Using Elkonin Boxes

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One of the earliest researchers to link phonemic awareness to reading was D.B. Elkonin (1963), a Russian psychologist. He developed a method of teaching children to segment the sounds in a word by moving markers into boxes on a piece of paper, hence the name "Elkonin boxes."

You may find it helpful to introduce Elkonin boxes the way Elkonin used them—with pictures that represent short, regular words. Model for students how to say the name of the picture slowly and move a marker (a penny or chip) into a box for each sound in the word *as you say the sound.* Help the students practice moving the markers independently. If necessary, prompt the students to watch your lips as you pronounce each sound, or let them observe themselves in a mirror to help detect each sound visually.
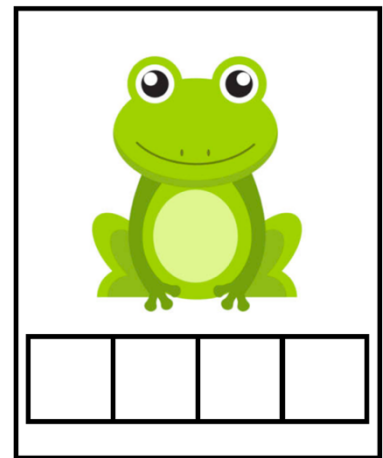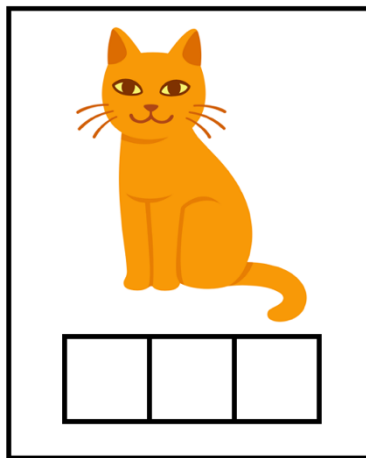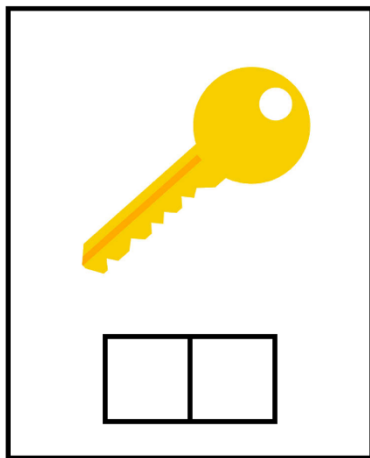
This early use of Elkonin boxes to assist in the development of phonemic awareness has since been adapted to include letters. This adaptation makes the technique more effective for promoting decoding skills (Ross & Joseph, 2019). Use the following steps:

- 📖 Count the sounds in the word with the students.
- 📖 Draw one box for each sound.
- 📖 Use chips to represent sounds at first.
- 📖 Insert the letter(s) for each sound, and say each letter sound.
- 📖 Write the word beneath the boxes, and read the whole word.
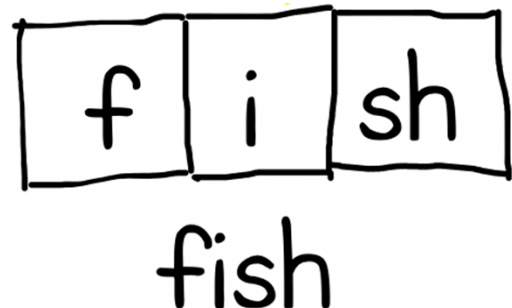
To begin using Elkonin boxes, help the students write the words by drawing boxes. Select only words that have few sounds and that have regular spellings. Ask the students to count the number of sounds in regularly spelled words to determine how many boxes should be drawn. Help them understand that the number of sounds you hear in a word corresponds roughly to the number of letters you see—the length of the word.

Begin by having the students push markers into the boxes previously described. Then, ask them to identify the letter that makes the first sound and prompt them to write that letter in the first box. Help the students identify the letter that corresponds to each sound and write it in the appropriate box.

u	p		d	o	g		h	a	n	d
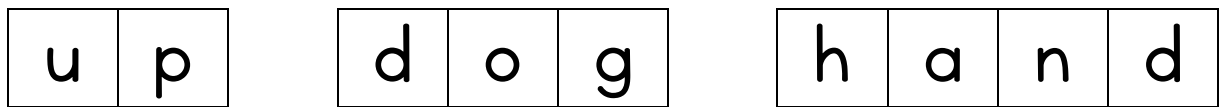
As you move from words with regular, simple spellings to words with more difficult spellings, you may need to put more than one letter in a box to represent a single sound. Use this opportunity to point out to the students that, often, several letters work together to make one sound and some letters are silent.

p	ie		sh	o	p		t	i	g	er
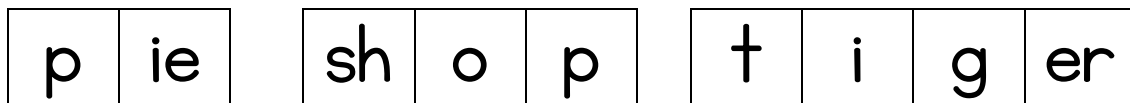
To help students progress to spelling more difficult words independently, use dotted lines to split those boxes in which two letters are required to make one sound.

s	h	e		r	e	a	l		b	o	r	d	e	r
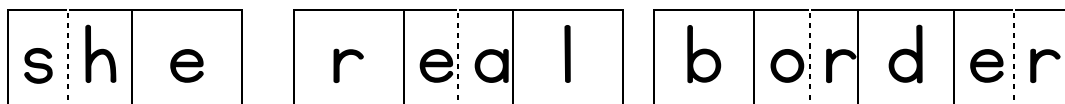
After sufficient practice with each of these activities, the students should be able to make their own boxes when needed. Eventually, they should be able to spell the words using the sounding-out techniques without the Elkonin boxes.

Elkonin boxes can be drawn on paper, chalkboards, or wipe-off boards. They can be used in large groups, small groups, or literacy centers. They can also be used as a method of spelling practice. Studies that have employed Elkonin boxes have consistently found them to be a powerful tool for teaching struggling beginning readers (e.g., Joseph, 2002; Lane, Pullen, Hudson, & Konold, 2009).

Letter Combinations that Share One Elkonin Box

Vowel Patterns

Long Digraphs
Long a
ai (paid)
aigh (straight)
ay (play)
ea (break)
ei (vein)
eigh (eight)
ey (they)

Long e
ea (teach)
ee (tree)
ei (ceiling)
ey (key)
ie (thief)

Long i
ie (pie)
igh (high)
uy (buy)
ye (bye)

Long o
ew (sew)
oa (boat)
oe (toe)
ow (crow)

Oddball Digraphs
au (haul)
aw (saw)
ea (deaf)
ee (been)
ew (chew)

More Oddball Digraphs
ie (friend)
oa (broad)
oo (boot)
oo (hook)
ou (soup)
ue (true)
ui (fruit)

Other Vowel Patterns

Diphthongs
oi (join)
oy (joy)
ou (cloud)
ow (cow)

R-Controlled Vowels
ar (farm)
er (jerk)
ir (bird)
or (fork)
ur (turn)

Oddball
R-Controlled Vowels
or (word)
ar (calendar)
ear (learn)
ear (hearth)

Other Oddballs
igh (light)
ough (bought)
augh (taught)

Consonant Patterns

Digraphs
ch (chew)
ck (back)
gh (tough)
gn (gnat)
kn (knife)
ph (phone)
mb (lamb)
ng (song)
sh (shop)
th (think, that)
wh (whale)
wr (wrong)

Trigraphs
dge (edge)
tch (catch)

Doubles
bb (rubber)
dd (ridden)
ff (cliff)
gg (juggle)
ll (hilly)
mm (hammer)
nn (runner)
pp (happy)
ss (dress)
tt (little)
zz (buzzer)

Endings
-le (simple)
-ed (if /t/ as in asked)
-ed (if /d/ as in spelled)
(NOT -ed if /əd/ as in ended)

Silent Letters

Silent letters go in the box with the nearby sound.

b	o	n**e**

bone

kn	i	t

knit

wr	a	p

wrap

l	**igh**	t

light

c	r	u	m**b**

crumb

-ed Ending

The past tense suffix -ed can be associated with three different pronunciations:

/t/

a	s	**k**	ed

asked

After an unvoiced consonant, -ed represents the /t/ sound.

/d/

s	p	e	**ll**	ed

spelled

/d/

s	t	**ay**	ed

stayed

After a voiced consonant or a vowel, -ed represents the /d/ sound.

/əd/

s	t	ar	**t**	e	d

started

/əd/

e	n	**d**	e	d

ended

After a /t/ or /d/ sound, ed represents /əd/.

Here are a few types of words to avoid using in Elkonin boxes, at least for beginning decoders:

☒ Words with unclear letter-sound correspondences, such as *ocean* or *laugh*
☒ Words with the /ə/ (schwa) sound, such as *fam<u>i</u>ly*, *an<u>i</u>mal*, or *<u>a</u>bout*
☒ Words with the /ŋ/ sound, such as *king*, *song*, or *rang*
☒ Words with /ŋ/ + /k/, such as *think*, *rank*, or *monkey*
☒ Words with syllabic consonants, such as *button* or *model*

References

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