



National Education Week

'Success for Every Learner'

Showcase

Friday 4th March, 2016



We invite all parents and friends of Provo Primary School to join us for our fantastic Education Week Showcases!

Each class has a variety of activity stations set up for you to engage in.

EYFS - Toddlers - Kindergarten @ 8:30 - 9:30 AM

Learn more about how STEM (Science, Technology, Engineering and Mathematics) learning is incorporated into our Early Years Curriculum.



KS1/2 1 - 6 @ 2:15 - 2:50 PM

Explore how children learn through Topic-based learning, taking them on adventures back in time and around the world!

During our showcases, we encourage you to visit different classrooms around the school and not just the one that your child is currently in. We feel this will allow you to gain a greater sense of how our hands-on approach to STEM and Topic-based learning develops and enhances children's skills as they progress through the school.



The children are all very much looking forward to sharing and explaining their learning with you!



Introduction:

At Provo Primary we endeavour to provide a rich, imaginative and inspiring curriculum that will open doors to allow every child to reach their potential. We believe that the best practice in education allows for plenty of meaningful play and investigation, and this kind of learning early in life builds skills and interests that serve children throughout their school years, and later in life. We feel that as part of our balanced curriculum, both our STEM and Topic-based learning approach offer the potential for 'Success for Every Learner'. We look forward to demonstrating and sharing this with you at our Showcases.

EYFS: Tod - K @ 8:30 - 9:30 AM



What is STEM?

More and more, the acronym 'STEM' is becoming a 'buzz' word in the world of education. You may have seen it written on packaging on toys you have bought for your child or quoted in advertisements. STEM stands for Science, Technology, Engineering and Maths education (and sometimes STEAM - including the Arts).

Tell me more about the subjects that make up STEM...

Science is a way of thinking. Through experiments children learn basic science skills like observing what is happening, communicating what they notice and repeating the action to compare results.

Technology includes any tool that helps make a task easier. Different types of technology go far beyond computers and smart phones! In the Early Years, Technology refers to using tools to develop fine and gross motor skills. Tools can help develop eye-hand coordination and strengthen their hand and finger muscles.

Engineering is all about practical problem solving with innovation and construction. Playing with building materials develops Maths and Science skills, helping children learn about gravity, balance, shapes and problem solving.

Mathematics is at the heart of Science, Technology and Engineering. Through play with blocks, colours and shapes children begin to learn many concepts, such as counting, patterning, comparing and classifying. Many elements of STEM learning also go on to be incorporated into the subject Design and Technology taught in Years 1-6.

So why is STEM such a ‘buzz’ word?

Today’s students are tomorrow’s leaders. Occupations in STEM-related careers are some of the fastest growing of the 21st century, and they often have the greatest potential for job growth. Nations around the world are recognising this and thus there is an increasing level of importance being given to these subjects in schools. Building a solid STEM foundation through a well-rounded curriculum is the best way to ensure that children are exposed to Maths, Science, and Technology throughout their educational career. Children are extremely curious and impressionable, so instilling an interest at an early age could spark a lasting desire to pursue a career in any of these fields.

So is STEM something totally new to Provo Primary?

More than simply teaching these subjects in isolation, STEM education is about integrating knowledge across the subjects, encouraging children to think in a more connected cross-curricular and holistic way. STEM taps into children’s natural and innate curiosity about the living world, encouraging them to ask questions about the real world around them and to be active participants in their own learning. It is driven by problem-solving, discovery and exploratory learning, with children actively engaged in a situation in order to find its solution.

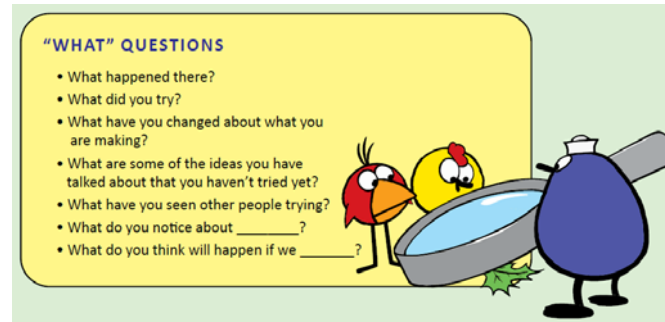
In a nutshell, STEM promotes the hands-on, topic-based, real-life learning that we feel has always been very much at the heart of teaching and learning here at Provo Primary – especially in our Early Years. However, with continuous advances in technology, and as educational and brain research tells us more about how children learn best, we continue to develop and enhance our programme to offer the best it can for all of our children.

How can I help support STEM learning at home?

Young children are innately curious and eager to explore their environments and learn about a wide variety of causes and effects. Simply providing and allowing for opportunities for exploration is all it takes, inside and out, at home or in the community.

As you play alongside your child, observe what they are doing. Try not to jump in with suggestions on how to solve a problem when they arise, but instead ask very open-ended questions. Try focusing on “what” questions as much as possible and try to ask “why” questions as little as possible. Asking “why” questions often implies that there is a correct answer while “what” questions keeps the conversation going and lets you discover answers right

along with your children. “What” questions draw attention to what’s happening, what’s being noticed, or what you’re doing. When answers come easily to your children, their confidence grows, with them feeling as if they can answer as experts! Additionally, asking insightful “what” questions help children develop important observation and communication skills. “What do you think will happen if we _____?” is a great question for helping kids who are struggling with something they are making or with an experiment. This question requires that you observe what the students are working on and that you determine why it is not working.



In addition, rather than telling children how to fix a problem, you can ask them to focus on something that will lead them toward discovering the answer. By focusing their attention on the point of the problem, you will not only be helping children learn how to focus on details, but you will also lead them toward answering their own questions and solving their own problems - which is much more empowering than being told the answer!

Exploring STEM learning in our Early Years classes...

Our Early Years children experience and practise STEM activities every day. Come and discover a selection of example activities at our Showcase:

In Toddlers:

Science – What will you discover outdoors with your binoculars? Bring something back to the class to touch and feel.

Technology – Pour water in and out of a variety of plastic bottles.

Engineering – Can you make a tower with blocks? How high will it go before it topples over?

Mathematics – Interact with our number role play centres.



In Preschool:

Science – What will you discover outdoors with a magnifying glass? What textures can you find by rubbing with crayons?



Technology – What will happen if the tools are different sizes and shapes? Will they affect how you scoop and pour lentils, beans and rice?

Engineering – What can you make using recyclable boxes and tubes?

Maths – Can you match the shapes to the ones on a quilt?

In Junior Kindergarten:

Science – What will you discover when you add different liquids to baking soda? What will happen when we add water to different flours?

Technology – Use calculators to explore how a machine can work and play a little game of pick the number! Explore coloured cellophane and the torch in a darkened box.

Engineering – How far can you make a marble travel by adding structures ramps and pathways to the basic marble game.

Mathematics – What images can you create on squared paper? Measure how long your shoe is using large Lego blocks and log your answer on the chart.



In Kindergarten:

Science - What can you discover when you go outside in the sunshine with a bowl of water and a mirror? What happens when you mix baking soda, vinegar and a few drops of red and orange food colouring together in your very own volcano? What happens to an orange in a bowl of water? Can you make it float and then sink?

Technology - What is a Bee-bot? What is a Roamer? What do you have to do to make the Bee-bot and the Roamer move in different directions?

Engineering - What 3D shapes can you build with marshmallows and toothpicks? Can you build a dinosaur with 3D shapes?

Mathematics - What is number to you? Why are numbers important?



KS1/2: 1 - 6 @ 2:15-2:50 PM

What is Topic-based Learning?

At Provo Primary we strive for each child to develop a deep interest in, and love for, learning. Topic-based learning allows subjects to be combined in a cross-curricular way. You will be familiar with our topic maps that teachers create and share with you, showing how different subject areas will be explored and linked. These are a starting point for topic-based learning, although they are inevitably tweaked to embrace children's particular interests as the topic is explored more deeply.

Topic-based learning is not simply about learning and reciting facts. Through providing opportunities for interesting and enjoyable learning experience, knowledge and skills can be explored and learnt in a meaningful way. Different learning styles can be catered for, and a range of tasks provided to allow for a combination of group, paired and independent work. Opportunities for experiential learning through field trips are also very much a part of topic-based learning.

As children move through the school and different topics are explored, knowledge is accumulated, links in learning are made, skills become more sophisticated; independence and creativity increase. Children gain skills that enable them to learn to acquire knowledge and understanding and to apply them to different situations. We believe one of the most important skills is to help children learn 'how to learn'. It is the skill of being able to make the right response to situations and how to act when you are faced with situations for which you have not specifically been prepared.

Skills also assist learners in becoming more interested, focused and prepared for a challenge. Home projects, in particular, allow children to focus on areas of interest to them within a topic, and encourage them to practise and demonstrate their skills, alongside learning new ones. Opportunities for these and other work to be presented and celebrated take place within the classes, between classes and with families and friends at Showcases like this.

In Year 1 - The Carnival of Animals:

Come explore *The Carnival of Animals!* In Year 1, you will be able to read children's animal-filled journal entries, look at their Carnival of Animal information books, see their amazing papier mache animals and look around our class for more animal creations. Explore our word wall and our 100 chart, see our MindUP and Cool-off Corner, and ask a child to read a book from their levelled book bin. So much has been happening in Year 1 for you to explore!



In Year 2 - Traditional Tales



Year 2 will be presenting completed and ongoing work from our Spring term topics of *Traditional Tales*, *Chinese New Year* and *George and the Dragon*... so much learning and so much to share!

The tale of The Three Little Pigs... make sure you are on time to see the whole class perform this traditional children's story... wait for it... in Spanish!

Do you know the tale of The Elves and the Shoemaker? Our Design and Technology project this term focused on us designing and making our very own shoe... see if you can make the difficult choice of deciding which one you would like to wear!

Come and visit our Chinese New Year display area. Find out everything you need to know about this celebration, and maybe hear some of the songs we have made up and performed!

Finally, we have been using the school iPads in our computing lessons to make up our own traditional tale. See if you think they are better than the traditional stories you have heard before!



In Year 3 - Ancient Egypt:

Come and discover some of the wonders of *Ancient Egypt* uncovered by the Year 3 archeologists. Find and decipher what artefacts have been found and what they tell us about the past. Come read and write your own hieroglyphic message and find out what happened to you if you were to be mummified! Can you choose the heart that will balance the scales? What organ goes into which canopic jar? Visit us to find out!



In Year 4 - Explorers and Exploration:

Famous Explorers Story Books - Come and learn about two famous explorers from very different time periods - Marco Polo and Sir Francis Drake. See if you can match up famous discoveries with the famous explorers!

Where the Wild Things Are - We have been looking at adventure stories this half term. We have looked at 'Where the Wild things Are' by Maurice Sendak and delved into the endless possibilities of a child's imagination. Presenting our stories has been so fun, as well using the iPads to make some great posters.

Mufaro's Beautiful Daughter - Stories from different cultures have also featured in our Literacy - the explorers brought lots of tales and folklore back with them. The children have prepared a series of pieces of work to show you how they analyzed, adapted these to create their own stories. However, our stories have been taken apart; see if you can put them back together!

Everest Exploration - Compete in our IWB quiz on Edmund Hillary and Tenzing Norgay and journeys up Mount Everest.

In Year 5 - Space and Segregation:



Join Year 5 in the 1960's with our Space and Segregation topic. Do you think you know your planets? Take the space knowledge challenge and find out! Check out our Mars rovers or lunar probes or take part in a debate using MLK Junior's fantastic persuasive style; beware the year 5's have persuasive skills sorted! Let the children impress you with their own choice of who has made a difference to our world using their fantastic ICT multimedia skills! Or simply settle down to listen to some amazing diary recounts of Rosa Park's struggle.



In Year 6 - World War 2:

Join us in Year 6 as we take you back in time to the era of World War 2. Watch our incredible Prezi and Educreation presentations and prepare to be left informed as you learn about the Holocaust; life in concentration camps; female spies; the Blitz and many more important areas linked to this woeful time in history! Take part in a hot seating exercise and ask World War 2 leaders anything about their roles during this time period; be warned our students will be addressing your questions in character! Enjoy reading our historical fiction pieces in our quiet area and get creative making your very own gas mask!



Multimedia and E-Safety



In school this term, our Year 1 to 6 classes have been exploring the theme of Multimedia as part of their Computing curriculum. Throughout KS1 and 2, children have explored how we use technology purposefully to create, organise, store, manipulate and retrieve digital content; what devices and software we can use and combine to accomplish given goals and how we can present information. As you visit each classroom, you will see examples of some of the activities and work we have produced using cameras, apps and PC software, and how these are incorporated into our topic learning.

E-safety topics are explored each term as part of the Computing Curriculum. The children think about how we need to use technology safely, respectfully and responsibly; where to go for help and support and what information we should keep private. As part of their E-Safety learning, Year 6 have been exploring the topic of Cyberbullying. They have used multimedia to create cyberbullying storyboard scenarios. Come and find out how we skill our students on making good digital decisions, preparing them for a future use of social media. How can you help as a parent? What are the right things to do and say? What can you do today that will help your child avoid this pitfall of our digital world?