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Helping Kids Learn

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Information Sheet 56

Games Do Count

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Best practice tells us that young children learn best through play.

When children enter school, however, it seems we strip away the fun and believe that learning at home occurs through explicit instruction and set formal homework sheets and text. In addition, when children enter school many parents feel that learning is something that they may no longer be best placed to assist with and it becomes the domain of school and their involvement may be simply to 'police' homework.

These assumptions are unfounded.

New research suggests that parents can in fact play an important role in helping their child develop essential numeracy skills in a fun and easy way.

One way to give your child a head start in mathematics is to play board games with them.

A child's math ability at the beginning of kindergarten is strongly predictive of their math achievement test scores in later years – even in high school (Duncan et al., 2007). If a child enters school with less numerical knowledge than their peers, they will be disadvantaged throughout their schooling.

A study published by Geetha Ramani and Robert Siegler this year found that the differences in math ability amongst young children in the early years of school is attributable to experiences with informal learning activities, including board games in their preschool years.

This means that young children who have experience with board games are more likely to have stronger numerical knowledge than children who have no or limited experience.

Children can start to participate in board games from about the age of three or four years and parents can tailor the way they play the game and its complexity to suit the age and development of their child.

Playing board games helps your child develop in the following ways.

Socially

When playing in a group, children learn to and practise how to wait their turn and take turns. These are skills that are needed for most of life's experiences, and in particular are very useful when they need to share the attention of the teacher with up to 30 other children.

Playing competitive games can help your child learn to be a good loser.

Make sure you do not always let your child win the game. Life certainly won't let them win all the time and this is a safe environment to practise becoming a good loser.

The best way to do this is to model being a good loser yourself. When you lose you should verbalise your feelings. For example, say, "Oh, I didn't win. I wanted to win, but that was bad luck. Maybe I'll win next time. Congratulations, you played really well".

Number skills

Playing a board game may seem like a simple activity, but this actually helps develop your child's number skills in many different ways.

It helps your child learn to:

- understand that numbers represent amounts and that they are ordered from less to more (for example, four is more than three because it has more dots on the dice);
- recognise numbers (for example, the squares may be numbered and so they get to see the visual or symbolic representation of the amounts);
- understand that whole numbers increase in a linear fashion;
- introduce the notion of counting on and counting back (for example, you roll a six and therefore you move forward six places, or you land on the instruction 'the player must move back five places') that are essential for mastering addition and subtraction;
- improve their counting.

If you are playing the game with an older child, increase the level of complexity to challenge your child.

Usually you would roll the dice and move that number of spaces. Why not use two dice and you have to either add or subtract the two numbers to find out how many spaces you move (for example, if you were playing the game by adding the dice and rolled a five and one you would complete the sum $5 + 1 = 6$ and move forward six spaces)?

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We raise funds to help children from birth to 18 years by offering a range of services including the following.

Early Childhood Services for children from birth to six years.

- Early childhood intervention and support for very young children.
- An inclusive preschool for children with and without additional needs.
- An assessment and consultancy service for families who are concerned about their young child's development.
- Specialist early childhood services and therapy.

School Age Services for children from Kindergarten to Year 12 who have low support needs.

- Comprehensive assessments.
- Small group literacy and numeracy support.
- Occupational and speech therapy.
- Outreach programs.
- The Ronald McDonald Learning Program for seriously ill children and Reading and Counting for Life Programs for children falling behind in reading and numeracy at school.

Family Services helping and supporting families and health professionals.

- Centre and home-based family counselling.
- Parenting Programs and groups for families.
- Case Management Services.

Professional Development for teachers, health professionals and parents.

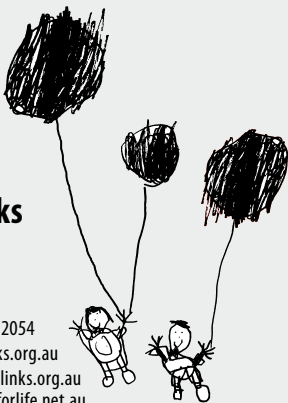
- Presentations, workshops and advice on identifying and helping children with learning difficulties, learning disabilities and developmental delays.

Learning Links has branches in six Sydney locations at Peakhurst, Penshurst, Fairfield, Miller, Brookvale & Randwick. We also offer some services to children in country NSW, the ACT, and some programs Australia-wide and in New Zealand. A complete list of branch locations and contact numbers is on the back cover.

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Although the skills listed above may seem quite simple, it is important to remember that the acquisition of skills relies on the mastery of more simple skills. So, if your child is able to understand the basic concepts underpinning number, they are better placed to learn further numerical skills that follow.

Communication

Playing games with other people relies heavily on having good communication skills.

The child is required to listen and understand the instructions and procedure of the game. This is of course an essential skill for learning. When you next have a new player join the game (for example, a younger sibling is now old enough to play or Nana comes to visit) ask your child to explain to the new player how to play the game.

The content of the game can increase the vocabulary and general knowledge of the child.

At home, my four year old's favourite board game at the moment is called 'What a Performance'. In this game, when you land on certain squares you need to pick up a card and perform that activity. It may be 'pretend to be an astronaut' or 'list five vegetables'. Through this game he is learning about objects and activities in the world and expanding his knowledge – whilst having fun.

Approach to learning

Some children, especially those who struggle with learning, can feel overwhelmed and 'shut down' when presented with a learning or homework task. Playing a game, however, does not summon the same anxiety and children are more willing to have a go.

Children love to play. Children approach play with enthusiasm and zest. This results in an increased motivation and engagement which is great for learning new things or consolidating skills.

If young children are exposed to numerical concepts and symbols through play in their early years they are more likely to feel a sense of increased confidence and self-esteem when they are presented with a number problem in class.

Relationships

Young children enjoy playing games and interacting with their parents and family members. At times, it can be hard to make the time, or find a suitable activity, to genuinely interact with our children. Playing a board game together is something that children can look forward to and enjoy whilst spending time together as a family.

Parents as educators

Quite often parents may feel that they do not have the necessary skills to be able to "teach" their children new skills. Some parents therefore assume that learning and teaching are something that occurs within the school context and not at home.

Parents, in large part, understand that we should read to our children to help develop their literacy skills. But what do we do to help develop their number skills?

Quite often math is seen as unfamiliar territory and an area where we may not feel particularly confident. For example, I am sure they have changed how you complete long division since I was at school so I had better not try to help my child out with that as I will probably only be making it worse for them!

Playing a board game together is a task that is achievable and simple for parents to do and feel confident in doing – especially in the area of number.

Some board games to look out for:

- Dino math tracks
- Honeycomb hike game
- Snakes and ladders (www.judius.com.au)
- What a performance
- Bus stop
- The game of ladybirds (www.windmill.net.au)

So, tonight when you get home and the washing up is finished and the chores done for the night, why not turn off the TV or computer and get out a board game ... because games do count!

References

- Duncan, G., Dowsett, C., Claessens, A., Magnuson, K., Huston, A., Klebanov, P. et al. (2007). School readiness and later achievement. *Developmental Psychology*, 43, 1428-1446.
- Ramani, G., and Siegler, R. (2008). Promoting broad and stable improvements in low-income children's numerical knowledge through playing number board games. *Child Development*, 79 (2), 375-394.



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