td>The interactions involving touch were integrated into a meaningful session with careful thought given to the objects that were selected. The use of the talking watch for example allowed for engaging peer interaction at the end of the session.</td>
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<td>6. Consistent touch</td>
<td>There is a high level of consistency in the approaches used by different adults in the school to support each child’s learning experiences. The TA was using a carefully crafted ‘script’ that outlined the particular approach to be adopted with each of the children when interacting with them through touch.</td>
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<td>7. Informative touch</td>
<td>Objects were not placed into the children’s hands without a supporting context. Touch was used to provide the children with information about a variety of events, including the layout of the tray in front of them, and the people around them. This information was also presented as part of whole events, and was included as part of sequences which each child was learning to understand (ie the beginning and ending of a particular lesson).</td>
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<td>8. Communicative touch</td>
<td>As well as being used to find out information about the world touch was also used for communicative purposes. An example of this was Dave sitting alongside Rafie observing him play with his right arm gently placed against Rafie’s left side to provide a reassuring presence.</td>
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<td>9. Invited and acceptable touch</td>
<td>Rather than having an object imposed upon them, each child was invited to join with Dave in exploring interesting materials from their treasure chest. When changes were made to their physical position or when Dave alerted them to a distinctive feature appropriate warning was given.</td>
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**CONCLUDING THOUGHTS**

Within the wide range of educational needs created through multiple disabilities the role of touch in a child’s learning and development can easily be neglected and practitioners and researchers are only now beginning to appreciate the complexities as well as the subtleties of this powerful sense. In considering the learning environments of children who have MDVI, their actions on the environment will, in many cases, require varying levels of support from their adult partners throughout their education. A focus exclusively on a child's use of touch in relation to objects, people and/or sensory experiences may not therefore be appropriate. Indeed, it has been argued that a significant feature of children who have MDVI is their increased dependency on other individuals to structure their learning experiences, including their interactions with people, objects and different types of sensory experiences, ie what and who they interact with, the nature of their interactions, where the interaction takes place, as well as the duration of any given interaction (McLinden and McCall 2002).

Through close liaison between the different professionals and with careful planning and input, Roise and Raphie were actively engaged throughout the session. The ways in which touch was used with each child, how they were alerted to different touch experiences, allowed to
withdraw their hands as appropriate, involved in meaningful tasks and motivated by them, means that they should increasingly welcome tactual experiences and information helping them to become more actively engaged in other classroom experiences and in turn, to become increasingly great explorers in their own time!
REFERENCES


USEFUL RESOURCES

A good starting point for information and resources is ‘Project Salute: Successful Adaptations for Learning to Use Touch Effectively’

http://www.projectsalute.net/index.html

A range of useful resources is also included in the glossary of the Learning Through Touch text.

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Website: http://www.education.bham.ac.uk/research/victar
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