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Editor’s Entrée

What can we find to say about the number 22 for this issue? Well, there are 22 yards in a chain, and it is also the length of a cricket pitch in yards. It is the number of players on a field of both soccer and American football, is referred to as ‘two little ducks’ in the game of Bingo, and was the speed at which the Titanic was travelling (in knots) when it hit the iceberg... can you think of anything else? What can the children in your school come up with?

Revised Early Years Foundation Stage
As you are no doubt already aware, Dame Clare Tickell, Chief Executive of ‘Action for Children’, recently reviewed the Early Years Foundation Stage. Following the review, an official consultation website was set up, hosting a consultation document and inviting teachers, practitioners and other interested parties to contribute their thoughts on the set proposals. This consultation period is due to end on 30 September 2011, so you don’t have long to share your views. Responses can be submitted either online (responses must be complete by 23:45 on 30 September) or via email (responses to be received by midnight). Postal responses will also be accepted, but must arrive no later than the morning of 1 October. Any changes to be made to the EYFS are expected to be announced in November.

Primary Magazine
As ever, the latest edition of the NCETM Primary Magazine is packed with inspiration and ideas that can easily be adapted for the Early Years classroom. Issue 37 focuses on weather-themed activities - useful for those sunny, windy, rainy… even stormy days we often have at the start of the autumn term. Keep an eye out for Issue 38 at the beginning of October.

Conferences and events
Last issue we alerted you to the Nursery World North Conference, to be held in Manchester at the start of October. This month we bring you details of two exhibitions hosted by the TES: ‘TES Special Needs’ on 14 and 15 October, and ‘TES Resources’ on the 9 and 10 December, both at the Business Design Centre in London. Find out more from TES Connect.

QCDA test update
A quick update for Key Stage 1 schools regarding arrangements for end of key stage assessments. The Standards and Testing Agency (STA) will be established on 3 October to deliver national curriculum tests and assessments following ministerial decisions to close the Qualifications and Curriculum Development Agency (QCDA). Responsibility for the overseeing of Key Stage 1 moderation in 2011/2012 will continue under the STA, a new executive agency within the Department for Education. Moderation of the Key Stage 1 for 2011/12 will be continuing as normal. Settings and schools should continue to liaise with QCDA until the STA is established and takes on responsibility for this work.

Resource spotted!
We found a gem of a resource on the TES connect site, PSRN Take Home Challenge Cards for the Foundation Stage. The clue is in the title, but these could provide a lovely starting point for involving...
parents and carers in early mathematics. Let us know if you give them a try, or share other strategies used for linking home and school through mathematics.
Focus on…transition from Reception to Year 1

The transition from a Reception class to a Year 1 class is often treated in exactly the same way as that between any other two year groups in a school. However, in many schools, the ethos of the foundation stage does not continue into Year 1, making the transition as potentially difficult as changing settings or schools. Indeed, there can be a rather sharp discontinuity between Reception and Year 1, as schools remind the Year 1 teachers that it is ‘only five terms to Key Stage 1 SATs’. The Year 1 classroom may be set up rather more formally than the Reception class, with more tables to allow for increased time spent on focused activities. Although children will have visited their new classroom and new teacher before the summer holidays, the reality of being more restricted to what the teacher wants may come as a bit of a shock.

To help ease the transition, it is a good idea to make the first term as similar to the foundation stage as possible, perhaps even continuing some of the routines from the previous class until the children are settled enough for change. Making much of the learning play based, including the teacher-led activities should help the children to settle in, enjoy and achieve. This also helps the Year 1 teacher to see and make judgements for themselves about what level each child is working at. Although Reception teachers will have passed on a great deal of information about each child, perhaps in the form of an e-profile or something similar, it is hard to take all the information in when the children are barely known to you. After playing and working with the children for a few weeks, it is useful to reread the information received, since you will then have a ‘hook’ to hang it on. Spending the first half term getting to know the children really well will pay dividends during the rest of the year.

QCDA’s Continuing the learning journey is a training package aimed at those concerned with the transition between the EYFS and Key Stage 1. Although the booklet can be downloaded free, the corresponding DVD material is no longer available. Nevertheless, much can be gleaned by simply reading through the pack. For example:

The aim of Section 2 of the materials is:
To promote best practice for transition between the EYFS and Year 1 by considering:

- the experience of transition for children
- the effective transfer of information about children, including the EYFS profile.

Key questions focusing on good practice in transition feature throughout.

A further publication, Seamless transitions: Supporting continuity in young children’s learning, gives examples of effective practice which will help practitioners to reflect on routines within their own setting. The materials reflect the learning journeys of the six local authorities participating in the Foundation Stage Transition Project (October 2004 – October 2005) and makes interesting reading.

You might like to read some of the research and case studies of the transition from Reception to Year 1:

- Making a successful transition to Year 1
- Effective Transition, An Action Research Project from Reception to Year 1
- Blackpool Transition Project, Reception to Year 1
- Moving on: Effective transitions from reception to year 1
- Case study: Creating a Nursery, Reception and Year 1 Lower school to support transition
Case study: How the school blog and building continuity in child-initiated learning into Year 1 are improving children’s experience of transition

Transition from the Reception Year to Year 1: an evaluation by HMI.

On a more mathematical note, one way to get a feeling for each child’s understanding of number and their attitude to mathematics is to invite two to four children to come and play a track game with you. Make sure the track is numbered and, ideally, has optional routes so that children have to make decisions. If you don’t have a game with optional routes, snakes and ladders is fine. Playing the game with a small group gives you the opportunity to focus on observing the children.

Look out for children who:

- organise themselves (and others)
- take turns
- count dice spots accurately or show subitizing skills (‘seeing’ the dice pattern/number)
- move their counter the correct number of spaces
- include the space the player is on as the beginning of the count
- follow the numbers
- relate well to other members of the group
- get upset if they don’t win.

Ask questions about what number the player will land on if they throw a two, or five, etc. Listen out for allegations of cheating. What has the accused done? What is the accuser saying has happened? Allegations and responses sometimes reveal misunderstandings about how to play the game.

Another useful observation session involves using digit cards. After you have explored the children’s understanding of digits, give a set of digit cards to each pair of children and ask them to make a total of 10. Prepare a sheet of paper like the one below with spaces for the digit cards to support the children. The children will need to use the one and the zero to make 10, a good test in itself, then use the other digit cards to explore ways of solving the addition. Provide sticks of 10 interlocking cubes, counters and mini whiteboards for the children to use if they wish. If necessary, demonstrate making 10 with counters or cubes, placing the relevant digit cards in the boxes except for the 10, asking the children to help you. Then ask them to find a different way. Challenge the more able by including a third number to add to make 10 or by moving the calculation around to make 10 - ? = ? or by removing the stipulation that the total must be 10.

Do they show evidence of:

- organising themselves (and their partner)
- working with their partner
- talking about their solutions
• using the previous solution to make a new one
• using cubes or counters confidently
• choosing to record, either in their own way or in a number sentence.

These two activities will tell you so much about the children’s understanding of number and their attitude to mathematics. You will be able to see how flexible they are, whether or not they can explore and persevere and get a good idea of who works well together. Then you have the whole year ahead to investigate and discover mathematics together!
R4U – Investigating the role of language in children’s early educational outcomes

This research report was commissioned before the 2010 change of government, so it is not known how many of the recommendations will be accepted and acted upon. Despite this, the report makes fascinating reading.

The report explains that there is increasing evidence linking children’s early language skills and their success in school. The thrust of the report is that a focus on children’s language could be used to raise attainment. Understanding the everyday influences on children’s early language development could suggest potential areas for interventions and help to target resources effectively. These influences are broadly categorised as internal to the child or within the child’s environment, though the groups are interactive and dynamic. Interventions could be particularly important for the seven per cent of children who exhibit some kind of impairment in their speech and language development.

Although there is considerable academic research showing that children from lower socio-demographic backgrounds tend to have poorer language skills when they start school, less is known about what it is in their environment which leads to this.

The research asked three key questions:

1. To what extent is a child’s early language development associated with the child’s performance on assessments in the first years of formal schooling?
2. To what extent is the child’s early communication environment associated with a child’s early performance on assessments in the first years of formal schooling?
3. What are the characteristics of the child’s early communication environment that contribute to children’s language development at two years of age?

The five key findings of the report are stated as:

- There is a strong association between a child’s social background and their readiness for school, as measured by their scores on school entry assessments covering language, reading, maths and writing;
- Language development at the age of two years predicts children’s performance on entry to primary school, irrespective of their social background. Children’s understanding and use of vocabulary and their use of two or three word sentences at two years is very strongly associated with their performance on entering primary school;
- The children’s communication environment influences language development. The number of books available to the child, the frequency of visits to the library, parents teaching a range of activities and the number of toys available are all important predictors of the child’s expressive vocabulary at two years. The amount of television on in the home is also a predictor; as this time increased, so the child’s score at school entry decreased;
- The communication environment a child experiences before their second birthday is a more dominant predictor of early language than social background. In the early stages of language development, it is the particular aspects of a child’s communication environment that are associated with language acquisition rather than the broader socio-economic context of the family. Children who attended a crèche or pre-school group performed better in school than those who did not;
The child’s language and their communication environment influence the child’s performance at school entry in addition to their social background. Children’s success at school is governed not only by their social background; the child’s communication environment before their second birthday and their language at the age of two years also have a strong influence.

The report’s findings emphasise the importance of the child’s very early years from 0-24 months. The impact of the child’s environment clearly starts within the first two years of life, but how should this information be communicated to parents? Those in need of the messages may be the least likely to respond to leaflets and pamphlets, particularly since some of these families may have their own limitations in literacy. Antenatal groups and teenagers’ sex education classes could be targeted but health visitors, community midwives and others who go into the home in the first few months of a child’s life are those most able to speak directly with the families. Parents could also be contacted regularly through their mobile phones. Dame Clare Tickell recommended in her Review of the Early Years Foundation Stage that an insert should be placed in the Red Book – the book given to all parents on the birth of their child – to encourage the monitoring of children’s communication. She acknowledged the importance of language and communication as a vital underpinning skill that contributes to children’s success in life.

And once parents are aware of the importance of their child’s early language and communication environment, then what? The suggestion that the predictive role of language becomes clear by 24 months suggests that this is a critical time to identify those at risk. Although most children are not in education facilities at this point, they are covered by health visiting services in the NHS. The child’s vocabulary and ability to combine words, perhaps through the use of two- and three-word sentences at 24 months old, could become a useful screening criterion, leading to some form of early intervention if necessary. Such services would need to be consistently available for all children and those least likely to access them must be enabled to do so. One way to enhance children’s language development is to encourage wider book ownership and library use with infants. This has been a feature of Book Start and other initiatives widely used in Sure Start local programmes. Such programmes could also encourage parents to turn the television off and teach their children a range of activities, as well as providing toy libraries. Just how many of the recommendations will be accepted and acted upon remains to be seen.
Games

We’re always interested in finding new, innovative ways of engaging children in their mathematics and talking about their learning. How do you do that? For almost a year now, ‘Maxwell Maths Ted’ has been part of the NCETM team, visiting schools and encouraging pupils with their mathematics. Maxwell travels fairly lightly: with his big book in which teachers and children record his visit to their class, and his little suitcase for anything else he collects whilst on his travels.

Maxwell started his journey at West Park School in Derby last year, where he was officially named Maxwell, and was treated to an outing to Skegness. After staying to celebrate his birthday in Derby, he moved on to Priory Junior School. Here he joined in with the making of granola bars, a perfect activity not only for applying his mathematics, but also to help him on his next journey!

Maxwell has spent his summer holidays relaxing in Surrey, writing a holiday project on the new Hindhead Tunnel! This autumn, Maxwell is hoping to visit more schools, moving further into Surrey and then into Hampshire. He will continue on his way through the South East during the spring term, before heading to London to witness the Olympics… busy, busy, busy!

If you are based in the South East and would like to entertain Maxwell Maths Ted, encourage your pupils to share their mathematics with him and help him on his journey, then do contact him c/o Fiona Allan.

Why not entertain Maxwell as part of a larger teddy bear-themed maths project? There is a whole host of themed games and resources available online, including Teddy Town and Teddy Bear Line-up from NRICH, or Teddy Turns hosted by TES Connect. We would love to hear your stories of ways in which you bring maths alive - please do contact us.
Case Study

Developing a network of Early Years practitioners specialising in cognitive mathematics

A teacher at Highgate Primary School in London initially set out to support Early Years Foundation Stage staff in her own school, developing their confidence in delivering open-ended, investigative mathematics lessons alongside a wider range of assessment strategies. The success of this NCETM funded project, Developing a network of Early Years practitioners specialising in cognitive mathematics, led to wider support for all year groups in Key Stages 1 and 2 and expanded to include three other very different schools. They went on to create a highly supportive, reflective network where colleagues continue to share ideas, suggestions and improvements.

The CAME (Cognitive Acceleration in Mathematics Education) investigative approach to learning formed the main structure for their work. Teachers used new strategies and skills to team teach lessons together, providing feedback and suggestions for further improvement. Pupils benefited both academically and socially, taking the lead more frequently during teaching sessions and allowing the teacher to take an observer role.

Read the project's final report, find out the highs and lows of the project, as well as advice for anyone else considering working in a similar way in their school.
The Early Years CPD Modules were added to the portal in April this year.

Having reflected on your own experience of mathematics in the introductory module, you could choose to work through either the Number or the Counting module. Last month, we gave you an outline of the Counting module, so this month we look a little more closely at the Number module.

All the modules follow the same format, so the first thing you will see are the sections telling you what you will do in the module and the progress you will have made by the time you have completed it.

**Number**

In this module you will:

- learn more about the development of young children’s early number skills
- identify when children are learning securely through effective assessment
- learn more about the mathematics involved in early number skills and where this can underpin future mathematical knowledge and understanding
- plan effective learning experiences to ensure the secure development of these skills.

At the end of this module you will:

- have a better knowledge and understanding of both the importance of early number skills in mathematical development and a sense of how they underpin future mathematical competence
- have a greater depth of mathematical subject knowledge
- be better placed to support and guide the development of number skills through effective, problem-based activities
- assess progression more accurately.

The useful readers listed in Module 1, Counting, as are just as relevant for Module 2, Number. If you can, try to read (or dip into) at least two of the books. Comparing what the authors say about a particular topic will often help to clarify your thinking, though at times it may also show you both sides of an argument. Larger bookshops will carry several, if not all, of the books and are usually happy for you to browse. If your local bookshop has a coffee shop too, you could be there for some time! Online book retailers sometimes allow you to look inside a book too, giving you several sample pages to read, to help you to decide which books appeal to you.

As the writer of the Mathemapedia entry, What’s in a number? explains, children need to experience the nominal, cardinal and ordinal aspects of number. As you work through the Number module, you will find out about these different aspects of number and much more. Other areas covered include developing number sense, equivalence, inequality, subitizing, estimation, numbers without limit and mark-making. Remember to click on the + boxes to reveal text and click on them again to collapse the text, so that you can focus on the activities and your reflections. If a particular area intrigues you, try one of the Digging Deeper readings to find out more.

Most of the questions within the module will trigger some kind of reflection and it is useful to clarify your thinking through discussion with others. If that is not possible within your setting, then you might like to use the Early Years Forum to enable you to discuss the key ideas. Just click the red New Topic.
button and type in your question or comments. If you select Notify me of new posts on the introductory page to the forum, you will receive an email whenever a reply is received.