Snap Science review – Teach Primary

Teachers up and down the country have been waiting in anticipation for good resources that will aid them in the smooth implementation of the 2014 primary science curriculum, and help them carefully and effectively assess their pupils.

Well, ‘Snap Science’, from Collins, could be just the answer. This new, dynamic toolkit has been written by a team of curriculum experts and incorporates a range of useful elements. It is a whole-school scheme of work (accessible in both printed and online formats) that shows clear progression through all the new modules contained with the 2014 Programme of Study. It cleverly covers all aspects of planning, teaching and assessment, has clear links to the new ‘Working Scientifically’ criteria and helpfully includes a list of resources for each lesson. As a result, teachers can be secure in the knowledge that their pupils have access to an effective curriculum that will help them systematically build their skills and understanding.

Snap Science differs greatly from many schemes of work that I have encountered in the past in the way in which it can be utilised. Rather than being a strict framework it has built in flexibility, enabling teachers to use their professional judgement and adapt it to suit their own classes and schools. By accessing the online toolkit via the Collins Connect platform, teachers are able to download all the lesson sequences, lesson plans and related resources. The treasure trove of online videos, animations and interactive activities really help to engage pupils and bring the scientific concepts to life. Each lesson comes complete with its own resource sheets that are differentiated into three levels to enable all pupils to access the lessons effectively. This differentiation can also been seen through the ‘Enquire’ section of the main lesson plan. As a result of this, every child should have the ability to succeed within the lesson and gain a good grasp of the related learning intention.

What I have found particularly refreshing about Snap Science is the way in which it strives to approach school science in an authentic manner. Jane Turner, the series editor, states that the questions posed throughout the toolkit are reality-based and not contrived, which is something with which I would agree. By basing the modules around questions that children want to find out the answers to (such as ‘What do flowers have in common’ – Lesson 8 of the Year 3 Plants Module) it makes the work meaningful and real for learners and instantly engages them. They are able to make links to their own experiences and discuss their ideas with their peers. Each lesson has a clear learning intention and success criteria that are written in child-speak to exemplify what is required for them to be successful in the lesson. This is very powerful and will motivate even the most reluctant scientific learner.

What makes Snap Science stand out for me is how it incorporates ongoing teacher assessment into the whole toolkit. Gone are the days of having a series of lessons with an assessment at the end. Snap Science incorporates Assessment for Learning within every lesson so that the teacher can gain a good, thorough, awareness of how his or her pupils are progressing. Each lesson encourages a lot of talking through the concepts and this really does empower the children to take an active role in their own learning, rather than just passively filling in worksheets.

The science of success
Well considered and effectively presented, these resources are an absolute must for the new curriculum.
Snap Science: Teaching framework year 3

Nicola Beverley, Naomi Hiscock, Liz Lawrence and James De Winter (series editor: Jane Turner)
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Complete and detailed sequences of lessons to support your children to 'Work scientifically'

Changes in the English National Curriculum provide many opportunities and challenges. There is the opportunity to widen primary science beyond the fair test and beyond the classroom (using naming plants as the excuse to get outside!). The challenge of any change is always finding the time to consider what you will keep and what you will adapt. It is here that publishers are keen to support us with a wide array of publications designed to support implementation of the new curriculum. This is one such publication.

The new Collins Snap Science programme describes itself as a 'dynamic toolkit'. This means that there are a number of parts, many of which can be adapted online to suit your class. There is a paper book called a Teaching framework for each year group, containing sequenced lesson plans. There is also a subscription-based online resource kit on the Collins Connect platform, which contains the lesson plans in editable 'drag-and-drop' format, so that the activities can be selected and used in your preferred order. There is online supporting material for the lessons in the form of images, videos, animations and slideshows. Online assessment and tracking are also mentioned but at the time of writing this was still under construction, so this review can only make comment on the Teaching framework book.

The publisher states that the scheme is written by a team of curriculum experts, and the list of names does bode well, including advanced skills teachers (ASTs), consultants and 'big names' in primary science, all of whom started in the classroom. It is not surprising then that there are great principles stated at the start of this year 3 book: progression leading to big ideas in science; developing understanding through working scientifically; active involvement of children in their own learning; and the prominence of assessment for learning (Afl) strategies. These high aims are embedded in the lessons; for example, each has a clear focus and, in support of Afl, learning intentions are exemplified by 'I can' success criteria to support the teacher and children.

Each module begins with some background science for the teacher and common misconceptions to look out for. The lesson plans are clear, with all the usual sections for resources of vocabulary and so on. I particularly like the way every lesson is based around a question and starts with 'Explore activities', designed to catch attention, place the science in context, stimulate children's questions and provide an opportunity for the teacher to find out what the children already know about the topic. The main 'Enquire challenge' is described in three levels of differentiated challenge and provides opportunities for practical exploration, data collection and analysis. For example, exploring leaves leads onto comparing, sorting and classifying leaves. When comparing rocks, challenge 1 gives clear instructions to test absorbency, challenge 2 asks children to time how long it takes for water to be absorbed, and challenge 3 gives children the opportunity to design and carry out their own investigation into the permeability of rocks.

Self- and peer-assessment is highlighted in many of the plenary sections, reinforcing the principle of supporting the children to be active in their own learning. The sequences of lessons include 'core' lessons that are needed to cover all the objectives from the new English programme of study, and 'enrichment' lessons that provide extra breadth and depth.

The lessons do contain many references to the supporting online materials, so it may be a little frustrating to only have the book, although the lesson plans are complete if you are willing to spend a little time finding images and so on. The Snap Science toolkit represents a significant financial commitment; thus it is likely the decision over whether to purchase it will need to be made at a whole-school level.

While many of the activities are not new ideas (which is quite comforting too!), the clear, complete and principled way this resource is presented brings enquiry, context and children's questions to the fore so that we can be confident we are supporting children to be active in their learning.

Sarah Earle
Senior Lecturer, Bath Spa University