



VI. HANDWRITING: TEACHING THE FOUNDATION APPROACH



PREFACE

Handwriting serves writing.

Handwriting serves writing when students can produce legible handwriting fluently and with minimum conscious effort.

The fundamental purpose of handwriting instruction is to help students develop a legible, fluent handwriting style.

Statement of Principles Writing K-12

1. The Foundation Approach to teaching handwriting has two major components: Foundation Handwriting Movements and the NSW Foundation Handwriting Style. It recognises the importance of handwriting movements, and not letter shapes alone, in the successful development of handwriting skills.
2. The Foundation Approach, with its emphasis on handwriting movements, is intended to be a carefully taught intermediary between the natural scribbles and drawings of young children and the development of legible and fluent personal handwriting styles.
3. The Foundation Approach is the product of action research carried out in New South Wales involving the students, staffs and parents of some forty schools.

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SECTION A: BACKGROUND

1. Why handwrite?

- 1.1 Handwriting enables writers to capture thought on paper. It also provides a means whereby others can read the writers' thoughts, and so helps writers to share meaning. The mock letters invented by young writers and the scribbles of mature writers can fulfil their need to make meaning. However, in order to be able to share this meaning with readers, writers need to learn to use standard letter shapes.
- 1.2 Handwriting can give aesthetic and emotional pleasure. It can provide a sense of creating an artifact, in the same way as do the acts of carving, sculpturing or modelling.
- 1.3 Handwriting can produce the most personal of written messages by combining a handwriting style, a writing style and a message, all of which are personal.
- 1.4 Handwriting, by slowing down the writing process, can allow insights to occur; it can give the writer time to construct and reconstruct meaning from the writing.
- 1.5 Handwriting is a convenient, portable and accessible skill.
- 1.6 Handwriting enables writers to express, communicate and record thought, to discover understandings and develop personal insights, and to learn new information.

2. Processes underlying handwriting

- 2.1 The process of physically producing handwriting requires
 - **Visual recall:** the ability to form mental images of the shapings of symbols as well as their shapes. Remembering the appearance of the movement is important
 - **Kinaesthetic recall:** the ability to remember and reproduce the internal physical feeling used to produce the handwriting movements necessary to form symbols
 - **Visual recognition:** the ability to see the similarities and differences between the movements that produce the symbols, as well as between the symbols themselves.
 - **Kinaesthetic recognition:** the ability to feel the similarities and differences between the movements that produce the symbols and clusters of symbols
 - **Relating to space:** the ability to accurately relate oneself to the space of the writing surface and to properly relate symbols to each other on the writing surface.

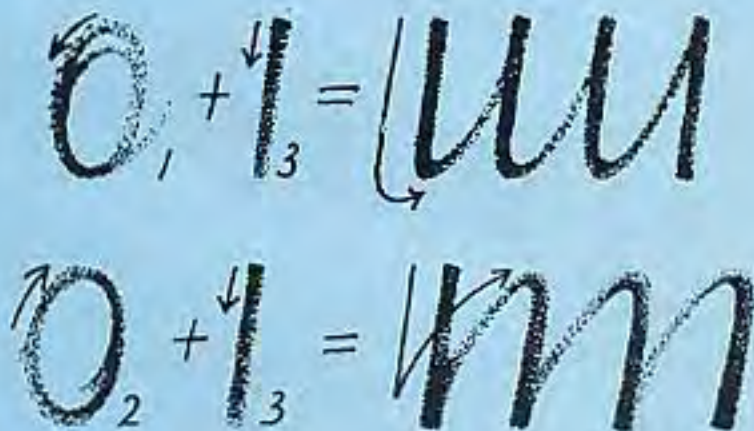
3. Definitions of terms

[The following definitions apply to these terms as used in relation to the Foundation Approach]

- 3.1 **Handwriting movements:** three movements that, when combined and repeated, form the basis of fluent, legible, automatic handwriting. They are



They can be combined in the following ways to form basic handwriting patterns:



- 3.2 **Manuscript handwriting:** unjoined letters of any style, but here, the letter shapes of the NSW Foundation Style.
- 3.3 **Cursive handwriting:** joined letters of whatever style. Not all letters need to be joined for the handwriting to be cursive. Joining manuscript letters to form cursive handwriting is a natural consequence of moving fluently from one letter to the next. The writing implement naturally glides on the page or above the page. Joining lines between letters occur naturally and where convenient.
- 3.4 **Style:** letter shapes of the NSW Foundation Style and the way they are formed.



Section C, pp.159-185, for details of the letter shapes

- 3.5 **Fluency:** the smooth, rhythmic movement of the tip of the writing implement. Fluency implies an easy, economical, left-to-right progression involving touch and non-touch; in other words, fluency is hindered by not joining any letters in any words as well as by trying to join all letters in all words. Fluency is maximised by joining where convenient.

3.6 **Legibility:** the ease with which readers can distinguish individual letters and groups of letters. The four major factors that contribute to legibility are familiarity, sameness, difference and balance.

- **Familiarity:** Personal scribbles might be legible to the writer but not to others. When writing for others writers need to use letters that are distinctive and familiar to other literate people.
- **Sameness:** This takes several forms that can all be related to three spaces and four lines:

UPPER SPACE	Line 1	
MIDDLE SPACE	Line 2	
LOWER SPACE	Line 3	THE BASE LINE
	Line 4	

- ★ Letters need to maintain the same size. A letter that spans one space should continue to span the same space and should be the same size as other similar letters; for example,

magnificent rather than mAlgNiflCeNt

- ★ Letters need to maintain the same proportion. A letter's width and height both need to be constant and need to be constant with other similar letters; for example,

humming rather than humming

- ★ Letters need to maintain the same shape. To make the task as easy as possible for the reader, the writer needs to use the same basic shape for a letter within the one body of writing; for example,

manufacturer rather than manufactuker

- ★ Letters and words need to maintain the same spacing; for example, between letters



- ★ Joining lines have an important influence in maintaining even spaces between letters by repeating the basic pattern; for example, in

uuuu in little

- ★ Letters need to maintain the same slope, that is, they need to be parallel.

handwriting rather than handwriting

- ★ Letters, words and lines need to maintain the same alignment. Not aligning letters, words and lines vertically down a margin and horizontally across the page can be useful in presenting ideas artistically, but can make everyday writing and reading unnecessarily difficult.

- **Difference:** Legibility is maximised if the special, distinctive features of letters and groups of letters are preserved; for example, the letter *a* is easily recognised, as is *A*. But if this letter is written as *4* then the distinctive features of the letter are lost and confusion might arise. The context of other letters can be used to determine a letter, but overall, context should not be over-relied upon.
- **Balance:** Overemphasis of either the handwriting movement that produces the tops of many letters (*ʌmm*), or the movement that produces the bottoms of many letters, as well as many joining lines (*6uuu*) can distort letter shapes and therefore reduce legibility.
For example, overemphasising the movement *ʌmm* produced this handwriting

*On the first place
not in front you not
at D. in road in up in*

and overemphasising the movement *6uuu* produced this handwriting

*The movement seen first
sawed in England than*

4. Self-expression and communication

- 4.1 Handwriting contains elements of self-expression and communication. It carries a tension and balance between the need freely to express individuality and to conform to social standards.
 - Overemphasising self-expression can lead to personal squiggles that do not readily communicate to a wide reading audience. Signatures that need the name of the signatories typed beneath provide an example of this.
 - Overemphasising communication can lead to stereotypical, uniform handwriting that lacks the stamp of personality.
- 4.2 The balance between self-expression and communication shifts depending on
 - the stage of development of the handwriter
 - the stage of development of a piece of writing
 - whether the intended audience is the writer only, or other people as well.

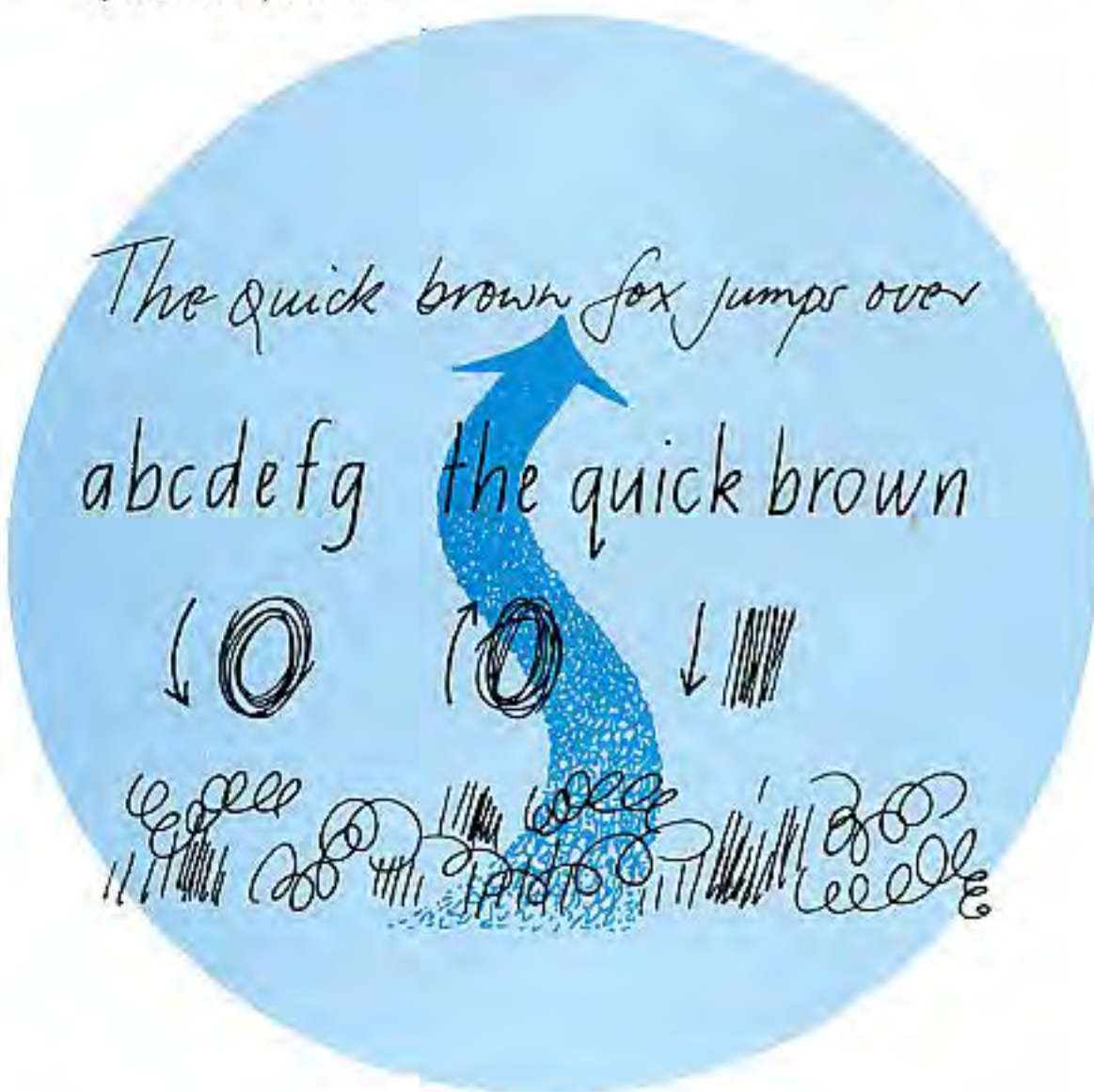
SECTION B: THE NSW FOUNDATION APPROACH

1. Aims

- 1.1 to help students master a simple, foundation set of handwriting movements. These movements arise out of the scribbles and drawings of children and are refined and contained to form the basis, or foundation, of the NSW Foundation Style
- 1.2 to help students learn the simple set of letter shapes of the NSW Foundation Style. These letter shapes are based on the Foundation Movements and are the foundation upon which personal handwriting styles can soundly develop. The Foundation Movements and letter shapes can be used by students who participate in programs for languages other than English that also use the Roman alphabet
- 1.3 to help students develop personal handwriting styles that are automatic, legible and fluent. These personal handwriting styles arise out of and are based on the Foundation Movements and the Foundation Style.

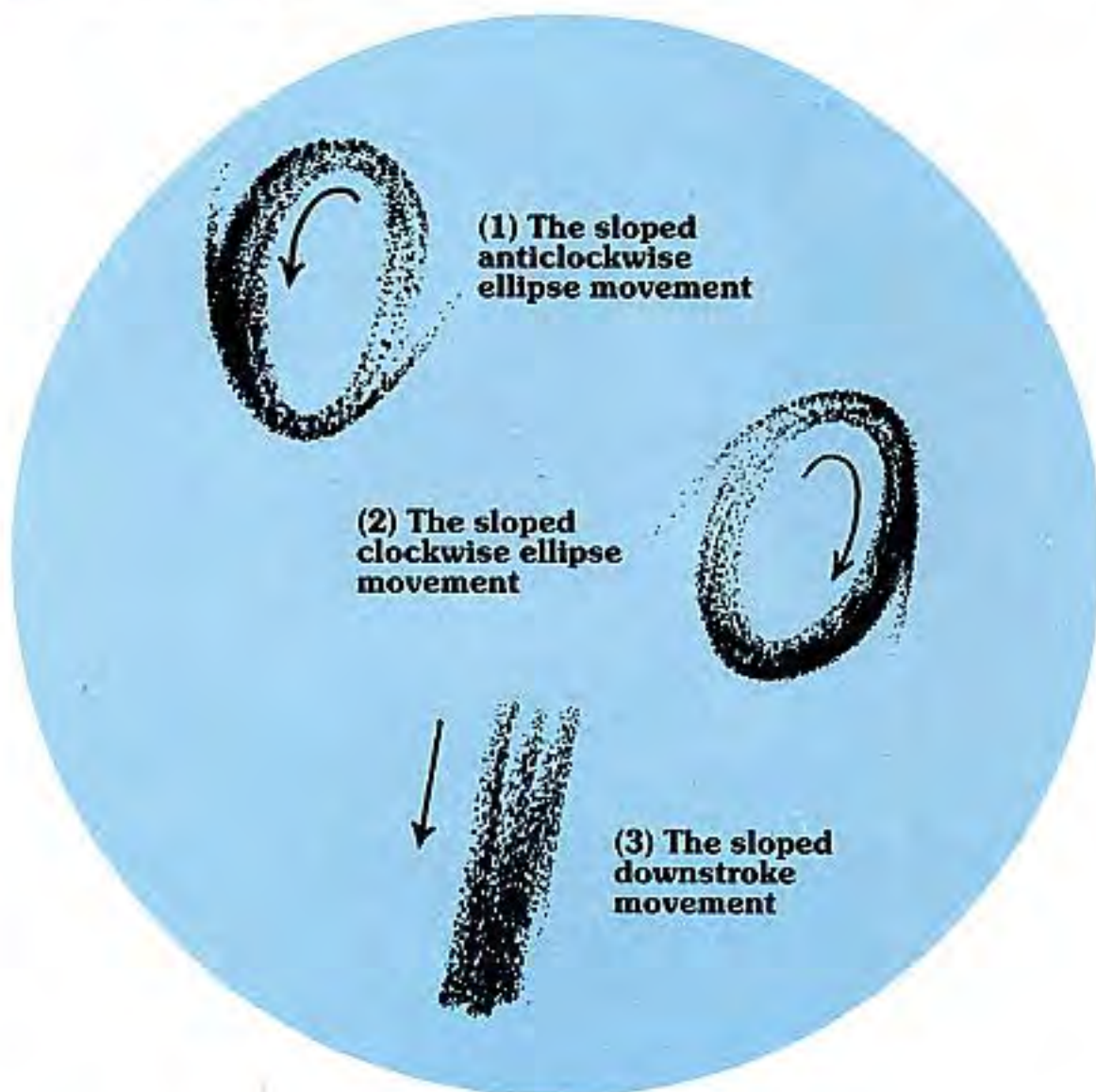
2. Movements and style

- 2.1 The NSW Foundation Approach to learning and teaching handwriting has two major components, Foundation Movements and the Foundation Style.
- 2.2 The relationship of scribbles, Foundation Movements, the Foundation Style and personal styles can be depicted thus



The Foundation Movements

- 2.3 The following three Foundation Movements form the basis of legible, fluent handwriting. They are the basis of the Foundation Style.
- 2.4 Practising these movements separately and in combination develops a memory for them. This memory can be developed whether the movements are large or small.
- 2.5 The movements are

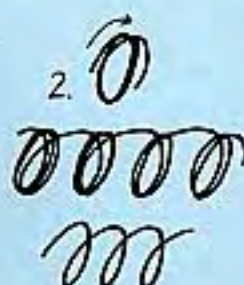


- 2.6 Each of these movements can be produced by the fingers contracting and releasing. They can also be produced by using the whole arm to make large movements.

- 2.7 If (1) is repeated while progressing to the right, the following patterns can emerge:



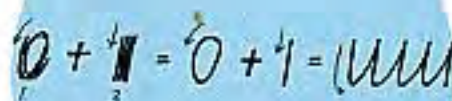
- 2.8 If (2) is repeated, these patterns can emerge:



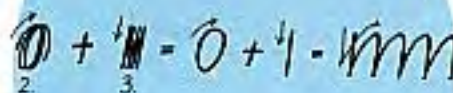
- 2.9 If (3) is repeated, these patterns can emerge:



- 2.10 If (1) and (3) are combined while progressing to the right, they interact, modify each other and form this basic handwriting pattern:



- 2.11 If (2) and (3) are combined while progressing to the right, they interact, modify each other and form this following basic handwriting pattern:



2.12 The *lmm* pattern is the basis of a number of the small letters of the Foundation Style:



2.13 The following letters have inverse curves:



2.14 The *fm* pattern is also the basis of a number of the small letters of the Foundation Style:



2.15 The following small letters are not produced by emphasising either the pattern *lmm* or the pattern *lmm* but are produced with reliance on a downward stroke.



2.16 The ability to produce the downstroke *l* *lmm* needs to be cultivated when forming the small letters of the Foundation Style.

- 2.17 By repeating this movement and giving it a little more emphasis than the upward and elliptical movements, an automatic rhythm can develop. This rhythm helps fluency and legibility.
- 2.18 In addition, 20 of the capital letters of the Foundation Style begin with a straight downstroke. The 6 others (S Z C G O Q) also have an important downstroke component.
- 2.19 Three other basic movements contribute to the formation of the capital letters:

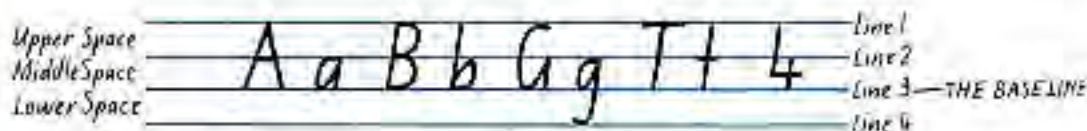


- 2.20 And the overall left-to-right movement of the arm influences the progress of handwriting:



3. The major characteristics of the NSW Foundation Style

- 3.1 The style comprises one basic set of letter shapes that are the same for young students using manuscript handwriting (unjoined letters) and for older students using cursive handwriting (joined letters).
- 3.2 The letter shapes are joined by students when they are individually ready to do so, not at any prescribed age or grade.
- 3.3 The style incorporates a few simple movements that are combined and repeated to form letter shapes.
- 3.4 These movements arise out of most children's scribbles and drawings and are refined and contained to become the foundation of the style.
- 3.5 The style can be produced using any of the commonly available writing implements.
- 3.6 Different appearances result from using different writing implements, while the style, that is the letter shapes, can remain the same.
- 3.7 The letters have their own distinctive features. These features include shape, relative size and orientation.
- 3.8 Departures from this model of the letter shapes and their slope can legitimately be made, particularly when older students are developing fluency along with their own personal styles, provided, however, that the distinctive features are preserved along with fluency when required.
- 3.9 Careful attention needs to be given to the direction and sequence of the movements that produce the letter shapes, so that the letter formations become automatic and repetitive and the overall left-to-right progression of writing is encouraged.
- 3.10 The letter shapes have simple proportions and relate simply to each other; all letters relate simply to four lines and three spaces, thus



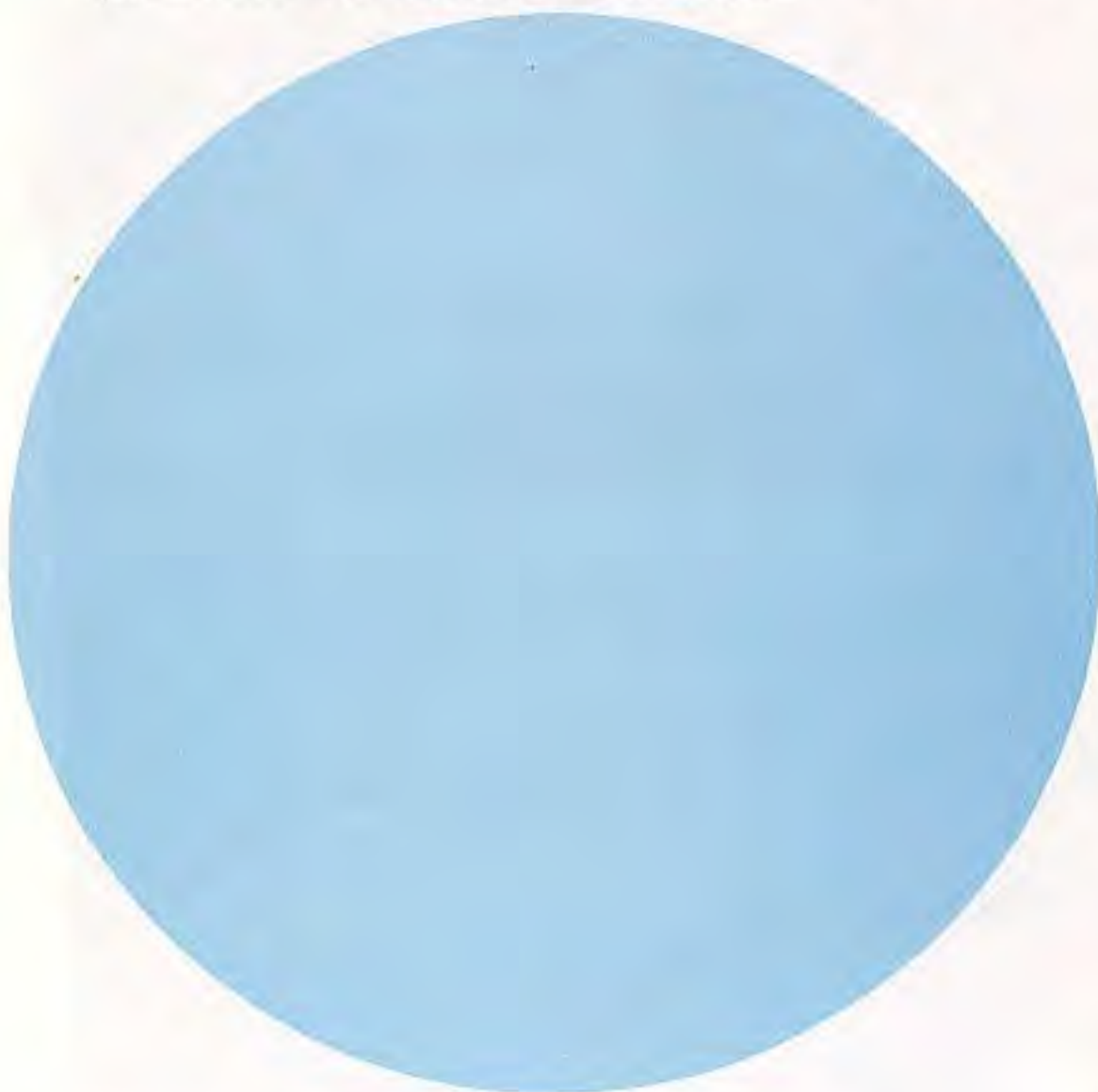
- 3.11 Each letter and numeral can be formed within a parallelogram



SECTION C: THE NSW FOUNDATION STYLE

1. An overview

- 1.1 The following pages detail the shape and the shaping of each letter of the Foundation Style.
- 1.2 These letter shapes are grouped according to the basic movements they have in common. Within each group the letters are ordered so that the shaping of one letter can be seen to arise naturally out of and lead to the shaping of others.
- 1.3 This is not to suggest that a child cannot be taught a letter until the previous one has been taught. What it does suggest is that a child, in learning one letter, can benefit by understanding its relationship to another letter or other letters.
- 1.4 The letters of the Foundation Style are members of families and are not simply isolated phenomena.
- 1.5 Following is a graphic overview of the letters of this style, followed by a detailed description of each of the letters.
- 1.6 These descriptions do not indicate absolute sizes of letters but, instead, indicate relative sizes and proportions. If allowed natural development, students begin by producing for themselves letter sizes that best suit their abilities and purposes.



2. The NSW Foundation Style (graphic overview)

THE
SMALL
LETTERS

u y v w a d g q c e o
f j s n r m h k b p l t i x z

THE
CAPITAL
LETTERS

U C G O Q J S
B P R D I L E F H T
A V W M N
K Y X Z

THE NUMERALS

0 1 2 3 4 5 6 7 8 9

abcdefghijklmnopqrstuvwxyz

The quick brown fox
jumps over the lazy dog.

3. Index of letters, numerals and punctuation marks

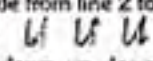


Letter	Page	Letter	Page	Letter	Page
A	171	J	166	S	166
a	163	j	166	s	166
B	169	K	172	T	171
b	168	k	168	t	170
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c	164	l	170	u	162
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d	163	m	167	v	163
E	171	N	172	W	172
e	164	n	167	w	163
F	171	O	165	X	173
f	165	o	164	x	173
G	165	P	169	Y	173
g	163	p	168	y	162
H	171	Q	165	Z	173
h	167	q	164	z	173
I	170	R	169		
i	170	r	167		


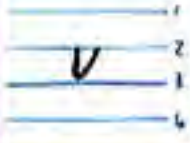
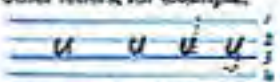


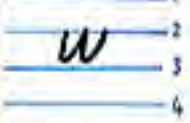

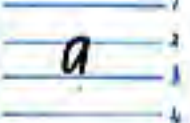
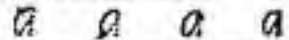

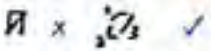

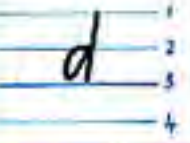

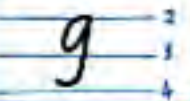
Overview 1	
letters emphasising anti-clockwise and downstroke movements	162
Overview 2	
letters emphasising clockwise and downstroke movements	167
Overview 3	
letters emphasising linear, including downstroke movements	170
 Numerals	 183-184
 Punctuation marks	 185




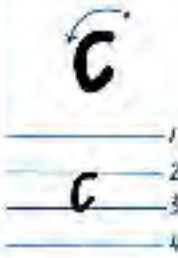




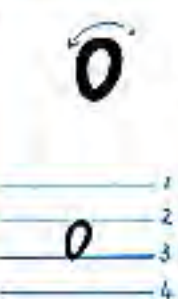
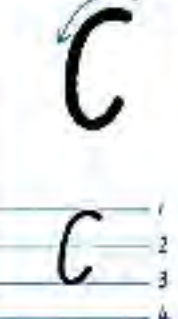
3.1 OVERVIEW 1


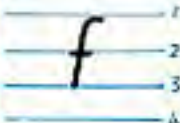



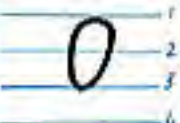

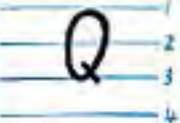
Emphasising anti-clockwise and downstroke movements



Shape	and Shaping	Further Comments
	<p><i>u</i> is two parallel downstrokes joined by an upward-moving, slightly rounded diagonal. It is produced by beginning at line 2, making a downstroke and then a quick change in direction upward and to the right as line 3 is reached. Then the second parallel downstroke is made from line 2 to line 3. It happens thus: </p> <p>The tempo of the down, up, down movement is slow, quick, slow.</p> <p><i>u</i> and letters like it, fit into a parallelogram: </p> <p>based on the proportion of 2:1</p>	<p>The shape of this letter is found within several other letters. The quick upward curving line is not only found within several letter shapes but is the movement that both spaces and connects legible, fluent cursive handwriting; for example, <i>lit</i> : <i>lit</i></p> <p>The quick upward curving line and the two parallel downstrokes are very important related movements. There is no pen-lift in producing this letter. It is important that a wedge-shaped space is left under the upstroke thus  so that it is neither too jagged (e.g. <i>u</i>) nor too rounded, hindering fluency (e.g. <i>u</i>).</p>
	<p><i>y</i> begins in the same way as <i>u</i>. The letter is finished by extending the second downstroke to line 4 with a clockwise curve no wider than <i>u</i>. This curve is the inverse of the curve of <i>f</i>.</p>	<p>This letter requires extension and contraction of the fingers, allowing the pen to move from line 2 to line 4, across two spaces. For some, this might be difficult at first but will be mastered with practice.</p> <p>The ability to extend and contract the fingers is needed for all double-space letters.</p>
	<p><i>U</i> is produced in the same way as for the small letter, except that it begins and ends at line 1.</p>	<p>Although the size of this letter is larger than its small counterpart, the proportion of 2:1 remains.</p>

Shape	and Shaping	Further Comments
 	<p><i>v</i> is made in the same way as <i>u</i>, but without the downstroke. It is important to begin at line 2 with a sloped, straight downstroke, otherwise <i>v</i> could happen.</p>	<p>The shaping of this letter is the same as for several other letters; for example,</p>  <p>This movement is found between letters when they are fluently joined; for example,</p> 
 	<p><i>w</i> is the same as for <i>u</i> but repeated.</p>	
 	<p><i>a</i> is built on the letter <i>u</i>. Start at line 2, at the beginning of the second downstroke of an imagined <i>u</i>. Push horizontally to the left and then, just past half the letter width, curve downward into the remainder of the letter. <i>a</i> The progression is as follows:</p>  <p>As the letter is being formed, the tempo can be thought of as slow (<i>a</i>) quick (<i>a</i>) slow (<i>a</i>) Like the <i>u</i>, <i>a</i> fits into a parallelogram:</p> 	<p>The first left movement is crucial; if it is underdone it can look thus: <i>a</i>. If overdone, it can look thus: <i>a</i>. This letter is not a triangular arrangement of straight lines but a smooth merging of three curves:</p>  <p>As with <i>u</i> it is important that the wedge-shaped space be left under the upstroke. Otherwise a rounded letter (e.g. <i>a</i>) will result. This letter, like all of the letters of the NSW Foundation Style, is a member of a family of shapes. Part of the reason for the way it is formed is to be found in the way other letters are similarly formed, in this case particularly the <i>u</i>.</p>
 	<p><i>d</i> is formed as for <i>a</i> but with a final downstroke that extends to line 1 and back to line 3.</p>	<p>The aim is to complete the letter using one continuous movement.</p>
 	<p><i>g</i> is formed as for <i>a</i> but with a final downstroke extending from line 2 to line 4 with a rounded curve as for <i>y</i>.</p>	

Shape	and Shaping	Further Comments
	<p>q is formed as for g, but instead of producing a  shape at line 4, a tail is produced moving to the right and reflecting the quick change of direction found in the middle space: .</p>	
	<p>c begins as for the letter a but finishes about halfway up the middle space.</p>	
	<p>e begins at the midpoint of c and loops out, up and over quickly towards and slightly to the left of the starting point of c. The rest of e is as for c. The beginning of this letter is not a straight line as in e or e but is the beginning of a continuous curve that travels at the same angle as the end of the letter e.</p>	<p>The letter can become easily distorted if the loop begins too high (e.g. ) or too low (e.g. ). Beginning with a horizontal movement () can also distort this letter; it can make the letter a circle rather than an ellipse.</p>
	<p>o is produced in the same way as the beginning of a. It can become a little rounder but not circular.</p>	
	<p>C is a larger version of small c. The difference lies in the capital's extending over the top two spaces.</p>	

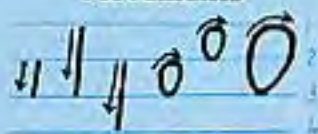
Shape	and Shaping	Further Comments
	<p><i>f</i> begins like the curve of the small <i>c</i> but after the top curve is complete, immediately moves into a straight downward movement finishing at line 3. It is completed with a cross bar at line 2, as for <i>f</i>.</p> 	
	<p><i>G</i> is the same as the capital <i>C</i> except that it moves a little higher to line 2. It is completed with a straight downward movement that finishes at line 3. The letter is produced with one uninterrupted movement.</p> 	
	<p><i>O</i> is produced in the same way as the small <i>o</i> except that it spans the top two spaces.</p> 	
	<p><i>Q</i> is the same as the capital <i>O</i> but finishes with a small straight diagonal tail starting in the middle space and going below line 3 at 5 o'clock.</p> 	

Shape	and Shaping	Further Comments
	<p><i>j</i> is a downstroke, beginning at line 2 and extending to line 4 and finishing with a clockwise curve as for <i>y</i> and <i>g</i>. The dot in the top space, in line with the downstroke, completes this letter. The curve of the <i>j</i> is the inverse of the curve of the <i>f</i>.</p>	
	<p><i>J</i> is shaped in the same way as the small <i>j</i>, except that it is positioned within the top two spaces and has no dot.</p>	<p><i>J</i> needs no crossbar (serif) at the top to distinguish it. Without the serif only one movement is needed. The curve on line 3 can be slightly flattened.</p>
	<p><i>s</i> begins as do the letters <i>a</i> and <i>c</i> and then moves with a diagonal connecting stroke to the right and finishes with a curve, similar to the tail in the letter <i>g</i>. The movement is as if around two dots placed on a sloping line, thus:</p>	<p>This can be a difficult letter because of its immediate change from an anticlockwise movement to a clockwise movement. The diagonal is pulled down steeply to the right. This helps to give this letter its slope. The second curve is the inverse of the first.</p>
	<p><i>S</i> is produced in the same way as the small <i>s</i> except that it spans the top two spaces.</p>	

3.2 OVERVIEW 2

Emphasising clockwise and downstroke movements

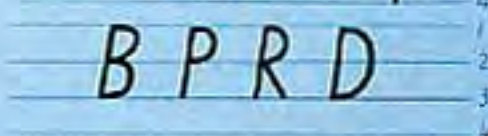
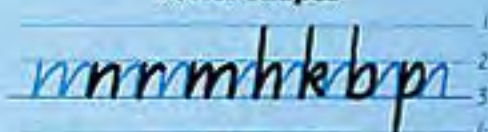
Movements



Wedge-shaped spaces



Letter shapes



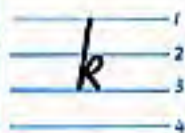
Shape	and Shaping	Further Comments
	<p><i>n</i> begins with a firm downstroke that drops from line 2 to line 3 and then bounces back to line 2 in a clockwise curve, culminating in a second downstroke parallel to the first. This should be done without a pen-lift. The bounce starts immediately from line 3 leaving a wedge-shaped space, thus: </p> <p>The tempo of the down, up, down movement is slow, quick, slow.</p>	<p>This letter provides a basic handwriting rhythm, together with its counterpart <i>u</i>. The down impulse should be emphasised so that the upstroke is felt as an incidental movement between the downstrokes. The <i>n</i> is an inverted <i>u</i>.</p>
	<p><i>r</i> begins as for <i>n</i> but stops with the curve at line 2.</p>	
	<p><i>m</i> begins as for <i>n</i>, but has one more bounce and downstroke. The downstrokes need to be equidistant and parallel to help both legibility and to maintain a basic handwriting rhythm. Two wedge shapes are produced, and there is no pen lift. </p>	
	<p><i>h</i> is the same as for <i>n</i> except that it starts at line 1 and therefore requires slightly more extension of the fingers. Note the wedge shape: </p>	

Shape

and Shaping

Further Comments

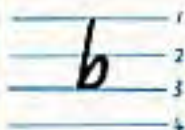
k begins as for *h* but as it finishes the curve, it continues with a clockwise movement, forming a loop, touching the downstroke midway in the middle space and finishes with a straight tail the width of the curve.



b begins as for *h* but finishes with a flattened curve on line 3. This curve begins just before line 3 is reached and is shaped in much the same way as the tail of the *y*.

The second downstroke must be sustained for most of the middle space, thus:

Note the wedge shape: *b*



This letter can become illegible, if the following types of distortions are allowed:

not sustaining the second downstroke

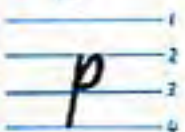
going below line 3

not closing the curve


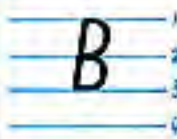

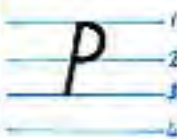

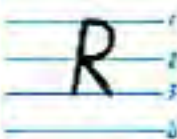

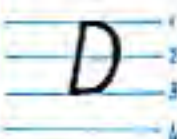
not flattening the final curve to meet the first downstroke at line 3.

not leaving a wedge-shaped space above the curved upstroke.

p is the same as for *b* except that the downstroke begins on line 2 and extends to line 4.



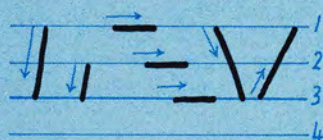
Distortions as for the finishing curve in *b* can also occur for *p*.

Shape	and Shaping	Further Comments
 	<p><i>B</i> begins with a downstroke followed by a pen lift and then a controlled double curve, each the same size and made in one continuous movement that momentarily touches the downstroke at line 2. The beginning and ending of the double curve should be flat, running briefly along line 1 and line 3 respectively. The final curve on line 3 is the same as for <i>b</i>.</p>	
 	<p><i>P</i> is the same as <i>B</i> except that when line 2 is reached, the letter is finished.</p>	
 	<p><i>R</i> is the same as <i>P</i> but is completed with a straight diagonal downstroke from line 2, finishing on line 3 at the same width as the curve. The curve and the diagonal are produced without pen lift.</p>	
 	<p><i>D</i> begins with a downstroke followed by a pen lift and clockwise curve from line 1 to line 3. The curve begins and ends flat as for <i>B</i>.</p> <p>The curve of the <i>D</i> is a little fuller than the width of the <i>B</i>.</p>	

3.3 OVERVIEW 3

Emphasising linear, including downstroke, movements

Movements













Letter shapes





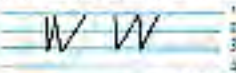

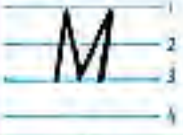
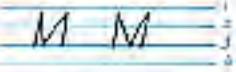

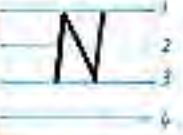


Iti LEFHT


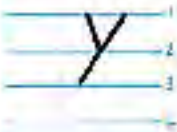


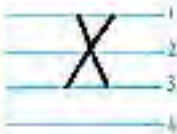

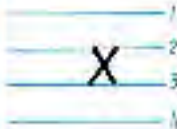

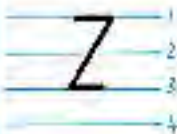


AVWMN

KYX x Zz

Shape	and Shaping	Further Comments
	<p>Small letter <i>l</i> and capital <i>l</i> begin at line 1 and end at line 3</p>	<p>This shape serves as a capital <i>l</i> as in <i>Italy</i> or small <i>l</i> as in <i>little</i>. Words in which these letters are likely to cause confusion are too rare to counter the benefits of simplicity and fluency gained from <i>l</i>.</p>
	<p><i>t</i> begins as for letter <i>l</i> at line 1 and ends at line 3. It is completed with a cross bar through the downstroke on line 2, no wider than one space. The cross bar is bisected by the downstroke.</p>	
	<p><i>i</i> is produced with a downstroke that begins at line 2 and finishes at line 3. It is completed with a dot at the mid point of the top space and in line with the downstroke.</p>	
	<p><i>L</i> begins at line 1 with a downstroke to line 3 and then, without lifting the pen, makes a horizontal line to the right equivalent to half the height.</p>	

Shape	and Shaping	Further Comments
 	<p><i>E</i> begins as for <i>L</i>, followed by the two horizontal lines, on line 1 first then on line 2. The width as for <i>L</i> is equivalent to half the height.</p>	
 	<p><i>F</i> begins with a downstroke, followed by a pen lift to produce horizontal lines, equivalent to half the height, on line 1 first then on line 2.</p>	
 	<p><i>H</i> is made by beginning with two downstrokes, half the letter height apart. The cross bar on line 2 completes this letter.</p>	
 	<p><i>T</i> begins with a downstroke, followed by a pen lift and then on line 1 a cross bar balanced on the downstroke.</p>	
 	<p><i>A</i> begins with an oblique downstroke to the left to line 3 and is followed by another to the right. It is finished with the cross bar on line 2.</p> <p>The top point of <i>A</i> is at the midpoint of the top of <i>E</i>. After each stroke, the pen is lifted.</p>	<p>The midline of <i>A</i> has the same slope as for the <i>E</i>.</p>

Shape	and Shaping	Further Comments
 	<p><i>V</i> begins from line 1 with an oblique downstroke to the right to line 3 and is followed by an oblique upstroke to line 1 without lifting the pen. The bottom point of <i>V</i> is at the midpoint of the bottom line of <i>E</i>.</p>	
 	<p><i>W</i> is made without pen lifts as a double <i>V</i>.</p>	<p>The three touch points on line 1 need to be equidistant to avoid undue distortion such as:</p>  <p>When produced as a double <i>V</i>, <i>W</i> might be wider than an <i>E</i>, although can be narrowed to fit an <i>E</i>.</p>
 	<p><i>M</i> is formed with two strokes. It begins with a downstroke from line 1 to line 3 as for <i>I</i>. Then there is a pen lift to the starting point at line 1 to begin the second stroke that comprises a down-up-down movement. The down-up section is the shape of <i>V</i> and is followed by a downstroke parallel to the first downstroke. The pen is not lifted during the down-up-down stroke.</p>	<p>Producing the zig zag second stroke without lifting the pen helps the development of the habit of continuous left-to-right progression. The three touch-points on line 3 need to be equidistant to prevent distortions of the following types:</p> 
 	<p><i>N</i> is formed with two strokes. It begins with a downstroke from line 1 to line 3 as for <i>I</i>. Then there is a pen lift to the starting point at line 1 to begin the second stroke that comprises a down-up movement. This down-up section begins with an oblique movement that touches line 3 a letter width to the right of the first downstroke and finishes with an upward movement parallel to the first downstroke. The pen is not lifted during the down-up stroke.</p>	<p>As with other letters, parallel downstrokes are emphasised so that they can be developed and maintained as a basic, continuous handwriting rhythm.</p>
 	<p><i>K</i> begins with a downstroke from line 1 to line 3. The second stroke begins on line 1, goes in to meet the midpoint of the first stroke at line 2 and then moves away to line 3.</p>	

Shape	and Shaping	Further Comments
 	<p><i>y</i> begins with an oblique downstroke to the right, stopping at line 2 (it would continue to line 3 if it were an <i>x</i>). The second downstroke begins at line 1 and continues obliquely to the left, touching the first downstroke and finishing at line 3.</p>	<p>The letter can also be formed thus:</p> 
 	<p><i>x</i> begins with an oblique downstroke to the right from line 1 to line 3. The second stroke begins at line 3 and moves obliquely upward to the right to line 1.</p>	
 	<p><i>x</i> is the same as capital <i>X</i> but spans only the middle space.</p>	<p>The first downstroke encourages the basic downstroke impulse of fluent, legible handwriting. The second upward stroke encourages left-to-right continuity in words such as</p> <p><i>exit</i> or <i>exit</i> <i>except</i> or <i>except</i></p>
 	<p><i>z</i> begins with the horizontal left-to-right movement on line 1 and then moves obliquely to the left, finishing with a horizontal movement to the right on line 3. This is done without lifting the pen.</p>	
 	<p><i>z</i> is the same as capital <i>Z</i> but spans only the middle space.</p>	

From manuscript to cursive

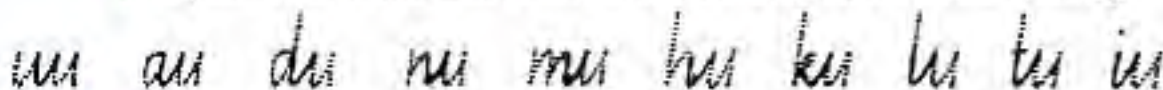
4. As students develop confidence and competence in producing manuscript (that is, unjoined) letter shapes, their fluency in moving from letter to letter increases. This improvement in fluency means that natural or spontaneous joins can appear, letter shapes slightly change and their size decreases.
5. Although these effects usually appear quite naturally, students need careful guidance in being shown efficient ways of joining and ways of changing the shape and size of some letters in order to assist fluency without losing legibility. Such guidance helps students develop cursive handwriting (that is, handwriting that has joining lines) that effectively balances fluency and legibility.
6. The time to show students how to join and modify letter shapes is when they are individually ready, and not at any prescribed age or grade. The following considerations can help when showing students how to join and change letter shapes.

7. Joining

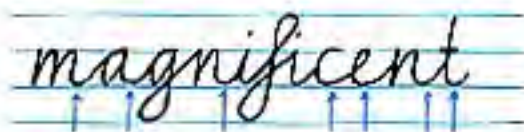
- 7.1 *Using a quick change in direction.* As students develop the feel for the repeated parallel downstroke characteristic of fluent, legible handwriting (referred to on page 155), a quick change in direction can develop between and within letters; for example:



- It is worth noting that this quick change in direction produces joins that conform to the basic pattern. It occurs for those letters that end with a downstroke on line 3, namely:



- As well as an emphasis on downstrokes, a de-emphasis on joining lines can also help fluency and legibility. When joining movements are over-emphasised the following type of ponderous handwriting can occur:

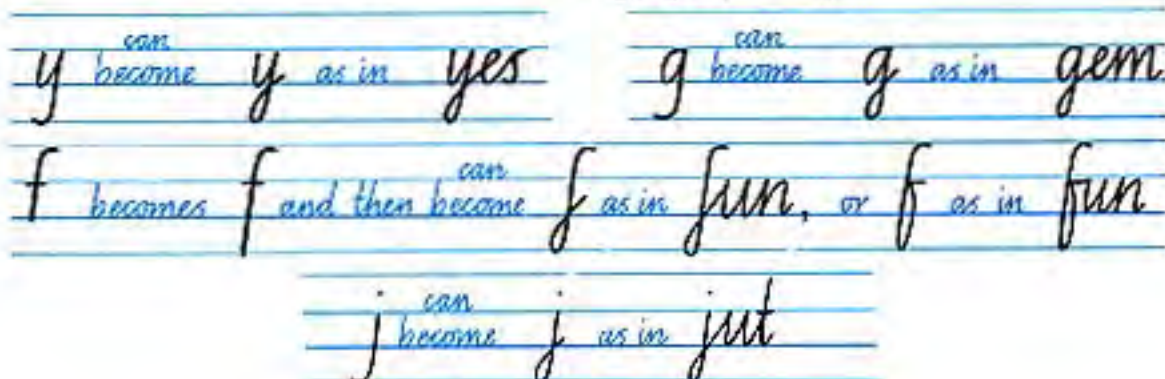


- The anticlockwise movement is exaggerated here.

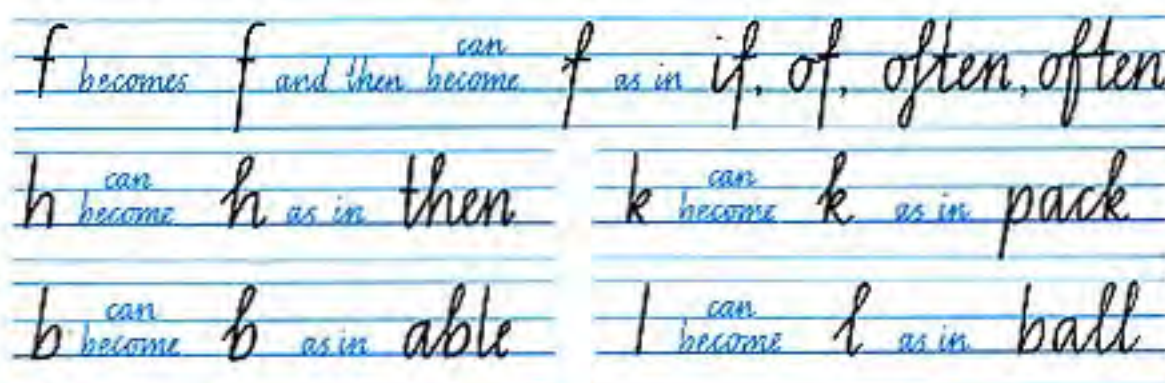
7.2 Using loops

- Loops can effectively occur

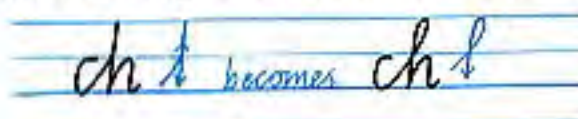
★ when trailing the pen from the end of *y*, *g*, *f* and *j* thus:



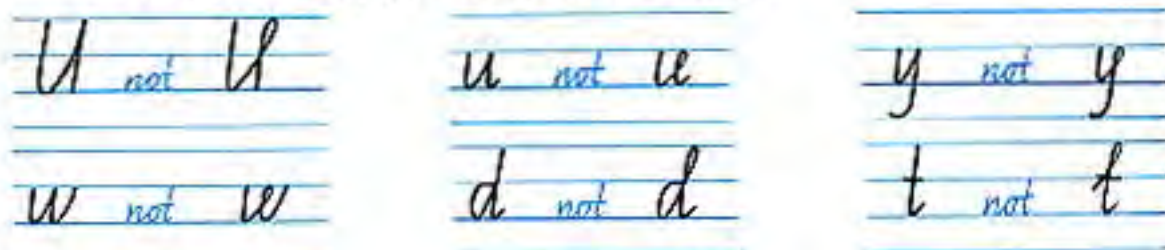
★ when the pen travels to *f*, *h*, *k*, *b* and *l* thus:



- With the letters *h*, *k*, *b* and *l* the loops occur partly because of the influence of retracing; instead of travelling the same path twice, a deviation can occur thus:

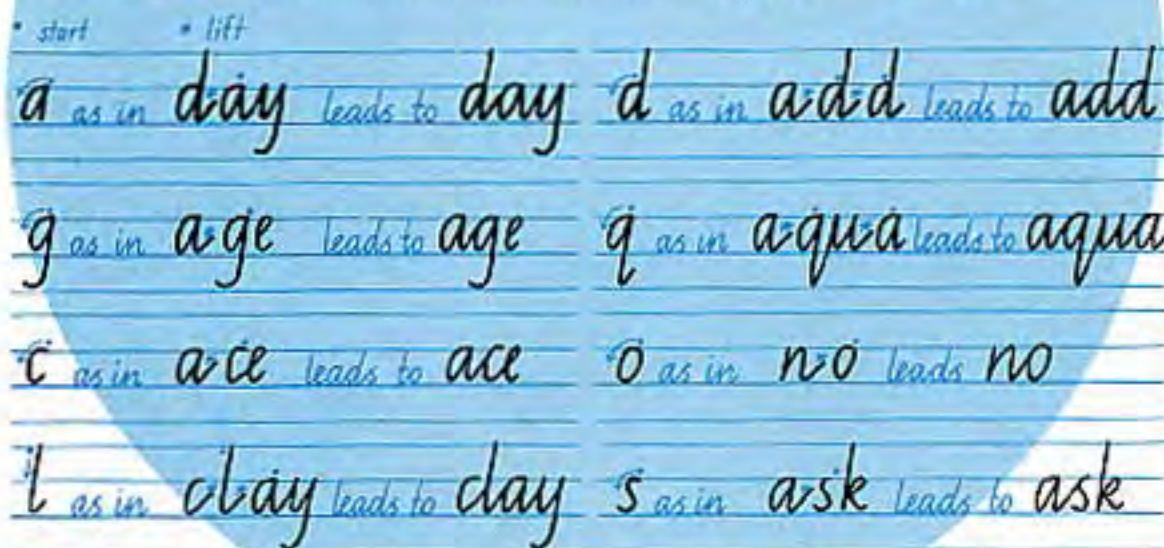


- For all other letters, however, the influence of retracing needs to be controlled to save readers from possible confusion while at the same time keeping handwriting movements as simple as possible; for example, when retracing occurs in the following letters the following types of loops should be avoided:



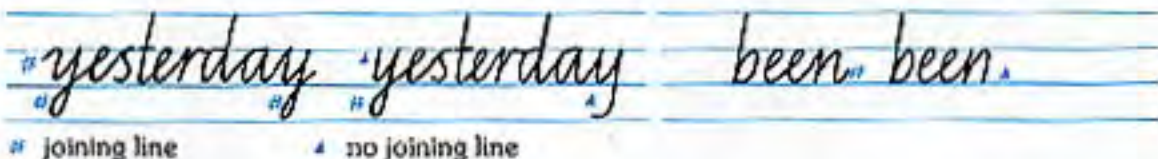
7.3 Dropping in letters

- A natural consequence of emphasising the basic parallel downstroke of fluent handwriting, together with the inconvenience of retracing, for example, is to drop letters into place. The following letters can effectively be dropped into place:

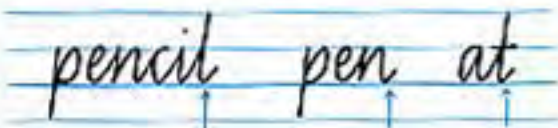


- The downstroke of the letter being dropped into place touches the upstroke of the preceding letter.

7.4 A joining line is not necessary unless there is something to join it to; for example,



- Sometimes, however, for aesthetic or kinaesthetic reasons a writer might wish to produce a little flick at the end of words, thus:



7.5 Joining lines are influenced by the way letters are finished.

- Letters finishing with a downstroke or by going to the right are normally easy to join to letters that follow. Letters finishing with an upward movement or by going backwards can easily be left unjoined. A summary of letter finishes and optional joins is on page 179.

7.6 Joining lines influence spacing between letters.

- This spacing is produced by the pattern mentioned in 7.1, and influences legibility by ensuring that the letters are regularly and adequately spaced; for example:

even spacing magnificent *uneven* magnificent

7.7 Joining lines are mainly needed for fluency.

- Readers use letter shapes, not joining lines, to read. A distinction can be made between letter shapes and joining lines; for example:

u in nun is a combination of joining lines / *s* plus *u* = *nu*

y in ayf is a combination of joining lines / *plus y* = *yf*

s in ask is a combination of joining line / *plus s* = *as*

7.8 Fluency and legibility are assisted when the writer takes as direct a path as possible from letter to letter; for example, the joining lines to the letters go straight to the first downstroke:

n m i v w x r y j p

an am ai av aw ax ar ay aj ap

on om oi ov ow ox or oy oj op

yn ym gi gv gw yx gr gy yj yp

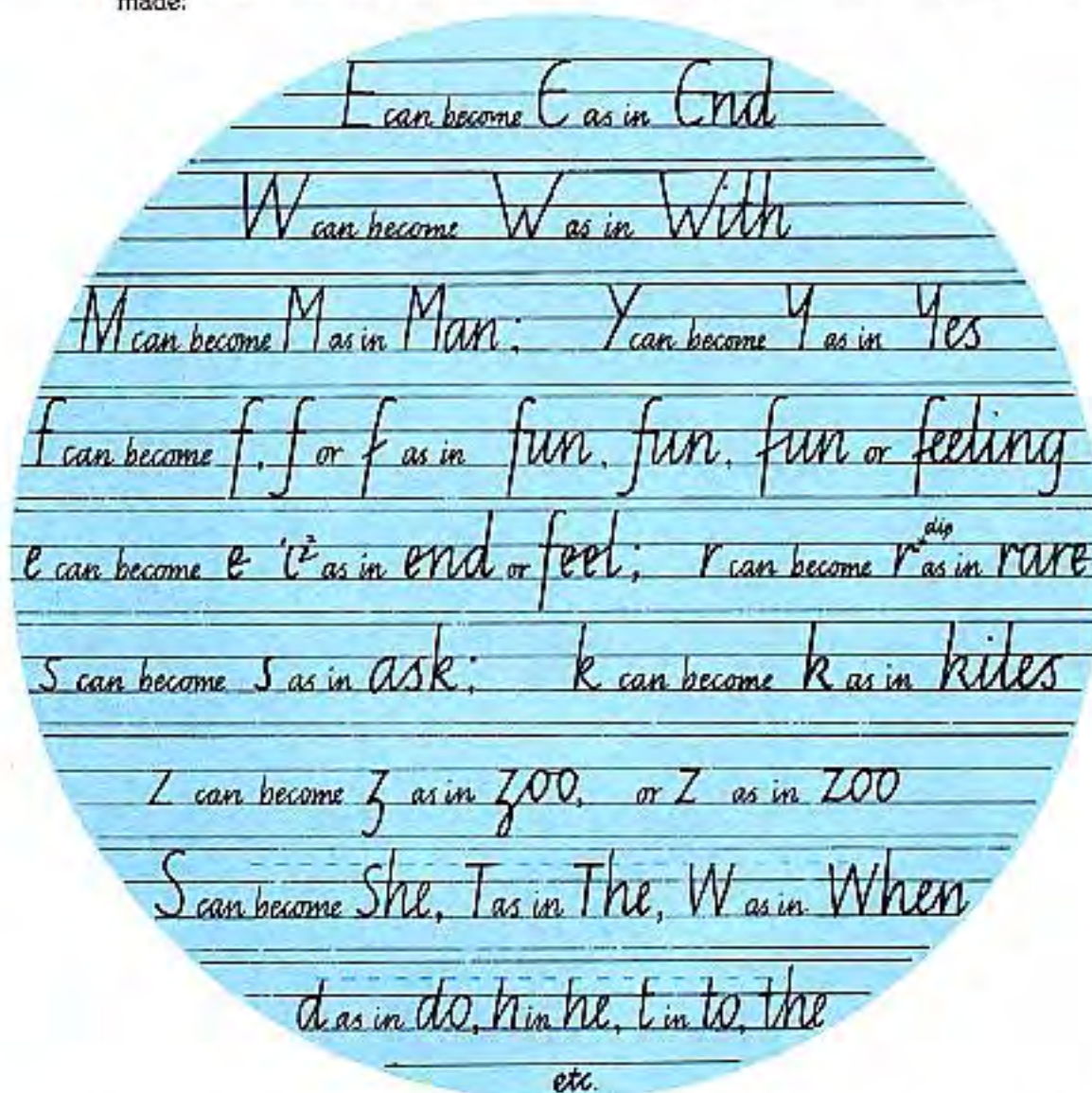
7.9 Capital letters can effectively remain unjoined. However, once fluency develops, the following capitals might be joined thus:

Ua Ca Qu Ra Ap

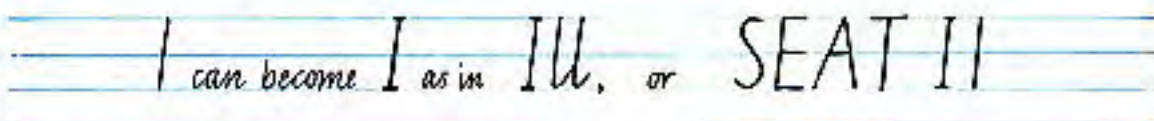
Ma Ea Fa Ha Ka

8. Changing the size and shape of letters

- 8.1 Once the NSW Foundation Style has been firmly established, fluency can be assisted by
- reducing the size of letters and
 - making slight alterations to letter shapes; for example, the following changes can be made:



In addition, in rare circumstances where the capital I might be confused with small i or numeral 1, the capital can be changed thus:



9. Letter finishes and optional joins

from a downstroke	from an upstroke	from a left-to-right stroke	letters which are not easy to join
e.g.	e.g.	e.g.	e.g.
u up	q qu	f fun	y ye ^{or} ye
a an	c cu	t tu ^{or} tu	j jo ^{or} jo
d de	e en	r ru ^{or} ru	g gu ^{or} gu
n nu	v vo ^{or} vo	z zoo ^{or} zoo	s so ^{NOT} so
m my	w we ^{or} we		b bu ^{NOT} bu
h hi	wh wh ^{or} wh		p pu ^{NOT} pu
k ke	o ox ^{or} ox		z zoo ^{or} zoo
i in	ot ^{or} ot ^{or} ot		x xc ^{or} xc
l la ^{dropped}			ex ^{or} ex ^{or} ex
			oxen ^{or} oxen
			x

10. Optional joins for common letter clusters

10.1 Practising writing common letter clusters in standard English spelling can help both the development of handwriting fluency and legibility and the development of spelling skills.

10.2 Following are some examples of common letter clusters:

Two-letter initial consonant blends e.g.

bl br cl cr dr fl fr gl gr pl pr sc sk sl sm tr

Two-letter final consonant blends e.g.

ft ld lk lt mp nd ng nk nt py ry sk st wn

Three letter initial consonant blends e.g.

scr shr spl spr squ str thr

Digraphs e.g.

ar ee er or ch qu sh th all aw ay oa ou ow

Prefixes and suffixes e.g.

anti con extra un es ed ing est ment or

* drop into position

11. Joining to and from small letters

Letter	Unjoined	Joined
a	man fat yap	mian fat yap
b	able tb yb bun	able tb yb bun
c	ace fc yc act	ace fc yc act
d	add yd den dim dt	add yd den dim dt
e	net ten fen ye ee	net ten fen ^{or} fen ² ye ee
f	aft off yf fey ff	aft off yf fey ^{or} fey ² ff
g	age tog gg gun gh	age tog gg gun gh gh
h	chin who this yh	chin who this yh yh
i ²	nine tin fin yip vi	nine tin fin yip vi
j ²	uj oj yj job jet	uj oj yj job jet
k	pack poke yk keep	pack poke yk keep
l	all bolt yl lot lip	all bolt yl yl lot lip
m	imp Tom ym man	imp Tom ym man

* dropped into place

in	ant one yn nun	ant one yn nun
o	Tao toad spoon got	Tao töäd spoon got
ip	up hope yp pun	up höpe yp pun
q	aqua barque	aiquä barque
r	are torn grape rr	are-äre torn gräpe rr
s	asp hose gs stirs	asp höse gs stirs
t	at hot yt that to	at höt yt thät tö ^{or} to
u	au tub gun our	au tub ^{or} tub gun our
iv	eve oven oval	eve ^{or} ewe ^{or} ewe oven oval
uw	ewe ow won gw	ewe ewe ^{or} ewe ^{or} ow won gw
x	axe oxen excel	axe axē oxen oxen excel
y	aye toy yet you yy	aye tōy toy yet yōu yy
z	adze ozone jazz	adze ^{a little wave} adze ozone ^{or} ozōne jāzz jāzz ^{or} jāzz

* dropped into place

12. Numerals

- 12.1 The following pages contain descriptions of how the numerals of the NSW Foundation Style are formed. They describe the shape and the shaping of each numeral.
- 12.2 Although the height presented is the same as the capital letters, this can change according to circumstances and the personal needs of each student.

Shape	and Shaping	Further Comments
	<p>The numeral 0 is formed as for the capital letter O</p>	
	<p>1 is a downstroke, beginning at line 1 and ending at line 3</p>	
	<p>2 is made as for the capital letter Z but starts with an upward-moving curve</p>	
	<p>3 is the double curve of the capital letter B. Although there is no downstroke to establish a slope to the right, nonetheless this numeral slopes to the right like all other letters and numerals, thus: 3</p>	
	<p>4 begins as for the numeral 1 but stops midway in the middle space and makes a small horizontal stroke to the right without lifting the pen. This horizontal stroke is one capital letter wide. The second downstroke is parallel to the first, touches lines 2 and 3 and bisects the horizontal line. Like all other numerals, 4 is contained between lines 1 and 3.</p>	

Shape	and Shaping	Further Comments
	<p>5 begins at line 1 with a downstroke to line 2 and then, without lifting the pen, a clockwise curve is made similar to the bottom curve of <i>B</i>.</p> <p>After a pen lift, this numeral is completed by making a horizontal stroke to the right on line 1, beginning where the downstroke began. The horizontal line should be no wider than the curve.</p>	
	<p>6 begins at line 1 with a straight downstroke that begins to curve part way down the middle space and continues as for the letter <i>O</i> but finishes at about the 11 o'clock point, just below line 2.</p>	
	<p>7 begins with a horizontal stroke to the right on line 1, one capital letter wide. It is completed with an oblique downstroke that meets line 3 at the half-way point of the base line of <i>E</i>.</p>	
	<p>8 is begun as if it were a capital <i>S</i> and finishes after curving at line 3 with a straight line to the starting point.</p>	
	<p>9 is produced in the same way as <i>g</i> and <i>q</i> but without a tail and it extends from line 1 to line 3. This numeral, like all others, is contained between lines 1 and 3.</p>	

13. Punctuation marks

13.1 The following page indicates alternative ways of producing common punctuation marks.

Mark	Example
. full stop	They went.
, or , comma	The cat, called Tibby, was asleep.
' or ' apostrophe	Her father's horse is lame.
" " or " " quotation marks	He said, "Let's eat now."
! exclamation mark	Please don't!
? question mark	Why are we here?
: colon	My reason is simple: no money.
; or ; semi-colon	I arrived sad; I left happy.

SECTION D: TEACHING CONSIDERATIONS

1. Teacher intervention

- 1.1 The overriding and crucial tasks of teachers of handwriting are
- to create a writing environment in which children are encouraged to write, even before they have mastered the letter shapes of the NSW Foundation Style
 - to identify which handwriting difficulties are impeding each student's attempts to get ideas down on paper and share these ideas with others. *Assessment and Evaluation* (Page 200) helps teachers in this identification
 - to intervene by showing each student how to overcome the handwriting difficulty, for example, how to better form a letter shape or make a better joining line, or how to practise a foundation movement. The intervention needs to take place at the student's point of need, the time when the student has indicated readiness to learn.
- 1.2 Where different students have the same needs and comparable abilities, whole-class or small-group handwriting lessons are suitable. Where a need is specific to one student, that need should be met for that single student.
- 1.3 There is good reason to give handwriting lessons apart from writing activities that require concentration on composing.
- 1.4 Teachers must help students progress on the basis of positive self-image and achievement. They do this by
- helping to make explicit for each student those things that they already understand and can do
 - emphasising their understandings and achievements rather than their misunderstandings and inabilities.



2. Learning to handwrite

2.1 Students learn to handwrite by

- *inventing marks*: they create their own marks and manipulate them, exploring the limits of these marks as well as exploring their own capabilities
- *forming hypotheses and testing them*: they make guesses about what might work and they test their guesses. Inventing their own marks and testing these to see how well they communicate involves children in comparing their inventions against the teacher's model. As a result, children gradually revise their understandings and refine their handwriting skills.

2.2 It is crucial that teachers show students how to produce the foundation movements and how to form the letter shapes of the NSW Foundation Style.

2.3 Also crucial is the teacher's creation of a whole language environment that makes much of writing and values the ways in which handwriting serves writing. Once aware of a need to write, students reach for the skills of handwriting.

3. Lesson types

3.1 There are three broad types of handwriting learning experiences for students. They are

- *Self-discovery experiences* in which students explore and discover for themselves the properties of writing and drawing implements. This is typical of early scribbling and writing periods.
- *Guided exploration experiences* in which teachers direct students' attention to particular features of scribbles, drawings and handwriting. Teachers demonstrate ways of producing and practising the foundation movements and the letter shapes of the NSW Foundation Style. This demonstration can take place while a student is writing, or during special handwriting lessons removed from the composing demands of writing. In response to teachers' demonstrations and directions, students revise their understandings and refine their handwriting skills and personal discoveries.
- *Self-direction experiences* in which students use these revised understandings and refined skills, and apply them independently in continued writing.

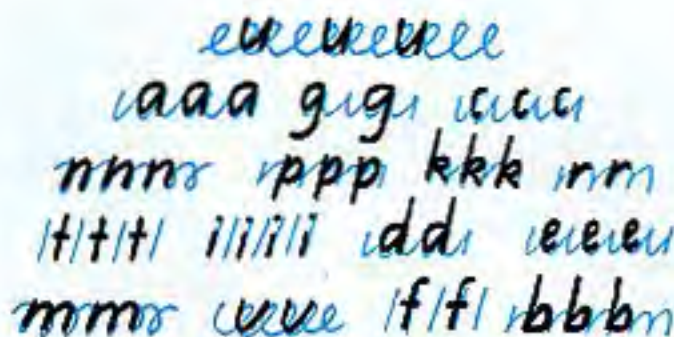


4. Patterns

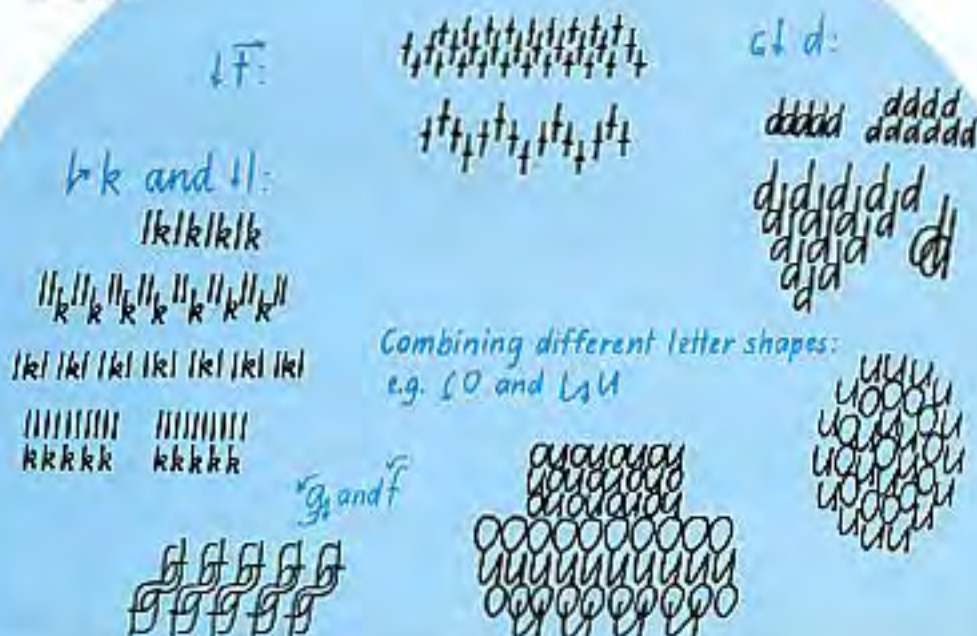
- 4.1 Patterns, using the foundation movements, help students develop automatic, fluent, legible handwriting by developing recall and recognition (see p.149), and developing manipulative skill.
- 4.2 In guided exploration lessons there can be three broad types of pattern activity:
 - *Students produce and explore various scribbles and patterns.* Letter shapes can be superimposed on to these patterns. The basic movements required to produce the letter shapes need to correspond to the movements of the patterns; for example:



Using the patterns found in the exploration scribbles of students, the teacher can demonstrate a repeated pattern and then show how letter shapes can be fitted on to this pattern; for example:

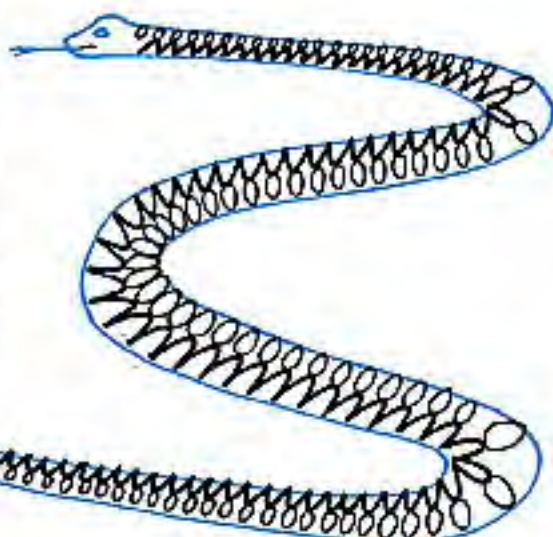
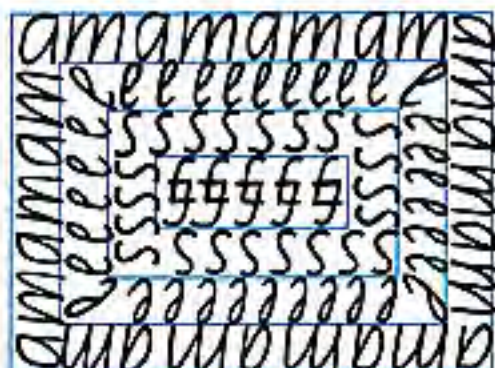


- *Students are shown how to form a letter shape and then asked to produce patterns based on this letter shape.* On some occasions the teacher can demonstrate patterns; on other occasions students can create their own patterns. Correct direction and sequence of movement in producing the letter shapes need to be encouraged; for example:



- Students are shown the Foundation Movements and asked to produce patterns and pictures based on these movements. The teacher can demonstrate patterns, or they can be created by the students. Producing patterns to the rhythm of music or poems can reinforce the rhythm of automatic, fluent, legible handwriting; for example:

[illegible][illegible]

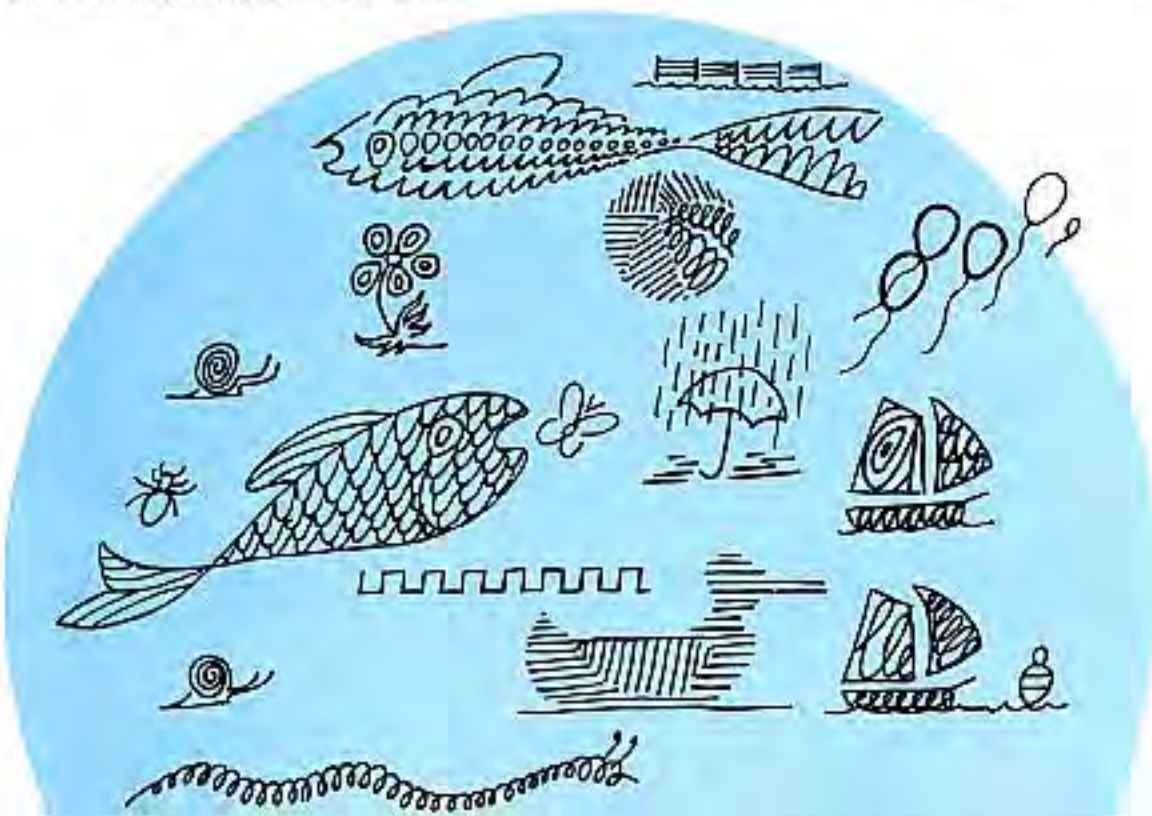


Prepare duplicated outlines and let the students decorate them with suitable handwriting patterns.

Examples of border patterns



Free creativity using basic movements



5. Sequencing

- 5.1 Sequencing addresses the issue of when the letters of the NSW Foundation Style should be taught and the order in which they should be taught.
- 5.2 Students should be allowed to write as soon as they feel the need, even before they have mastered the letters of the Foundation Style. They learn these with the guidance of their teachers along with and as a result of writing.
- 5.3 There cannot be, for all students, a single set sequence of lessons with each lesson being devoted to the shaping of a particular letter. Individual students take individual routes to learning to write and handwrite.
 - They come to school with different language backgrounds, different understandings, different abilities, and different writing experiences.
 - They master individual letter shapes at different rates. In any one class there might be students who are able to join letters while others are still mastering unjoined letters.
- 5.4 There can be no all-embracing decision that either capitals or small letters should be taught first. Instead, teachers should teach those letters that individual students and groups of students show that they have a need to produce in their writing and that are giving them trouble.

6. Developing multicultural perspectives to handwriting

What follows should be read in conjunction with the *NSW Multicultural Education Policy* (1983).

- 6.1 Students develop an understanding of the multicultural nature of Australian society through programs that acknowledge how this multiculturalism expresses itself in the variety of handwriting forms in use in our culturally diverse society.
- 6.2 Schools can develop such multicultural perspectives by
 - identifying the cultural needs of students, the school and the community
 - incorporating a range of cultural perspectives existing within the school and the community
 - building on the knowledge, values, attitudes and practices of different ethnic groups within the school and the wider community
 - countering cultural bias in school practice, and teaching and learning materials
 - taking into account the cultural role models of school and community personnel
 - involving various ethnic groups within the community in school-based activities.
- 6.3 Incorporating multicultural perspectives to handwriting might include the study of a particular script, including the influences that have contributed to its development. Such influences might include historical, religious, social and technological developments as well as cultural interactions. Understandings gained from the examination of one script might well form the basis for the study of other scripts.

7. Handwriting for English as a Second Language students

- 7.1 Students from non-English-speaking backgrounds might be unfamiliar with Roman script conventions and the NSW Foundation Approach. When planning lessons, teachers need to determine whether such students are
 - able to read and write in their first language
 - familiar with conventions used in written English
 - familiar with words used to describe handwriting in English
 - familiar with the relationships between the sounds and written symbols of Australian English
 - able to use the Foundation Approach when writing in languages other than English.

8. Body position and furniture

- 8.1 Children find it possible to write in all sorts of positions. The positions that are to be encouraged, however, are those that can be maintained with minimum tension and fatigue over a period long enough to complete the handwriting task. These positions should also allow freedom of movement of the writing arm, hand and fingers.



- 8.2 The following information can be useful:

- To avoid unnecessary strain on the neck and shoulders, the head should not be tilted too far forward or sideways.
- The elbows should be level with the table. This helps avoid tension between the shoulders. It can also help prevent fatigue, including eye fatigue caused by the reader being too close to or too far away from the page. Students who write with their heads unnaturally close to the writing page might do so because of eyesight problems.
- A backrest, supporting the hollow of the back, can prevent back fatigue.
- The thighs are anatomically and physiologically unsuited for supporting the weight of the sitting body. Compression of the thighs affects not only the muscles and their blood vessels, but also the nerves, especially the sciatic nerve, with consequent discomfort and possibly undesirable effects on soft tissues. Undue pressure on the lower thigh should, therefore, be avoided. The front of the seat should not press on the lower thigh; the seat should be hard or firm because a soft seat allows the pelvis to sink into it, increasing the fatiguing effect.
- A space is needed between the front of the seat and the calf of the leg to avoid leg discomfort.
- The feet should rest securely on the floor so that they share the body's weight. The height of the seat, therefore, should not exceed the length of the lower leg.
- The non-writing arm can take the weight to allow the writing arm to glide over the writing surface.



- 8.3 There are suitable alternative ways of sitting down to write; for example,
- using a sloped writing surface
 - using a seat that the writer can half-kneel, half-sit on
 - kneeling on the floor, sitting at a low table
 - sitting on a chair with a board
 - lying on the floor. This position can be satisfactory if the writing arm can move freely; for example, if the non-writing arm takes the weight.
- 8.4 When sitting left-handers with right-handers, a clash of arms and bodies can be avoided by sitting the left-hander on the left of a double table and the right-hander on the right.
- 8.5 The left-hander can have a problem in moving the writing arm left-to-right because the body might block progress. Moving the page to the left of the body can overcome this problem.

9. The nature of the writing implement

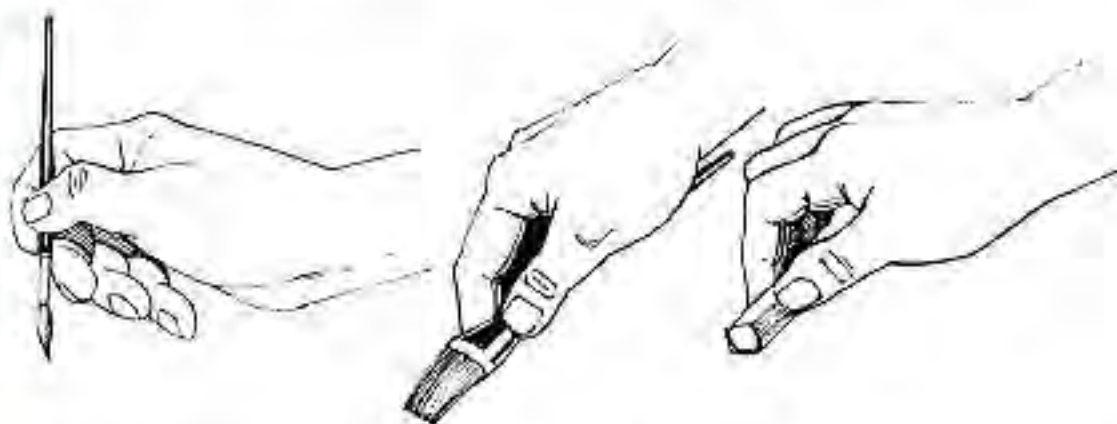
- 9.1 The two most important features of any writing implement are its point and its barrel.
- 9.2 The point of the writing implement normally needs to be large if the letters are to be large. The smaller the handwriting, the finer the point can be.
- 9.3 Pencils and multidirectional pens such as ballpoint pens allow writers to produce the foundation movements with ease, and are particularly useful for left-handers who typically push the pen left-to-right.
- 9.4 Students of any grade or age or class should not be restricted to any one type of writing implement; for example, thick-barrel pencils. Many young students trying to learn the desired pencil hold and movement find fat pencils too difficult. Thinner barrels are usually better for them.
- 9.5 Students benefit from having available a wide selection of writing implements that can be matched to their individual needs, abilities and writing purposes.
- 9.6 As part of the classroom writing environment teachers might set up a writing centre that provides students with different kinds of writing implements and materials.



Part II, Syllabus for Writing K-6, Section 11, p.53, on setting up a writing environment.

10. Holding the writing implement

- 10.1 The method of holding the writing implement can usefully vary from writer to writer. This variation might be caused by factors such as the nature of the writing implement, the body build of the writer and the cultural experiences of the writer.
- 10.2 Those students, for example, who are fluent writers of a script other than the Roman might hold the writing implement in a way that is complementary to that particular script. If their hold impedes the fluency and legibility of their handwriting using the Roman script, they need to be guided to hold the writing implement in the way described here.



- 10.3 The basic method of holding commonly used writing implements is that the thumb, index and middle fingers hold the writing implement either by
- having the thumb and index finger pinch while the writing implement rests on the middle finger, or,
 - having the thumb and middle finger do the pinching with the index finger resting on top, or,
 - having the thumb, index finger and middle finger share the task equally.
- 10.4 This method applies to both right-handers and left-handers.
- 10.5 The fundamental role of the index finger is to pull the writing implement towards the body. The thumb pushes the writing implement away.

- 10.6 Writers can find it comfortable to point multidirectional pens either over the shoulder of the writing hand, or to the right or left of the shoulder of the writing hand. Sometimes the angle of the writing implement to the page can be varied thus:



- 10.7 Ballpoint and other multidirectional pens can be used quite effectively at this angle.
- 10.8 The elevation will be determined, not only by the type of writing implement, but by the size of the hand, the length of the fingers and their position on the writing implement.
- 10.9 Both the angle of the writing implement to the page and the angle of the writing implement to the writing line need to remain constant as the writer's hand and arm progress left-to-right. Maintaining these angles helps keep the slope and spacing of the handwriting constant.
- 10.10 For left-handers, the method of effectively holding the writing implement can essentially be the same as for right-handers. Left-handers need to push the pen across the page more than right-handers, and therefore find multidirectional pens beneficial. Left-handers often find that, by holding the pen a little further from the point than right-handers, they gain a better view of their writing.
- 10.11 Undue pressure and tension, both of the fingers on the writing implement and of the writing implement on the page, work against a writer's attempts to be fluent and legible. A tense hold looks like this:



- 10.12 Causes of undue pressure and tension include the personality of the writer as well as the nature of the writing surface; for example, rough surfaces invite more pressure. Another cause can be the nature of the writing implement; for example, more drag comes from a rough point.
- 10.13 Conflicting muscular tensions can also produce undue pressure and tension. The repeated, rhythmic downstroke that helps fluent, legible handwriting, is produced by a continuous process of contraction and release. The muscles that produce the downstroke by contracting are different from those that cause the fingers to extend or stretch.
- 10.14 Fluent, legible handwriting utilises a continuous process of contraction and release. When one muscle group contracts, the other should relax; if both are tense at once, fluency and legibility suffer. Contraction and release exercises can be helpful.
- 10.15 Young writers gradually develop towards an efficient way of holding writing implements, progressing typically as follows:



Holding the pencil like a dagger



The index finger is wrapped over the thumb or vice versa

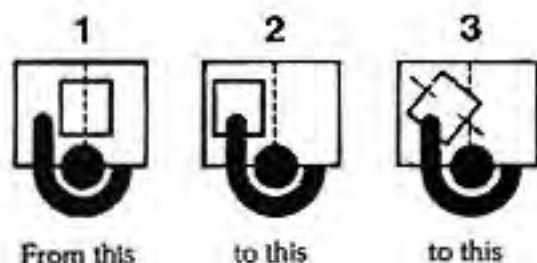


The ideal relaxed and flexible hold

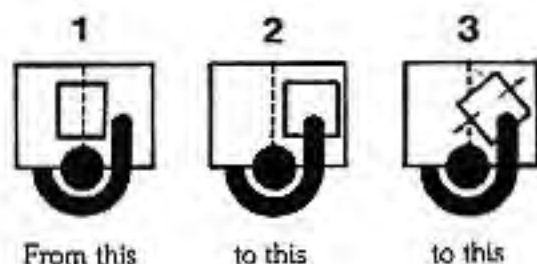
11. Relating the body to the writing surface

11.1 A way to arrive at a suitable position for the writing page is as follows:

For left-handers



For right-handers



12. Moving the writing implement

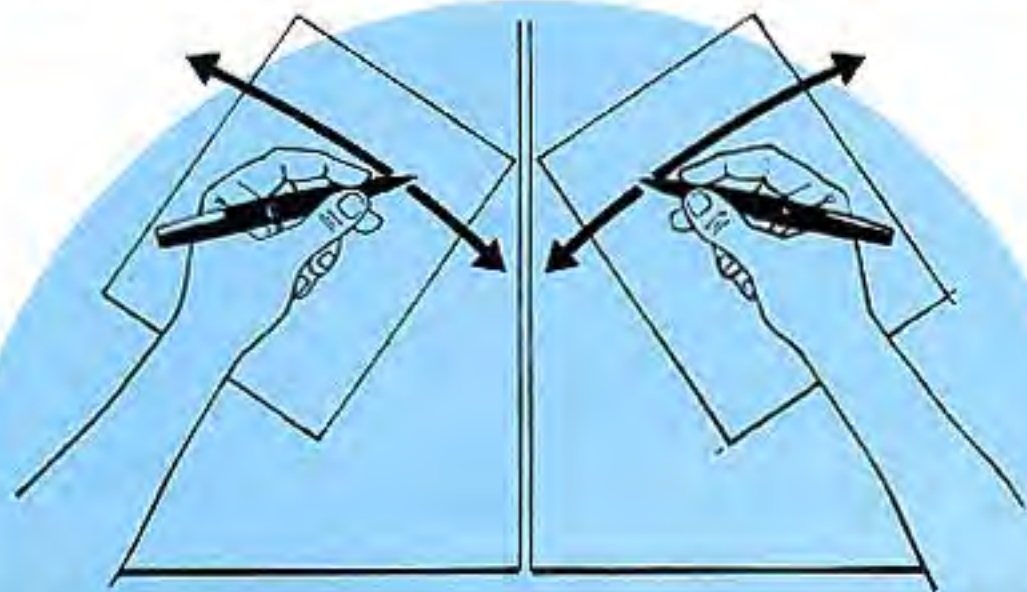
12.1 Moving the writing implement involves the arm, the hand and the fingers. Put simply, the arm moves the hand, the hand moves the fingers and the fingers form the letters.

12.2 The arm should support the hand, leaving the hand free to glide over the page with minimum friction, pressure and tension, and allowing the wrist to flex slightly to the right, whether right-handed or left-handed. The fingers need to contract and release to produce the Foundation Movements used to produce letter shapes.

12.3 To move the writing hand easily across the page, producing clear letter shapes, the arm needs to pivot on the table, allowing minimum or no weight to rest on the hand.



12.4 To counteract the arcing action of the arm's movement the paper can be tilted in the following ways:



13. The material being written on

- 13.1 Different paper can have different textures. Paper can be coarse or smooth, dull or glossy, absorbent or water resistant. It can be blank or lined.
- 13.2 Handwriting difficulties can arise when a writing implement is mismatched with the surface it is writing on; for example, glossed paper can cause loss of control when a ballpoint pen slides over it. On the other hand, when freedom of movement is required for patterns this combination can be highly desirable.

14. Blank and lined paper

- 14.1 It is not recommended that blank or lined paper of particular spacing be designated to particular grade levels or age groups. Instead, students benefit from having available to them a variety of paper types and a variety of line spacings. Within any one group students' needs vary.
- 14.2 Blank paper can allow unrestricted and personalised exploration of drawing and scribbling movements. The distinctive features of the shapes of the NSW Foundation Style letters can be freely explored. Such freedom to explore and practise handwriting movements and to incorporate them into letter shapes of a size that suits each individual student benefits handwriting development.
- 14.3 Lined paper, or paper with lines showing through, can be used to divide the large space of an otherwise blank page into smaller, more manageable corridors. Without touching the lines, students can write along the corridors bordered by the lines. Words can be written to touch under the line, between but not touching the lines, between and touching both lines, or on the line.



15. Slope lines

- 15.1 The NSW Foundation Approach does not specify any particular number of degrees for the slope of handwriting because, although it is common for handwriting to slope slightly to the right, the angle can effectively vary from writer to writer.
- 15.2 Both left-handers and right-handers typically find a slope to the right effective in maximising fluency while maintaining legibility and it is this slope that, generally, is to be encouraged.
- 15.3 However, it is important for legibility that the slope be consistent, whether slightly backwards, upright or slightly to the right. Slope lines can be useful for students to practise producing consistent slope for all letters.

16. Calligraphy

- 16.1 Handwriting can be an art form. However, the artistry of handwriting, for example, calligraphy, is peripheral to the basic intent of the Foundation Approach, which is to help students develop personal handwriting styles that will serve them and the writing they will normally need to produce.

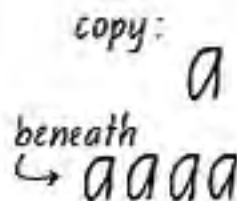
17. Tracing, copying and tracking

- 17.1 A tracing exercise usually looks like this:



- 17.2 It can force students to focus on the shape and size of the letters at the expense of visualising and feeling the movements that create the letters. The size of the letters students are asked to trace over might not suit the size of the movement that best suits them at their individual stage of development.

- 17.3 A copying exercise usually looks like this:



- 17.4 If the shape alone is presented, the student can practise incorrect direction and sequence of movement.
- 17.5 Tracking is beneficial because it focuses on movement. The movement necessary to produce a letter is demonstrated to the student who immediately reproduces the movement. This reproduction can take place during or immediately after the demonstration. It is of no concern that the student might end up with a letter that is a different size from the one presented, because it is the movement that is being emphasised.

18. Assessment and evaluation

The purpose of assessment is to gather evidence of students' achievements as writers and to use this evidence in ways that will contribute to their further growth as writers.

Evaluation is a judgement based on the evidence gained from assessment. Not only the performances of the students should be evaluated, but also teaching programs, and the resources used in teaching writing.

Students write for different readers and for different purposes and this must be considered when assessing and evaluating their writing.

Statement of Principles Writing K-12



Part II, Syllabus for Writing K-6, Section 9, pp.42-44, on Assessment and Evaluation

- 18.1** Assessment and evaluation of students' ability to handwrite should attend to both the process and the product of handwriting.
- 18.2** When assessing and evaluating the process of handwriting, the focus should be on fluency; with the product, the focus should be on legibility.
- 18.3** Assessment and evaluation information should take account of the person, the purpose, the process and the product
- **The person** Writers' individual stages of development and their attitudes towards handwriting both define what is achieved and determine what is achievable. Only within that context should assessors evaluate students' ability to handwrite.
 - **The purpose** Assessment based on a particular sample of handwriting must take into account
 - ★ whether the sample is intended for the writer's eyes alone or for others to read
 - ★ the stage of development of the sample; for example, whether it is a first or final draft.
 - **The process** Students should be observed while they are handwriting and the fluency of their handwriting should be assessed. Factors that influence fluency include
 - ★ visual recall
 - ★ kinaesthetic recall
 - ★ visual recognition
 - ★ kinaesthetic recognition
 - ★ body position and furniture
 - ★ the nature of the writing implement
 - ★ holding the writing implement
 - ★ pressure and tension.
 - ★ moving the writing implement
 - ★ relating the body to the writing surface
 - ★ the material being written on.
 - **The product** Assessing the product is mainly concerned with assessing the legibility of the handwriting. Legibility is necessary if writers are to share their meaning with others.