

Embedding English and Maths

SAMPLE

You might also like the following FE books from Critical Publishing

The A-Z Guide to Working in Further Education

Jonathan Gravells and Susan Wallace

978-1-909330-85-6

Becoming an Outstanding Personal Tutor

Andy Stork and Ben Walker

978-1-910391-05-1

A Complete Guide to the Level 4 Certificate in Education and Training Second edition

Lynn Machin, Duncan Hindmarch, Sandra Murray and Tina Richardson

978-1-910391-09-9

A Complete Guide to the Level 5 Diploma in Education and Training

Lynn Machin, Duncan Hindmarch, Sandra Murray and Tina Richardson

978-1-909682-53-5

Teaching and Supporting Adult Learners

Jackie Scruton and Belinda Ferguson

978-1-909682-13-9

Teaching in Further Education: The inside story

Susan Wallace

978-1-909682-73-3

Understanding the Further Education Sector: A critical guide to policies and practices

Susan Wallace

978-1-909330-21-4

Most of our titles are also available in a range of electronic formats. To order please go to our website www.criticalpublishing.com or contact our distributor, NBN International, 10 Thornbury Road, Plymouth PL6 7PP, telephone 01752 202301 or email orders@nbninternational.com.

Embedding English and Maths

Practical Strategies for FE and Post-16 Tutors

TERRY SHARROCK

**FURTHER
EDUCATION**

First published in 2016 by Critical Publishing Ltd

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, unless clearly stated at the bottom of the page, without prior permission in writing from the publisher. Where indicated at the bottom of the page material can be photocopied free of charge.

The author has made every effort to ensure the accuracy of information contained in this publication, but assumes no responsibility for any errors, inaccuracies, inconsistencies and omissions. Likewise every effort has been made to contact copyright holders. If any copyright material has been reproduced unwittingly and without permission the Publisher will gladly receive information enabling them to rectify any error or omission in subsequent editions.

Copyright © 2016 Terry Sharrock

British Library Cataloguing in Publication Data

A CIP record for this book is available from the British Library

ISBN: 978-1-910391-70-9

This book is also available in the following e-book formats:

MOBI ISBN: 978-1-910391-71-6

EPUB ISBN: 978-1-910391-72-3

Adobe e-book ISBN: 978-1-910391-73-0

The right of Terry Sharrock to be identified as the Author of this work has been asserted by her in accordance with the Copyright, Design and Patents Act 1988.

Cover and text design by Out of House Limited

Project Management by Out of House Publishing

Printed and bound in Great Britain by

Critical Publishing
152 Chester Road
Northwich
CW8 4AL
www.criticalpublishing.com



Contents

Meet the author	vii
-----------------	-----

Introduction

PART 1: The importance of embedding English and maths in your lessons

Chapter 1 What does embedding English and maths skills mean?	7
Chapter 2 What are the barriers to learning and how can they be overcome?	18
Chapter 3 How we learn and remember	32
Chapter 4 Case studies in embedding English and maths	40

PART 2: Practical activities

Introduction to the activities	50
» Notes for Activity 1: Age and house number	52
» Notes for Activity 2: It's all about attitude!	54
» Notes for Activity 3: Cups and coins	56
» Notes for Activity 4: Tell a story about a chart	58
» Notes for Activity 5: Mind reading with maths	60
» Notes for Activity 6: Bedroom makeover	62
» Notes for Activity 7: Discrimination legislation questions	64
» Notes for Activity 8: Converting units of measurement	66
» Notes for Activity 9: Finding faults	68
» Notes for Activity 10: Maths quiz	70
» Notes for Activity 11: A-Z activity	72
» Notes for Activity 12: Spelling test	74
» Notes for Activity 13: Apostrophes	76
» Notes for Activity 14: Prefix, suffix and root words	78
» Notes for Activity 15: Speaking and listening scenarios	80

» Notes for Activity 16: Fact and opinion	82
» Notes for Activity 17: Answering a customer complaint	84
» Notes for Activity 18: Creating a leaflet	86
» Notes for Activity 19: Presenting an argument	88
» Notes for Activity 20: Providing good customer service	90
Appendix 1: Features of an outstanding learning experience	93
Appendix 2: Spelling log	94
Appendix 3: Assessing writing skills	95
Appendix 4: Self-assessment sheet for maths problems	96
Answers	98

Meet the author

Terry Sharrock

A qualified teacher and Ofsted inspector, Terry has worked in education for 30 years, both in this country and the United States of America. He has taught literacy and numeracy in schools, colleges and adult and community learning for over 25 years.

Terry was a coach and cohort leader on the National Teaching and Learning Change Programme, designed to improve the teaching of literacy and numeracy in a number of contexts.

He runs his own successful educational consultancy and regularly carries out observations of teaching and learning for a range of providers. Many of the ideas in this book for embedding English and maths skills have been developed from observations of outstanding teaching and learning sessions. He also carries out staff training on embedding maths and English.



Introduction

About this book

This book is written as a result of many years observing learning in a number of contexts, including college classrooms, adult evening classes and work-based learning. It has been written to help tutors to engage and interest learners in the development of their English and maths skills.

It's well documented that young adults in England do not do well in developing their English and maths skills. They regularly appear in the 'relegation zone' of any league tables of English and maths skills.

“Out of 24 nations, young adults in England (aged 16–24) rank 22nd for literacy and 21st for numeracy. England is behind Estonia, Australia, Poland and Slovakia in both areas.”

OECD findings reported in the Guardian, 8 October, 2013

While you may argue about the way in which these statistics are arrived at, there is little argument that we need to improve the way English and maths are taught throughout our education system. This book is here to help. Its main aim is to help you as teachers in the further education and skills sector improve the way you develop maths and English skills in your learners. As a teacher in the further education and skills sector, particularly if you are a vocational teacher, you will be under increasing pressure to embed (and this is the word most commonly used) English and maths skills in your lessons. You may have come into teaching to pass on your skills and experience in plumbing or hairdressing but you are now being asked to help develop English and maths skills in learners who quite often have had negative experiences in school and have chosen your subject precisely because they were not successful in the academic subjects of maths and English. This is on top of the numerous other demands on your time, from revised curricula through promoting equality and diversity to achieving outstanding teaching, learning and assessment. And all this with decreasing resources of time and money. The challenge is clear. How can you help learners develop English and maths skills and overcome the negativity they may feel returning to study these subjects? How can you promote an interest in English and maths skills when you may lack confidence in your own skills?

How to use this book

If you are looking for ideas to develop English and maths skills in your teaching, you could go straight to the ideas in the second half of the book and use these directly. However, it will be more effective to take the time to read the first part of the book and think about your current teaching and how successful you are in helping learners to really understand, develop and apply their English and maths skills.

Most tutors are hardworking, committed teachers striving to do the best for their learners in very challenging circumstances. If you have bought this book you are probably one of those. Tutors are asked to develop English and maths skills and are often not given clear guidance on how to do this most effectively. People do not try to do a bad job, but they are often confused about what their role is in helping to embed and develop English and maths skills. In addition they may lack ideas about how they can do it most effectively. The ideas in this book come from many years of observing lessons and from developing well-regarded training sessions for tutors. Lessons can inspire and motivate learners or they can stultify and frustrate learners. The ideas presented in this book work. It is common for lesson plans to state that they will embed and develop English and maths skills, but this is often not translated into action. Some lesson planning only serves to pay lip service or complete a ‘tick box’ to satisfy the perceived need of some external body such as an inspection agency or observer from a management team. This tick-box exercise is of little benefit to anybody.

This book talks about what is really meant by embedding English and maths skills and how it relates to development of skills. It also suggests some ideas you may use in your teaching and learning in tried and tested ways that will engage and motivate your learners.

The structure of this book

Part 1

Chapter 1 What does embedding English and maths skills mean?

The first chapter in the book discusses the meaning of ‘embedding’ and how it relates to skills development. It considers what makes for outstanding embedding of English and maths skills and gives examples of learners’ writing to highlight the issue of addressing lack of achievement at school. It discusses issues of marking written work and looks at the most effective ways of giving feedback to learners and setting targets that lead to real development of English and maths skills. There is a discussion of how to record the progress of learners in the development of skills, so that improvements are clear to see. It suggests how best to assess written work so that learners are motivated to improve. There is a discussion of how to deal with different forms of learners’ writing, including the use of ‘text speak’. It concludes with a look at why developing English and maths skills is so important.

Chapter 2 What are the barriers to learning and how can they be overcome?

This chapter discusses why many learners are reluctant to engage in learning English and maths. It explores some of the most common barriers to learning, such as lack of confidence and a negative history of English and maths skills development in previous education.

It draws on research into learners' attitudes towards English and maths and relates these findings to learner behaviour, engagement and motivation. There is a discussion based on recent research which highlights negative attitudes among learners, particularly towards maths, and suggests practical strategies to overcome these, including how to show learners that everybody can 'do' maths. It discusses organisational approaches to developing English and maths skills and considers the merits of different methods, giving examples of the most effective methods of embedding and developing English and maths across the organisation. This chapter also considers research findings looking at the kinds of English and maths skills employers are looking for and relating this to the English and maths skills that learners need to develop.

Finally the chapter looks at the requirements of the revised Common Inspection Framework (September 2015) and its implications for post-16 providers. There is discussion of what Ofsted inspectors and post-16 quality managers are looking for when making judgements on the effectiveness of embedding and developing English and maths skills and what makes for outstanding provision.

Chapter 3 How we learn and remember

This chapter looks at one particularly effective approach to the question of how learners understand and remember concepts in English and maths, such as mathematical terms and spellings. It gives examples of using this method to remember people's names and extends this to ways to remember key concepts in maths as well as using it as one method to remember spellings. It discusses the concepts of a 'learning' classroom and a 'teaching' classroom and examines the difference, to explain, for example, why learners often have difficulties in recalling content that has been taught. It outlines a strategy for learning which encourages learners to make connections in order to understand, remember and apply key concepts. It gives examples of the use of learning logs to monitor progress and concludes with a discussion of other methods to improve spellings.

Chapter 4 Case studies in embedding English and maths

This chapter focuses on four case studies of teaching sessions that were judged and agreed by both an internal manager and an external practising inspector. The case studies cover the range of learning, with judgements from 'Inadequate', 'Requires Improvement' and 'Good', through to 'Outstanding'. Each case study includes a commentary on the session and an opportunity to reflect on what makes it effective and how it could be improved.

PART 2

Practical activities

The second part of the book is a collection of 20 practical activities for you to use to embed and develop English and maths skills in your lessons. There are ten activities to help embed maths skills, followed by ten activities focused on English skills. The left-hand page provides a set of guidance notes for you, the tutor. The notes include: suggestions on how and why you might use the idea; an explanation of how to carry out the activity; the key skills that might be developed and practised; specific employability skills that are developed; and possible extension activities. The right-hand pages feature the activity itself, describing it and, where necessary, providing clear instructions for the learner.

Free resources

All the student activities may be photocopied free of charge and they are also available as free downloads from the publisher's website: www.criticalpublishing.com.

Reference

Ramesh, R (2013) 'England's young people near bottom of global league table for basic skills', *Guardian*, 8 October. Available at: www.theguardian.com/education/2013/oct/08/england-young-people-league-table-basic-skills-oecd (accessed 21 July 2015).

PART 2

Practical

activities

Sample

Introduction to the activities

This chapter outlines 20 practical activities – ten for maths and ten for English – that can be used with learners to develop their English and maths skills. Each activity is spread over two pages. The left-hand page includes notes for you, the tutor. The right-hand page is for use with your learners. All of these activities have been used successfully to develop skills in English and maths. They can be used as they are or adapted to suit the needs and contexts of different learners. The activities are divided into maths and English but each can be used more naturally to develop skills in both areas. For example, in discussing solutions to maths problems, learners are practising speaking and listening skills. Similarly, learners need to be skilled in reading and interpreting information in order to understand what is being asked of them in maths problems. For each activity the tutor's notes are divided into a number of clear sections, detailed below.

How to use this idea

This section suggests ways in which you might use the idea, as an individual, pair or group exercise, perhaps as a starter activity or to reinforce certain skills. It discusses the reasons for using the activity and some key principles that support the learning.

Understanding the activity

This section explains how to carry out the activity together with some ideas about the key themes.

Skills practice

This section highlights the specific skills that are developed in the exercise. You should make your learners aware of these.

Developing employability skills

Where relevant, this section suggests some of the employability skills that are developed through the activity. These are skills that learners need in future study or employment and might include, for example, team working, speaking and listening, and presenting a logical and coherent argument.

Extension activities

Where relevant, some ways in which the activity may be extended are suggested. These are only suggestions and you may be able to devise your own ways of extending the learning.

Answers

Where necessary, answers are provided. In some cases these appear in the tutor's notes, but in all cases they can be found in the 'Answers' section at the back of the book.

Key points to remember in using these activities

- » *Try not to use these activities in isolation. Where possible, link them to key learning in the lesson and ensure that learners do not see these activities as ‘separate’ from the lesson.*
- » *Adapt the learning activities to suit the needs of your learners. Use them as a basis to help learners develop skills but tailor them to the needs of your learners.*
- » *Ensure that learners understand why they are doing these activities and how the activity will help them practise or develop important skills.*
- » *Use these types of activity little and often. Developing English and maths skills has to become a habit in the learning process.*

Taking it further

The following are suggested websites which provide further resources to support the development of English and maths skills.

- » <http://toolkits.excellencegateway.org.uk/functional-skills-starter-kit/section-3-developing-effective-practice/section-3a-resources-support-effective-practice/teaching-and-learning-resources-english-mathematics-and-ict>
- » www.aelp.org.uk/news/general/details/new-english-and-maths-resources
- » www.bbc.co.uk/skillswise/English
- » www.bbc.co.uk/skillswise/math
- » www.growthmindsetmaths.com
- » www.mathseverywhere.org
- » www.nationalnumeracy.org.uk/national-numeracy-challenge
- » www.skillsworkshop.org/useful_links