



# FIRST STEPS

TO A PHYSICAL BASIS OF CONCENTRATION



many  
causal  
factors

language or  
'words' side

visual or  
'pictures' side

walking

crawling

sleeping

single  
caus

ROY ANDERSON

*First Steps*  
To A  
*Physical Basis Of Concentration*

*An Initial Strategy For Parents And Teachers  
Relating To Learning And Behaviour Problems*

**Roy Y. Anderson**



**Crown House Publishing Limited**

First published by

Crown House Publishing Ltd  
Crown Buildings, Bancyfelin, Carmarthen, Wales, SA33 5ND, UK  
**www.crownhouse.co.uk**

and

Crown House Publishing Ltd  
P. O. Box 2223, Williston, VT 05495-2223, USA  
**www.CHPUS.com**

**www.crownhouse.co.uk**

© Roy Y. Anderson 1999

The right of Roy Y. Anderson to be identified as the author of this work has been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

First published 1999; reprinted 2003.

All rights reserved. Except as permitted under current legislation no part of this work may be photocopied, stored in a retrieval system, published, performed in public, adapted, broadcast, transmitted, recorded or reproduced in any form or by any means, without the prior permission of the copyright owners.

Enquiries should be addressed to  
Crown House Publishing Limited.

**British Library Cataloguing-in-Publication Data**

A catalogue entry for this book is available  
from the British Library.

**ISBN 1899836349**

**LCCN 2003102127**

Printed and bound in the UK by  
*Bell & Bain, Glasgow*

## *Table Of Contents*

	<i>Page</i>
<b>List Of Figures</b>	iii
<b>Acknowledgments</b>	v
<b>Introduction</b>	vii
<b>Chapter 1</b>	The Problem Of Tiny Switch-Offs 1
<b>Chapter 2</b>	Walking And Crawling 9
<b>Chapter 3</b>	The Sleeping Work – 1. Introduction 19
<b>Chapter 4</b>	The Sleeping Work – 2. Making A Start 27
<b>Chapter 5</b>	Rhythm And Rest Pauses 35
<b>Chapter 6</b>	Gaining Hemispheric Dominance 47
<b>Chapter 7</b>	Working On Sidedness For Dominance 51
<b>Chapter 8</b>	Primary And Secondary Factors 59
<b>Chapter 9</b>	Variable Spelling; Dominance And Dyslexia 65
<b>Chapter 10</b>	Reducing Variability 69
<b>Chapter 11</b>	The Underlying Reflexes – A Safety Net 75
<b>Chapter 12</b>	Implications And Applications 79
<b>Chapter 13</b>	An Initial Strategy For Parents And Teachers 91
<b>Chapter 14</b>	Conclusion 99
<b>Appendix 1</b>	Attention Deficit Disorder (ADD) 103
<b>Appendix 2</b>	Voluntary /Involuntary Aspects Of Switch-Offs 105
<b>Appendix 3</b>	Right Hemisphere Before Left 107
<b>Appendix 4</b>	Behaviour Difficulties 109
<b>Appendix 5</b>	Marking The Variable Spelling Test 113
<b>Appendix 6</b>	Results Of Reflexes 117
<b>Addresses For Help With Reflexes</b>	119
<b>References</b>	125
<b>Bibliography</b>	127
<b>Glossary</b>	133
<b>Index</b>	139

## *List Of Figures*

<b>Figure 1</b>	<i>Path Showing the Brain's Suggested General Development of Concentration and Its Daily Usage</i>	5
<b>Figure 2</b>	<i>The Test Walk</i>	12
<b>Figure 3</b>	<i>The Training Walk</i>	12
<b>Figure 4</b>	<i>The Sitting-Crawl</i>	14
<b>Figure 5</b>	<i>Crawling Forward</i>	15
<b>Figure 6</b>	<i>Crawling on the Spot</i>	15
<b>Figures 7 – 12</b>	<i>The Sleeping-Turn</i>	28 – 30
<b>Figure 13</b>	<i>The Army Wriggle</i>	42
<b>Figure 14</b>	<i>The Frog Wriggle: Before Step</i>	43
<b>Figure 15</b>	<i>The Frog Wriggle: After Step</i>	43
<b>Figure 16</b>	<i>Many Factors but One Factor</i>	61

## *Introduction*

'I can work with him now,' said the class teacher of BB (7yrs 6m) whose tasks for less than a week had included tackling weaknesses in walking and crawling. As a withdrawal teacher, it was my first use of this approach and I came to expect that frustration with a child's poor concentration could be virtually removed. This project is concerned with correcting, at least partly, a delay in early motor development because practice backed up by theory suggests it affects concentration.

The rationale includes sleeping in the recovery position. It should be said immediately, however, that an infant in their first year should not be put to sleep in the recovery position, because the reflex is not there during most of the year to support turning from that position on one side to the same on the other side while asleep. So one can accept current practice for the youngest infants to sleep on their backs, but I have yet to hear anyone suggest when their sleeping position might be improved. The recovery position seems logical from the second year of age onwards. Perhaps the 'terrible twos' need not be so terrible if the toddler is well rested at night.

My total experience was like a 'dumbbell' in that I was free to incorporate this work with specific learning difficulty children both initially and after retirement. In between, though, efforts were fragmentary when the need for 'concentration', in the popular sense, was great.

In another sense 'concentration', viewed symbolically, flows up and down the brain-stem, and becomes 'attention' on the language/relating side of the brain. The idea was that this concentration flows, primarily, via the creative/visual side of the brain. The illustrated path is followed part way (1) during tiny switch-offs, and all the way (2) in the daily routine of sleep/alertness/sleep and (3) in the ontological development of the child.

These momentary switch-offs are considered to play a large part in specific learning difficulties if poor concentration is a factor which it usually is; and its basis can be tackled separately from other work. Also, some parents who have felt unable to help their child

with education can easily help with these early motor development exercises, and have been glad to assist in this way.

This book has been kept short with a view to reducing the burden of reading: about six thousand words were removed in the final year of preparation. However, Peter Blythe who keeps saying that there is one point to be made in each book said that there was a lot in this book. I hope you will find it both interesting and useful. All good wishes.

# *Chapter Five*

## **Rhythm And Rest Pauses**

Work done in rhythm tends to channel the switch-off rest pauses between task-chunks which are, in consequence, not so frequently 'hit' by the switch-offs. Rhythmic work contrasts with work done in sudden rushes which tend to overload the brain and disrupt these sub-tasks.

Whereas adequate rest at night reduces the apparent need for rest pauses when learning, rhythm tends to organise them to cause less interference with tasks. Rest is mostly done at home while school employs rhythm.

### **The Early Development of Rhythm**

The Channel 4 television programme 'Equinox' (20-11-94) reported the startling benefits of exposing an unborn child to rhythm and music. Dr. Brent Logan of Oregon played variations of a synthesised heartbeat for a foetus, and Dr. Mikhail Lazarev of Moscow played a course of musical training. The booklet accompanying the programme, 'Brave New Babies: Learning Before Birth', gives further details.

A child's sense of rhythm develops early in life, and many rhythmical movements have been observed in the first year. Among the early progressions, the rhythm of walking might have the greatest impact, partly because so much of it is done. Early motor movement appears to be learnt primarily in the brain-stem, which has connections with the cerebellum, where the rhythm is almost certainly memorised. Later, in school, rhythm is seen to help the child in many ways.

## **Rhythm in Reading and Writing**

In the early stages of teaching, an adult may read part of the text with the child. (The length of section, and overlapping of reading **to**, **with** and **by** a child depend on the text difficulty – eventually he just reads **by** himself.) Helper and child co-operate in selecting phrase lengths to govern the rhythm of pausing. Reading together not only organises sentence breaks by meaning but also serves to keep the readers in unison, which teaches the child phrasing and, with it, rhythm. Thus, momentary switch-off rest pauses are more readily channelled between phrases.

In cursive handwriting, the word becomes the unit of rhythmic work, with switch-off rest pauses channelled between. Of course switch-offs do not occur between all words. Nevertheless, when one does happen it is more likely to be as the pen or pencil rises from the end of a word, which invites a momentary rest pause if the brain is ready for one.

## **Changes of Pace and Attention**

Obviously, it is important to work at a suitable pace. The rhythm of an activity normally slows when heightened awareness is required, such as while emerging from a new car in a tight garage. There might also be a momentary pause as, for example, before knocking on a VIP's door, giving instructions, or switching off the computer. Children with SpLD (specific learning difficulties), in particular, should be taught the need for appropriate changes of pace and attention.

On the other hand, an error, say in writing, should not be corrected with a rush to keep up the average speed, for it may encourage a switch-off. Instead, the child should accept that the error has caused a delay, and the correction should be made without much change of pace.

## **Cursive Writing Promotes Dominance**

At about the time that the junior child's handwriting becomes uniformly neat, there often occurs that sudden widespread progress probably indicating the gain of dominance. (For a few children, a particular ability or disability in handwriting means that its improvement does not come at the general surge.) Better cursive handwriting probably facilitates the normal development of dominance by channelling rest pauses. For this reason, the child is asked to produce very neat handwriting for a time until that sudden increase in all-round ability and ability to learn. Subsequently, he may revert to handwriting which simply responds to the needs of the moment. This style might often be near-cursive writing with the pen frequently flying over the paper without the suggestion of a switch-off.

If the child's style is being changed from print to cursive, he should be asked to practise newly taught letters in his creative writing. The child should not have to hold back until all letters have been taught before using them, because he should be putting into practice what he has learnt. Thus his writing is a temporary mixture of print and cursive, for which the teacher should prepare the parents. On the other hand, if cursive is taught from the beginner's class, a constant watch must be kept to avoid the awkward forming of letters becoming a habit and storing up a dreadful problem for a remedial group later on.

## **Early Motor Development Assists Blending**

Some children find particular difficulty in correctly combining the sounds of three-letter words of the kind you can sound out. A little work aimed at increasing the attention-stretch nearly always solves the problem. It seems that the child can switch off in the middle of a sub-task from the words side of the brain to the pictures side, and experience disorder; or he can switch back in again and forget something.

For example, he might sound out 'c...a...t ... (switch off) ... dog', making a reversal (more on this subject later) or a confusion. On the other hand, after saying 'c...a...t', he might switch off and

# *Chapter Eight*

## **Primary And Secondary Factors**

### **Factors Favouring Maintenance of Attention**

It was puzzling that the four children from a class of top infants who could not do a brisk cross-pattern walk satisfactorily were among the best readers. It seems that other favourable, more powerful factors probably influenced them, making it unnecessary to consider their poor marching.

A child whose verbal ability, motivation and emotional stability are strong is likely to maintain the focus of his attention in spite of inadequate rest, unsatisfactory cross-pattern movement, mixed sidedness and poor conditions of work. That is, if the primary factors are strong, it does not matter if the secondary factors are weak. A comparison might be made with sunlight and moonlight: if the sun is shining, it does not matter how much the moon is, or is not, shining.

Moonlight is not valued until the sun has gone down. Similarly, if a child has learning difficulties and his 'sunshine factors' are weak, his moonlight factors become important. Aiding the secondary factors of adequate rest, satisfactory cross-pattern rhythm, one-sidedness and suitable conditions allows learning to proceed slowly but surely.

### **Concentration – a Different Dimension**

With regard to dyslexic children, Pumphrey and Reason (1991) were not happy with single-factor theories, but the idea put here is a two-factor theory: we have teachable learning difficulties plus poor concentration due to an excessive number of tiny switch-offs. These are problems in different dimensions and the second can be alleviated on its own with notable results. This factor of poor concentration is itself caused by many factors.

If thought of as a flow, concentration involves transmission from one hemisphere to the other, i.e. 'horizontal' movement. Most educational studies deal with interaction between the relating hemisphere and something which might be related to, i.e. 'vertical' interaction. Usually investigations report what the child can do when he is presumed to be switched in; whereas the present study is about trying to keep it that way, by minimising the switch-offs which cause disruption.

Thus, any difficulty in learning could be resolved into horizontal and vertical components. The child may have lost the 'vertical' application to the task because he has largely switched off 'horizontally' to the other side of the brain. In spelling, for example, if the average variability remains over, say, 33%, one can attend to the horizontal component of concentration. The normal study of spelling is the vertical component.

In handwriting, each time a child switches off he may alter the slope and size of his letters, with many switch-offs bringing many variations. Letter formation may alter: a switch-off while writing 'baby' might result in forming each 'b' in a different way; and there may be a constant changing between alternative forms of 's'.

Learning to read the basic key words might be hindered by the vertical component of poor visual discrimination, but if the child shows extreme variability during matching exercises, the horizontal component of concentration warrants assistance. Later in reading, there may be a problem in his knowing where to pause between phrases, made worse by his switching off at inopportune moments.

## **The Horizontal Component of Concentration**

The horizontal component of concentration is particularly important before the child's dominance is formed and while his switching off is excessive. Switching off is one causal factor of learning difficulties, but has, itself, many causal factors, as can be seen in Figure 16.

# To what extent do specific learning difficulties and behavioural problems involve poor concentration?

## Is poor concentration a behavioural problem, or is it, in fact, a physical problem?

These questions and more are answered in this timely book.

*First Steps* identifies the traditionally ignored physical causes of inattention. Children's conduct and learning problems can be due to poor concentration, and this is frequently viewed as a behavioural problem. *First Steps* challenges this view, examining the specific effect of early motor neuron development on the ability to concentrate.

For all teachers and parents, this ground-breaking investigation will prove invaluable. Providing a programme of physical exercises that can effectively reduce inattention, this book targets areas such as sleep, walking and spelling, and forges links with topics such as autism, epilepsy, dyslexia, schizophrenia and chronic fatigue syndrome. A relevant, revelatory book, *First Steps* demonstrates how carrying out simple exercises for only a few minutes a day can greatly improve a child's concentration. Explaining in detail the causes of inattention, it offers key methods for preventing a child's concentration lapses.

- Includes a programme for working on a child's sleep and rest
- Reports extensive case study findings
- Provides vital strategies for parents and teachers



Twenty-eight years of varied experience has led Roy Anderson to the innovative and exciting conclusions put forward in this book. Following three years in an industrial laboratory, he taught secondary school children in a disadvantaged community and became involved in remedial teaching. This led to posts at a junior school, a Remedial Reading Centre, and a Reading and Language Service. In retirement, Roy has helped even more children with his weekly primary school visits. His methods continue to help children to overcome their learning difficulties.

  
Crown House Publishing Limited  
[www.crownhouse.co.uk](http://www.crownhouse.co.uk)

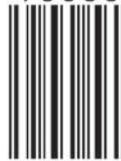
Education

Cover design by Tom Fitton

ISBN 189983634-9



9 0000



9 781899 836345