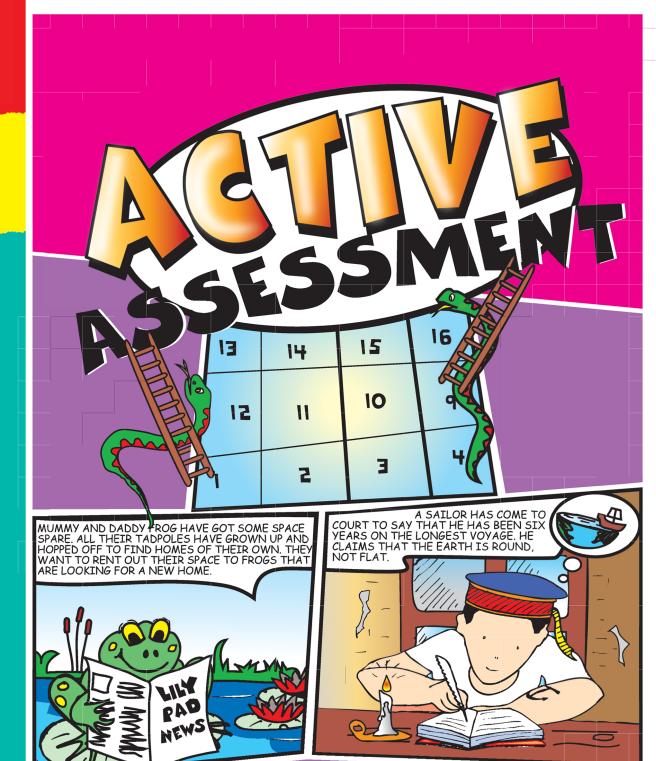
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- From the creators of concept cartoons
- Suitable for Primary and Secondary Schools



A David Fulton Book



Thinking Learning and Assessment in Science

STUART NAYLOR AND BRENDA KEOGH WITH ANNE GOLDSWORTHY



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STUART WAYLOR AND BRENDA KEOGH WITH ANNE GOLDSWORTHY





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Our illustrator, Ged Mitchell, provides the visual resource to accompany the text. As well as filling our walls with his paintings it is a pleasure to fill our books with his images.

Our chief magician and graphic designer, Kathryn Stawpert, has the enviable skill of bringing a page of text to life and extending our ideas of what is possible to do with a book. This book would be much less engaging without her creative influence.

The CD to accompany the book has been developed by Angel Solutions. With their extensive experience of working with educational organizations and understanding of educational issues, they were the ideal partner for translating parts of the publication into electronic form.

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www.greenstreetsoftware.com

Supplementary Resources Disclaimer

Additional resources were previously made available for this title on CD. However, as CD has become a less accessible format, all resources have been moved to a more convenient online download option.

You can find these resources available here: www.routledge.com/9781138420366

Please note: Where this title mentions the associated disc, please use the downloadable resources instead.

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Introduction

Active assessment in

science

Part of a teacher's job is to assess pupils. It's included in the job description. However, even if assessment were not a requirement, good teachers would continue to assess pupils. They know that assessment informs them about what pupils have learnt, indicates what pupils may be finding difficult and helps them to

and helps them to adjust their teaching to maximise pupils' learning.

This book is about active assessment in science in primary and secondary

schools. It is about how thinking, learning and assessment can be linked together in a creative and integrated fashion, so that thinking promotes learning, learning enables assessment to take place and assessment acts as a stimulus to both thinking and learning. That may sound ambitious, but we believe that good teachers already do this. This book draws on this good practice to provide real guidance on how to go about it.

Building on research

This book builds on recent research and guidance on assessment,

especially that
produced by Black and
Wiliam (1998), the
Assessment Reform
Group (1999) and Black
et al. (2002). These
publications have been
highly influential in
raising the profile of

assessment and in offering guidance on how assessment can be made more effective. The principles that they put forward underpin our writing. We have

Thinking, learning and assessment can be linked together in a creative and integrated fashion.

assessment acts as a stimulus to both thinking and learning.

translated these principles into practical strategies that can be used in the classroom during science lessons.

Assessment and learning: research into practice

Most of the book is therefore taken up with descriptions of practical strategies for assessment and learning in science. Each strategy is described in terms of:

- what it is
- how teachers can use it
- how it can help with assessment
- how it can help with learning

We have also provided illustrations of what these strategies might look like in the classroom, set in the context of different areas of science. A matrix in Part 3 provides an overview of the

strategies and the contexts in which they are set. For each strategy there are two illustrations. The first illustration is likely to be suitable for younger learners while the second illustration is for older learners. These illustrations are also provided separately on the accompanying CD ROM. The CD also provides additional resources and allows you to use a data projector to share the activity with the whole class and to interact with the text using the normal interactive white board facilities (such as highlighting).

If you are intending to improve your understanding and practice in assessment in science and would welcome guidance on how to make it more creative and more effective, then this is the book for you.

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