

Ensaio

Body awareness and dyspraxia: between theory and practice

Consciência corporal e depressão: entre a teoria e a prática

Conciencia corporal y dispraxia: entre la teoría y la práctica

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Abstract

This essay aims to address a gap in the educational literature, specifically the limited studies on dyspraxia and potential interventions in schools. By intertwining theoretical and practical dimensions, the essay seeks to elucidate how to effectively intervene with children with dyspraxia within an educational setting. The embodied cognition perspective recommends early engagement with body awareness to address the educational needs and enhance the skills of children with dyspraxia. Following a theoretical introduction, the essay provides practical guidance for teachers, divided into six distinct areas. The authors advocate an inclusive approach, emphasising the importance of not only focusing on the child with dyspraxia but also involving the whole class. This inclusive perspective is believed to be beneficial for all pupils.

Resumo

Este ensaio tem como objetivo preencher uma lacuna na literatura educacional, visto que existem poucos estudos sobre a dispraxia e possíveis intervenções na escola. Nessa direção, o ensaio, entrelaçando as dimensões teóricas e práticas, pretende apresentar como intervir com crianças com dispraxia na escola. A perspectiva da cognição incorporada sugere trabalhar precocemente na conscientização corporal para atender às necessidades educacionais e aprimorar as habilidades das crianças com dispraxia. Após uma introdução teórica, o ensaio apresentará orientações práticas para professores, divididas em 6 áreas. As autoras sugerem, de uma perspectiva inclusiva, trabalhar não apenas com a criança com dispraxia, mas com toda a turma, devido aos benefícios que isso pode oferecer a todos.

Resumen

Este ensayo tiene como objetivo llenar un vacío en la literatura educativa, ya que hay pocos estudios sobre la dispraxia y las posibles intervenciones en la escuela. En esta dirección, el ensayo, al entrelazar las dimensiones teóricas y prácticas, pretende presentar cómo intervenir con niños con dispraxia en el ámbito escolar. La perspectiva de la cognición encarnada sugiere trabajar tempranamente en la conciencia corporal para satisfacer las necesidades educativas y mejorar las habilidades de los niños con dispraxia. Después de una introducción teórica, el ensayo presentará orientaciones prácticas para los maestros, divididas en 6 áreas.

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Los autores sugieren, desde una perspectiva inclusiva, trabajar no solo con el niño con dispraxia, sino con toda la clase debido a los beneficios que esto puede ofrecer a todos.

Keywords: Dyspraxia, body, education, primary school.

Palavras-chave: Dispraxia, corpo, educação, escola

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1. Preliminary considerations

Why work on body awareness with dyspraxic children at school? This contribution aims to answer this question from a special pedagogical perspective. Rather than focusing on dyspraxia as a deficit, we will approach it as a disorder of executive functions, which also underlies dyslexia and other specific learning disorders (Crispiani, 2011). Disorder refers to a situation of confusion (which can be reordered), evoking presence, calling into question one of the central nuclei of special pedagogical reflection: work on the resources, on the potential inherent in everyone, which must be discovered and activated. This implies an encouraging and trusting educational action capable of recovering the true meaning of education, namely that of working towards the construction of the man who is not there, towards his being able to be otherwise. In this direction, corporeity becomes the basic element of every educational project. The body, in fact, refers both to 'dateness' (the ineliminable actuality of existence), but also to the possibility of existence (Iori, 2002). Man, in fact, ex-sists, can emerge from the situation in which he is thrown, to embark on a transformative, ameliorative, experiential journey, which is always an educational journey. Phenomenology, in this line, revolutionised the paradigm of the body. Binswanger emphasised that one does not have, but is a body (Binswanger, 1973). Regardless of their condition, individuals are embodied and therefore require bodily experiences. This is true even for those with dyspraxia, where physical and movement difficulties may hinder the full realization of the cognitive and relational self. Neuroscience has allowed for a re-evaluation of the importance of the bodily and motor dimensions, which were previously considered secondary to the cognitive. According to the theories of embodied cognition between 'perceptual, cognitive and motor processes there is no hierarchical relationship or temporal sequentiality (first we perceive an event, then we think how to act and then we do), but rather a circularity such that action influences both perception and abstract thought' (Carcuana, Borghi, 2016, p. 20). Therefore, it is essential to develop an educational project that incorporates the body as a fundamental aspect for every child in an inclusive school. An inclusive school must pay attention to all, give back to all, equipping itself with suitable, facilitating, supportive and caring didactic and pedagogical devices, and can increasingly organise a didactics capable of making one grow through repetition, recursiveness, going back to the beginning, starting over, and restarting. Rather than goals to be reached, experiences to be shared are fundamental; instead of summing up knowledge, skills, achievements, it is a matter of staying the same, not "going forward" but "being inside" (Rossini, 2015, p. 246), so as not to lose anyone.

2. Corporeality and Dyspraxia



There are not many studies on dyspraxia in educational settings. This essay aims to fill this gap. Praxis can be defined as an adaptive cognitive function that develops through the interaction and integration of multiple neuronal networks that are part of neurodevelopmental systems, including cognitive, perceptual, motor, and affective-relational systems” (Mazeau and Le Lostec, 2016, p. 35). It is important to note that dyspraxia is not solely a motor disorder, as is often believed, but is a multisystem disorder that involves different aspects of development that come to influence each other where disorganisation on the motor level and perceptual deficits have serious repercussions on different areas of learning. Dyspraxia is a disorder that affects the integration of motor, perceptual, and conceptual functions. This includes motor skills, perception, body schema, spatio-temporal awareness, and cognition. Dyspraxia includes difficulties in the planning, control and execution of purposive motor acts (Muzio, 2014, p.108) and may concern the body as a whole or individual motor districts and is characterised by the difficulty in performing voluntary movements, sequentially coordinated with each other, according to a purpose. Motor planning is inadequate in dyspraxic children as a consequence of the fact that body perception is inadequate due to poor processing of tactile, proprioceptive and vestibular stimuli. The child often relies more on sight and has to pay more attention to their movements, which are overall clumsy and stereotyped, with consequences for the planning and programming of the motor act itself. Children with dyspraxia face many challenges in their daily lives and academic journey. They require specific attention and tailored learning strategies to ensure they acquire new skills that will benefit both their academic success and daily life. Sabaddini identified recurring elements (indicators) in school-aged children that characterise those with dyspraxia. They require excessive executive time, have short attention spans, have problems with rhythms, synchronies and the coordination of actions with obvious repercussions in music education and physical education, have difficulties in the perception of space and time, have difficulties in mathematics and geometry, have problems with bimanual integration and fine praxis, often have problems with digraphs and/or lack of lateralisation (Sabaddini, 2005). Sabaddini states that dyspraxia is a common feature in several neurodevelopmental disorders, such as ADHD, DSA, and Asperger's. In children with these pathologies, there are symptoms of dysfunction in the planning of voluntary motor acts, accompanied by disturbances in visual-spatial skills (Secondary dyspraxia) (Sabaddini, 2005, p. 8).

Dyspraxia is a condition that is not widely known but is not uncommon, with prevalence rates ranging from 1.8% to 18% in some countries such as Great Britain, Sudan, and Australia. Most of these studies were conducted on children aged 5 to 12 years, and the diagnosis is made using a standardized measurement scale of motor skills (Huron, 2014).

The Italian Developmental Dyspraxia Association reports that dyspraxia affects around 5-6% of the school population, with a male/female ratio of 2:1. Therefore, at least one pupil in every class is likely to have dyspraxia (AIDE, 2023). During motor education, dyspraxic children often isolate themselves. Children with these difficulties may struggle with fast movements, jumping, balance, axis control, and free body exercises that require synchronisation with breathing. Even simple speed games with a ball or team games that rely on visual-spatial ability can be challenging. Pre-established sequences and coordination activities may also require significant effort, and the child may lose interest, become distracted, or even exhibit aggressive behaviour. It is necessary and urgent for teachers to develop a project focused on body awareness as a basis for enabling children to develop motor

planning, balance, bilateral motor integration, and fine motor skills. Developing a "body" project means, through systematic observation and the use of organised planned activities, constructing a didactic and educational programme in which the body and movement are not only the basis but also the means for the growth of all children. Movement, in fact, according to Moliterni, as an intentionally educational motor action (Moliterni, 2013, p. 226) is pervasive, persistent, and has a transversal value towards the area of languages, cognitive interactions and relationships (Ibidem, p. 216). Starting with the body can help children develop new ways of thinking about themselves and others, which can improve their self-esteem and self-acceptance. This is especially important when these are affected by the inadequacy of expected behaviour, compared to his own age. To achieve this, particularly at the start of primary school, teachers must observe and record the following abilities using a checklist. This will help identify any areas that require attention and enable early educational, didactic, and rehabilitative interventions to support the child in achieving greater autonomy. Based on Lois Addy's work (2003), the following is a suggested checklist for teachers:

Table 1: Checklist for teachers

Observation	Yes	No
1. Does the child have difficulty holding a pencil?		
2. Does the child have difficulty writing and/or copying letters?		
3. Are the child's drawings immature?		
4. Does the child appear clumsy?		
5. Is the child easily distracted?		
6. Does the child seem unaware of his/her appearance and appears unkempt?		
7. Does the child have attention difficulties?		
8. Does the child have difficulties with spatial organisation?		
9. Does the child have difficulty using objects?		
10. Does the child often seem confused and frustrated?		
11. Does the child seem to have low self-esteem or low self-confidence?		
12. Does there seem to be a discrepancy between the child's verbal reasoning and the written evidence?		

13. Does the size of the letters written by the child appear irregular?		
14. Does the child have communication difficulties?		
15. Does the child's language tend to deteriorate when he/she is under pressure, e.g. when answering a question?		
16. Does the child have poor mouth control when eating?		
17. Can the child hop on one foot?		
18. Is the child able to hop on one foot?		
19. Is the child able to balance on one leg?		
20. Is the child able to string beads?		
21. Is the child able to use scissors?		
22. Is the child able to use a ruler effectively?		
23. Is the child able to dress and undress and comply with AVQs (activities of daily living)?		
24. Is the child able to use gym equipment?		
25. Does the child leave sufficient space between words when writing a sentence?		
26. Does the child start writing on the correct side of the paper?		

Source: Based on the work of Lois Addy (2003)

3. Body awareness and ensemble teaching strategies

Body awareness refers to "that unconscious perception of body position, movement and strength that is derived from specific sensory receptors located at the joint and muscle level. This perception, called proprioception, allows one to understand what position one's arms and legs are in even when one's eyes are closed" (Kurtz, 2006). When the proprioceptive system is functioning, it enables the child to make automatic, continuous, and unconscious adjustments to their body position and movements in response to the task at hand. However, when the system is not functioning correctly, children must consciously make these adjustments, resulting in delayed activation and planning of gestures and motor acts. Working on this aspect involves implementing muscle tone and stimulating the proprioceptive system to instill confidence, promote relaxation, and provide constant exercise for the child. The



teacher should not solely rely on verbal instructions, but also provide physical guidance by demonstrating the activity themselves. This activates the mirror neuron mechanism and helps the child learn the necessary sequences and actions. Tactile guidance may also be necessary to help the child feel their muscles and properly position their hands and feet. The use of a ball can also aid in discovering body parts. The activation of mirror neurons generates an internal motor representation of the observed act, which is crucial for learning through imitation. Therefore, it is essential to 'show' the movement/action during the learning phases to activate the neuronal networks that enable correct acquisition. This process constructs an internal representation that facilitates not only the correct execution but also the comprehension of the action. The teacher in the primary school can help the child with dyspraxia, together with all the others, to work on the one hand on the body scheme and on the other on proprioceptive stimulation, using peers as models (Tutoring) and cooperative activities in which the child with dyspraxia can find reinforcement in the other, feel interdependent, to prepare him or her to gradually become more secure and autonomous. In the first instance, the teacher can suggest activities to mobilise different parts of the body, such as moving the head, bending a leg, squatting, sitting and standing. These activities can be demonstrated by the teacher or with the assistance of a tutor who works alongside the child with difficulties. Additionally, knowledge-based activities can be introduced, such as identifying body parts like the eyes, head, and nape. The lesson involves experiencing body movements through the game of body rolling, using a small ball to roll around different parts of the body. Localisation activities are also included, where students imitate the teacher through visual stimulus. Free mobilisation activities and movement activities with the feet and hands are used to develop a more refined knowledge of the body axis, such as lying on one's side, supine, and on the stomach to discover the mobility of the spine and orient oneself in space. The teacher can suggest activities that focus on developing fine motor skills in the hands and fingers. These skills are essential for many school activities, such as handwriting. The teacher can also arrange activities that help dyspraxic children with lateral dominance, which can be challenging (Lodi et al, 2014). These activities can include manipulation exercises, target shooting, and other progressively complex tasks. To promote proprioceptive development, various activities can be employed such as playing the rope game, doing the wheelbarrow, pushing against a wall, jumping on a trampoline, curling up while lying on the back, playing with clay, walking on knees or all fours, walking with arms behind the back, and applying pressure on the palms of the child's hands to help them maintain balance.

These are not rehabilitative activities, but rather activities that all children, regardless of their ability, should be encouraged to try in a welcoming, collaborative, and supportive environment. It is important to not be afraid of repeating the same sequences, as all children need to experience their bodies through motor, expressive, and playful activities both at school and at home. For this reason, we propose focusing on implementing certain teaching strategies in primary schools. We provide operational guidelines to achieve this goal.

4. Operational proposals

Motor activities can be proposed in school contexts to develop motor skills, which can improve conditions of dyspraxia and related neurodevelopmental disorders such as ADHD, DSA, and Asperger's. Additionally, motor activities can promote learning in children.



Automating various motor elements is necessary to tackle the task of learning. Poor motor skills can cause inefficiency in the learning process for all children. Movement involves planning actions in a finalized sequential organization. Similar procedural functions, along with movement, can improve the ability to deal with linguistic and mathematical tasks since they are located in the same brain areas. Some researchers (Lorusso Lorusso, Parini, Bakker 2010) confirm how the ability to read is learned in relation to the development of some motor patterns such as walking on all fours, development of the laterality of a hand (Tresoldi & Vio, 2003), in reference to this many other analogies can be applied. It appears that the processes of reading, writing, and calculation are similar to those of planned motor actions, modulated only by different intensities. Therefore, the instability of these processes can result in difficulty recognizing characters, memorizing their sequence, and a decrease in speed and accuracy. Working on coordination in dyspraxic children provides an opportunity for neuro-motor improvement in perception, ideation, and planning. These aspects are essential in the learning process. The relationship between movement and learning is attributed to the inputs facilitated by physical exercise that act on 'neuronal plasticity' (Craighero, 2014). This phenomenon, discovered by Merzenick, describes the brain's ability to increase the number of synaptic connections following the performance of a motor activity.

Repeating exercises and games can activate new sensorimotor circuits in children, promoting their space-time orientation, increasing their self-esteem and effectiveness. This may lead to the creation of new synaptic connections that the central nervous system can utilize for other academic functions.

Motor activity is crucial for the physical, mental, and emotional development of children. It can also serve as a foundational element for reorganizing the functionality of those experiencing scholastic difficulties (Barbieri, 2015).

Below, we present a series of motor activities suitable for children with dyspraxia, but beneficial for all.

The motor program proposed here aims to improve gross and fine motor coordination, balance, touch, and rhythm. It is structured into six sections of exercises that begin with activating smaller body segments such as fingers and hands, before progressing to more general activities like jumping, throwing, and other whole-body movements.

Section 1: Finger and hand activities

1st Activity

Objective: Move each finger independently of the others.

The child may have difficulty using his fingers independently. Use finger puppets, or draw a smiley face directly on your fingertip. Initially encourage the child to use only the index finger of one hand and extend the program until the fingers of one hand are able to move independently of each other.

Notes: There may be mirror movements of the fingers on the hand you are working on and on the other hand. It might help initially to keep the rest of the fingers, except the one whose movement is required, resting on the table or ask to hold a ball between the other fingers.

Evolutions: extend the exercise to two fingers, three fingers, and so on.

2nd Activity



Objective: Play the notes in sequence from 1 to 5 and then backwards with each hand in 5 seconds.

The child should place first his right hand and then his left hand on 5 white keys of a keyboard in sequence. The keys can be numbered from 1 to 5.

Notes: A keyboard drawn on paper can be used initially, then a computer keyboard if finger strength is weak, and finally a regular keyboard.

3rd Activity

Objective: An adult will direct the child. Play separate notes not in sequence e.g. 3-5-2-1-4 without hesitation. The child should reach the milestone of 5 out of 5.

The child should use each of their hands separately on the keyboard as before on notes numbered 1 to 5.

Notes: Say the numbers slowly to give the child time to process the information.

4th Activity

Objective: Move the wrists alternately.

Place two drum sticks in front of the child, 5 cm apart. The child uses chopsticks alternately. First the right hand and then the left. The child must move the chopsticks 10 times in 10 seconds.

Notes: If evident, eliminate the associated movements and the tongue sticking out of the mouth. Have him hold a soft ball in his non-working hand to reduce unnecessary movement.

Evolutions: Get to have the chopsticks 20 cm apart from each other.

Section 2: Hand-eye coordination

1st Activity

Objective: Coordinate both hands simultaneously 10 times.

Ask the child to hold a ball in each hand and imitate your action: Start with both hands touching below the waist. Slowly raise your hands along the midline of your body until both arms are extended above your head with the balls touching each other. Then, separate your hands and slowly bring them down to each side of your body until your hands touch again below your waist.

Notes: The child may have difficulty repeating the action in a casual manner. They might even move one arm faster than the other. Ensure that both arms move at the same speed. Also, observe tongue movements and discourage them.

2nd Activity

Objective: Knock down 6 pins with 2 attempts with the right hand. Knock down 6 pins with 2 attempts with the left hand.

Place the child on his knees 3 meters from a set of 6 pins. Ask the child to roll a ball towards the skittles. Initially, have them use the right hand, then the left.

Evolutions: Increase the distance to the pins.

3rd Activity

Objective: Dribble.

Encourage the child to hold a ball. With both hands at waist level, have them dribbles once and catch it using both hands 10 times.

Notes: The child must keep their eyes on the ball as they may have difficulty judging the speed.

4th Activity

Throw the ball with a single dribble to another child or adult. The ball should return the same way. Children should be positioned 3 meters apart. The goal is to make 10 passes in 40 seconds.

Notes: The child may be very excited while waiting for the ball to return. Encourage them to stay still by placing them in a small circle or square to stand in.

Evolutions:

1- Throw the ball with a dribble in a circle before being caught by the other child or adult. The ball comes back the same way. The children stay 4 meters apart.

2- Use a smaller ball. The pitcher should use their right hand 10 times and then his left hand 10 times. The ball is caught with both hands.

Section 3: Eye-Foot Coordination

1st Activity

Objective: Walk back and forth without leaving the lines.

Draw 2 parallel lines on the floor, 6 meters long and 20 cm apart. Ask the child to walk heel-toe forward and then backward while remaining between the lines.

Notes: If the child cannot walk properly, provide footprints as a guide. Shorten the distance if needed. Pay attention to the position of their hands and arms. Closing fists indicate instability, provide a heavier object to hold for stability, gradually removing it as they become more relaxed.

Evolutions: Walk only on toes, then only on heels.

2nd Activity

Objective: Walk on a drawn line.

Place a rope on the floor, shaping it like a snake. Ask the child to walk along the rope heel-toe.

3rd Activity

Objective: Walk sideways.

Use the 6 meter parallel lines and ask the child to walk sideways with their feet perpendicular to the lines, first moving the right foot and then the left. The goal is to travel the distance up and down in 20 seconds.

Notes: Observe any accompanying movement and ensure they are minimized.

4th Activity

Objective: Jump.

Play hopscotch by drawing on the ground: one square, two squares, one square, two squares, etc..for a total of 10 jumps. The child starts on the square where jump with one foot, then moves to the two squares where they jump with both feet and so on.

Notes: Demonstrate the activity initially. If the child experiences balance issues, provide them with a sponge ball to hold with both hands.

Section 4: Balance



1st Activity

Objective: Balance unaided for 10 seconds on each foot.

Ask the child to balance on each foot (separately). Initially allow them to hold onto the back of the chair or lightly touch the wall for support. As the child becomes more capable, encourage them to stand without support. Then demonstrate the activity, by balancing on one foot while holding a small ball in each hand with arms outstretched. Ask the child to mimic your actions.

Notes: Develop the child's stability before asking him to stand without assistance. Start with small goals such as 3, 5 then 8 seconds.

2nd Activity

Objective: Balance unaided for 10 seconds on each foot.

Balance on each foot on different types of surfaces, such as sand, foam cushion or a skipping rope.

Notes: Correct any tongue protrusion if evident.

3rd Activity

Objective: Walk across a beam.

The child should develop the skills to be able to walk along a 10cm wide beam. taking small steps. The beam should be 2 meters long.

Notes: Provide assistance to the child when walking across the beam, gradually eliminating support as they achieve balance. If the child clenches fists, ask them to hold a ball or object.

4th Activity

Objective: balance exercise in pairs.

Pairs of children start behind one line in the gym and must reach the opposite line. One of the two will move two disks on the ground, one at a time. The other partner will advance by placing one foot at a time on one of the disks. When the student maintaining balance reaches the opposite line, the students switch roles. The game ends when both students have crossed the designated area. If the student maintaining balance steps outside the disk or places both feet on the same disk, the pair must return behind the starting line.

Section 5: Whole Body Coordination**1st Activity**

Objective: Crawling.

Place a selection of hand and foot shapes along a 4-meter line. The child should walk the distance, placing their hand only on the corresponding shape and doing the same for the foot.

Notes: Many dyspraxic children may not experienced the crawling stage and may find this activity challenging. Continue practicing until the child can coordinate movements automatically.

2nd Activity

Objective: Coordinate arms and legs appropriately.

Arrange a series of colored circles on the floor for the child to walk inside.

Evolutions: Increase the distance between the circles.

3rd Activity

Objective: Coordinate your arms and legs during a jump.

Ask the child to stand with their feet together and arms along their body. Upon command, the child should jump on the spot, opening their legs, extending their arms at shoulder height.

Notes: Begin slowly and gradually increase speed up until a rhythm is established.

4th Activity

Objective: Hop on one foot.

Hop for a distance of 3 meters between 2 parallel lines placed 20 cm apart, first on the right foot and then on the left foot.

Notes: Provide the child a large sponge ball to hold with both hands to prevent abnormal arm movement that may reduce coordination. As the skill develops allow their arms to move freely.

Section 6: Activities on touch and rhythm**1st Activity**

Objective: Identify objects without seeing them.

Place 10 common objects in a bag, such as a spoon, a coin, a fork, a toy car, a piece of Lego etc. Ask the child to select an object and identify it without looking at it.

2nd Activity

Objective: Identify objects.

Have the child sit on the floor and place 5 objects on each side of their body. Place a red dot on the back of their right hand for identification. Ask the child to pick up the objects with their right and left hands. The aim of this activity is to encourage crossing the midline of the body, so ensure that most objects requested with the right hand are placed on the left side of the body. The goal is to correctly identify all objects.

Notes: Once the child can confidently identify the right hand and the left hands, remove the red dot.

3rd Activity

Objective: Maintain timing.

Dyspraxic children ofteng struggle with timing. Begin by asking the child to replicate a simple rhythm pattern, such as 3 bars repeated 5 times, by clapping their hands, e.g., III III III III III. Time each repetition.

Evolutions: Perform the exercise by tapping the same rhythm on a tambourine with fingerstipe and then with the palm of the hand.

4th Activity

Objective: Maintain timing.

To coordinate hand-tapping, for example, have your child sit down and start tapping their feet in a regular rhythm. Then demonstrate a sequence of two beats with the feet followed by two beats with the hands. Repeat the sequence 5 times.

5. Conclusions

The school can play a vital role in creating praxis-motor situations that are beneficial for children with dyspraxia. These situations aid in developing greater self-awareness and refining transversal skills that are applicable across various learning domains. This can be accomplished through a preventive, playful, and empowering approach that collaborates closely with the family. Enrico Sisti's article in *La Repubblica* on 5 March 2016, shares the story of James Guthrie-Croft, underscoring the significance of adequate motor education in enabling dyspraxic individuals to realize their full potential. Despite encountering daunting challenges in sports, James achieved remarkable success. Initially struggling with basic tasks such as tying his shoes, getting dressed, and holding a pencil, James overcame these obstacles and excelled with appropriate support and training. James was diagnosed with dyspraxia shortly before turning 5 by doctors at the Starship Hospital in Auckland, New Zealand. His difficulties were evident during his early days at school, where his slow walking pace and speech difficulties were observed by his teacher. Challenges in reading and speaking caused him to withdraw and become less communicative. Therapy sessions, which included basketball and running, were instrumental in his progress, as specialists noted his nervous system had not received sufficient stimulation. Despite these initial hurdles, James, now a student at Timaru High School, has garnered international attention for his remarkable achievements. Not only has he completed the 100 meters in an impressive time of 11.06 seconds, but he has also learned to read, defying previous assumptions that this milestone would be unattainable for him. His journey serves as a compelling testament to the transformative impact of motor education for individuals with dyspraxia and other specific learning disorders.

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