The teaching of phonics, the relationship of sounds to letters in an alphabetic language like English, is important for success in learning to read competently. Noting that there continues to be much debate as to what constitutes good phonics instruction, this paper presents a rather simple but basically sound and inexpensive approach for teaching phonics. It cites four basic principles and then gives directions for producing a phonics instruction kit. The kit, with accompanying instructional strategies, can provide instructors with a means for fostering the learning of phonics among readers. Appendixes contain a lesson plan model for fostering the learning of a consonant, and a list of common rimes and key words. (NKA)
Teaching Students to Use
Phonics Effectively with Emphasis on Rimes and Onsets

By
Edward J. Dwyer
&
Elizabeth Ralston

Department of Curriculum and Instruction
Box 70684
East Tennessee State University
Johnson City, TN 37614

November, 1999
Teaching Students to Use Phonics Effectively with Emphasis on Rimes and Onsets

The teaching of phonics, the relationship of sounds to letters in an alphabetic language like English, is certainly vitally important for success in learning to read competently. Arguments have raged for decades over the importance of phonics. The comprehensive study titled *Beginning to read: Thinking and learning about print* by Marilyn Jager Adams, summarized by Stahl, Osborn, and Lehr (1990), demonstrates conclusively that phonics instruction is an essential part of learning to read.

On the other hand, there continues to be much debate as to what constitutes good phonics instruction. The term “intensive phonics instruction” has even become popular among some politicians who see phonics instruction as the primary means to overcome reading problems. (Routman, 1996; International Reading Association, 1997; Brewer, 1998).

The teaching of phonics has become enormously complicated. There is a myriad of books, kits, and programs purporting to make phonics instruction easy and even fun for children. Radio and TV ads abound shouting the claims of various phonics programs. One can find materials purporting to promote phonics learning for sale in supermarkets and large multi-purpose stores.
The purpose of this article is to present a rather simple but basically sound and inexpensive approach for teaching phonics. The four basic principles will be followed by directions for producing a phonics instruction kit. This kit, with accompanying instructional strategies, can provide instructors with a means for fostering the learning of phonics among readers.

1. Children need to learn the sounds typically associated with single consonants at the beginning of words. Start with familiar words and names of students. The consonants are all the letters except the vowels, a, e, i, o, and u. Since q and u always (except in Shaq and Iraq!) appear together, they are treated as if they are a single consonant. Granted, there are inconsistencies (ex. /c/ & /g/). However, the single consonants are highly reliable. See Appendix A for a model lesson for fostering the learning of a consonant letter (d, /d/). This same model lesson plan can be utilized for providing instruction in all areas of phonics. The typical lesson lasts about 15 minutes. The bulk of instructional time, naturally, should be spent in authentic reading and writing activities. For example, students can apply their blossoming knowledge of phonics while composing original stories and in sharing and reading good literature.

2. Readers must be familiar with the high frequency consonant digraphs identified by Durkin (1993): ph, sh, th, and ch. Durkin
also proposed learning the sound associated with the letters ng and the sound associated with gh. The ph /ph/ consonant digraph (phonics, phone, Phil) does not serve as an onset for common rimes and can be taught separately using the lesson format presented in Appendix A. The /ng/ is dealt with when studying the rime ing. The gh is rare in words ("rough" and "tough", rhyming with fluff) and can be learned through direct instruction and reinforcement through encountering the gh digraph during independent (sustained silent) reading.

3. Blending the letters in consonant clusters into the sounds they represent is also a very important competence for all readers. The 24 high frequency consonant clusters identified by Durkin (1993) are: bl, br, cl, cr, dr, dw, fl, fr, gl, gr, pl, pr, sc, sk, sl, sm, sn, sp, st, sw, tr, tw, scr, str.

4. Rimes (also called graphemic bases and phonograms) are syllables beginning with a vowel and usually containing one or more consonant letters. Stahl, Osborn, and Lehr (1990) reported, based on Adams’ findings, that rimes are highly consistent in how they are pronounced in different words. These researchers reported that nearly 500 words typically found in primary grades reading materials could be made from the following 37 rimes: ack, all, ain, ake, ale, ame, an, ank, ap, ash, at, ate, aw, ay, eat, ell, est, ice, ick, ide, ight, ill, in, ine, ing, ink, ip, ir, ock, oke, op, ore, or, uck, ug, ump, unk.
There are, of course, other principles of importance in teaching phonics. However, the above four will help students immeasurably in learning to figure out words not known by sight. Also, using rimes and onsets fosters phonemic awareness. On the other hand, too much emphasis on phonics generalizations of limited application is time not well utilized and takes time away from authentic reading and writing activities. For example, long (glided) vowels in open syllables (go, tree) and short vowels in closed syllables (cat, tip) can be taught in the context of natural reading and, if necessary, directly in lessons using onsets and rimes following the lesson plan format presented in Appendix A.

The Phonics Kit

Each child can have his or her own phonics kit to use as a manipulative resource to foster awareness of sound to symbol relationships. Print all the single consonant letters using 68 point type on a laser printer. Remember to use *qu* rather than just *q*. Leave about one inch between each letter and each row of letters. Print the rimes in a similar manner on two other sheets of paper and the consonant clusters on another sheet. The four key consonant digraphs can all fit on one line of print and five lines can appear on one page. Use your own judgement relative to using the consonant digraph *ph* in the kit or just leaving it out for individual attention.
Photo copy the sheets containing the consonants, consonant digraphs, rimes, and consonant clusters onto 110 lb. paper of different colors. This sturdy paper is available in several different colors in office supply stores. It is typically used for cover sheets on reports. Use colors that contrast. For example, print the rimes in cherry, the consonant clusters in blue, the single consonants can be white, while the consonant digraphs can be yellow.

The next step is to cover the sheets with a protective plastic coating. Self sticking clear plastic film or self-adheasing sheets of laminating film work well. Also, a laminating machine can be used very efficiently. The plastic film or self adheasing laminating sheets make it possible to cover only the side with the print.

Number all the consonant clusters and rimes on the back. The numbers come from a previously prepared sheet. For example, the rime “ack” might be number 1 while the rime “ank” might be number 2, etc. Keep a master list with the numbers. This is important for keeping track of the rimes and consonant clusters because it’s quite possible for students to lose a few. Periodically, the students can line up the rimes and consonant clusters by number to determine if they have all of them. If not, it’s easy to determine what is missing by comparing the missing number with the matching rime or consonant on the number sheet. There is no need to number the consonants since they can be lined up alphabetically. Since
there are only four key consonant digraphs there is no problem keeping track of them.

Using a paper cutter or scissors, cut the rows between the letters. Then cut the individual units with a scissors or with the paper cutter. Number the consonant clusters and the rimes. The pieces can then all be put in a plastic zip lock bag. When practice is undertaken, the students can open the zip lock bag and pour out the individual pieces.

Make a classroom set using 175 pt. type. Keep the colors the same as in the individual kits for students. As above, cover the large set with a protective plastic covering. Add a small piece of magnetic tape in the middle of the back of each piece. The pieces can then stick to any metallic surface. Students can manipulate the pieces on a liquid marker board, for example. Further, the larger pieces are very useful for whole class or group activities. Please see photographs.

Produce a classroom set of words each containing one of the key rimes. For example, the key word for “ ank” might be “ bank”. Prepare the key words also using 175 pt. type so that the words can be visible throughout the room. The target rime within the key word can be underlined to call attention to the particular rime (bank). The key words can be introduced a few at a time following the format presented in Appendix 2. Gradually, all 37 key rimes are presented on a word wall. See Appendix A for a listing of rimes and common words.
Other key rimes contributed by teachers from a variety of sources are: ace, ail, are, each, eal, eam, ear, eed, eel, eep, eeze, end, ent, ess, et, ike, ill, ime, int, it, ive, oat, oil, old, one, ong, ool, oop, ot, ought, ound, ow, ow, ub, udge, uff, um, umble, un, unch, ung, unt, urn, ust.

Many instructional variations, including games, can be made to facilitate learning of common words containing rimes and onsets. The phonics kit and classroom size set of onsets and rimes provides for an enjoyable type of "hands-on" learning environment. Further, it is a rather easy way to become aware of sound to symbol relationships that are essential for figuring out words not known instantaneously.

References

Appendix A
LESSON PLAN MODEL

NAME: __________________________________________
Class: ___________ Date: _________ Unit: Phonics

Major Unit Goals:
The learner will be able to (TWL) recognize the letters of the alphabet. TLW apply sound to symbol relationships to determine unknown words.

Lesson Objectives: The learner will be able to (TLW)...
The learner will be able to recognize the letter \( d \) and demonstrate the sound associated with the letter \( d \) at the beginning of a word.

Resources: Equipment, Support Materials (Ex. overhead transparencies, film strip...
Pictures and objects represented by words that begin with the letter \( d \).
Ex. dog, desk, doll, dollar, dress, drum, dragon, drop, ...

Introduction: Focus of lesson, Anticipatory Set, Encouraging Motivation
Bring in resources. Show pictures of objects and situations that are represented by words that begin with the letter \( d \). Ask the students what the pictures show. Point out the letter \( d \) and the sound associated with it /\( d \)/. Bring in an eye dropper and squeeze out drops of water. What sound do we hear at the beginning of the word “drop”? Knock on the door. What sound do we hear at the beginning of the word “door”?
Instruction: Teaching Procedures and Student Activities

Write words that begin with the letter d on the board. Ask if anyone's name starts with the letter d (Ex. Doug, Denise, Dan). Write names on the chalk board. Make the letter d by gluing colorful pieces of breakfast cereal (Ex. Froot Loops, Lucky Charms) on construction paper. Suggested procedure: Make a thin line using an Elmer's Glue (or comparable school use glue) squeeze bottle in the shape of the lower case letter d and then affix the cereal to the paper. Put labels on things that start with the letter d in the classroom: Ex. door, desk, drapes, dinosaur (model), Dennis, Denise, Dan, ... Distinguish between upper case and lower case letter d words.

Evaluation of instructional process: informal evaluation of students' understanding

Ask the students to think of new words that start with the letter d. In an inviting manner, ask students directly if they don't respond voluntarily. Write the new words on the chalk board. Identify students who do not respond and/or respond with evident difficulty. Latter, plan for reinforcement instruction for those students who appear to have a need for further assistance.

Assignments: Independent Practice and Homework

Ask the students to find something whose name starts with the letter d at home. Send a note home to parents explaining that the letter d is under study and they are encouraged to help their child find pictures of things represented by words that start with the letter d.
Evaluation of Lesson: What did I do well? What would I have done differently?

This involves follow up study of the effectiveness of the lesson. This reflective time might include watching a video tape of the lesson or listening to an audio tape of the lesson. Did some of the students understand readily? Were some of the students obviously puzzled? Were the examples presented interesting and supportive of the objectives?

Formal Evaluation of Student Learning (Product): Examination, application of ideas....

Unit test.
Appendix B: Common Rimes and Key Words

ack, crack, stack, pack, track, tack, rack, back, black, quack, shack, snack, sack
ain, pain, gain, sprain, brain, chain, grain, main, plain, rain
ake, make, take, sake, lake, brake, cake, rake, stake, snake, bake, shake
ale, stale, pale, scale, tale, male
all, ball, hall, small, tall, fall, mall, call, stall, wall
ain, brain, stain, lain, train, main, pain, gain, grain
ame, came, same, name, blame, flame, game, lame, shame, tame, fame, whale
ank, thank, spank, tank, blank, sank, crank, frank, plank, tank, plank, bank
an, cap, tap, sap, nap, plan, tan, van, pan
ap, cap, tap, sap, nap, lap, chap, gap, map, snap, trap, flap, wrap
ash, cash, mash, sash, clash, crash, dash, flash, gash, splash, trash, gnash, trash
at, sat, hat, pat, splat, mat, chat, rat, fat, flat, bat
ate, mate, state, date, gate, late, plate, rate, skate, hate
aw, saw, jaw, paw, draw, flaw, law, raw, straw, thaw, claw
ay, say, pay, pray, day, tray, lay, may, stay, play, ray, stray, sway, clay, way, play
eat, beat, seat, heat, treat, meat, cheat, neat, wheat
ell, sell, tell, fell, bell, shell, smell, spell, well, yell, swell, bell
est, best, guest, chest, nest, pest, rest, vest, west, test
ice, nice, twice, slice, mice, rice, dice, spice, twice, price
ick, sick, lick, stick, brick, chick, kick, nick, pick, slick, trick, wick, quick
ide, tide, bride, glide, wide, pride, side, slide, guide, hide, ride, wide
ight, light, might, flight, fight, fright, night, right, flight, tight
ill, hill, spill, will, fill, chill, drill, grill, mill, skill, spill, still, thrill, bill
in, skin, bin, tin, chin, din, grin, in, pin, spin, thin, tin, twin, win, pin, skin
ine, mine, spine, dine, fine, line, nine, pine, shine, swine, twine, vine
ing, bring, cling, ding, king, ping, ring, sing, sling, spring, string, swing, thing, wing, wring
ink, think, pink, mink, sink, drink, link, shrink, stink, wink
lip, sip, hip, trip, lip, ship, flip, whip, grip, nip, skip, slip, snip, tip, drip, dip, clip
ir, fir, sir
ock, block, clock, crock, dock, flock, frock, knock, lock, rock, shock, smock, sock, stock
oke, broke, choke, joke, poke, spoke, smoke, stroke, woke
op, chop, crop, drop, flop, hop, lop, mop, pop, prop, shop, sop, slop, top, stop
ore, bore, chore, core, fore, snore, sore, shore, store, swore, tore, wore, more
or, for, or, nor
uck, stuck, luck, duck, muck, truck, buck, puck
ug, hug, snug, smug, lug, tug, dug, bug, jug, mug, plug, rug
ump, bump, dump, hump, lump, plump, jump, rump, slump, stump, thump, trump
unk, bunk, dunk, skunk, chunk, trunk, hunk, junk, shrunk, sunk, spunk
I. DOCUMENT IDENTIFICATION:

Title: Teaching Students to Use Science Effectively with Emphasis on Plants and Insects

Author(s): Edward J. Dwyer, Elizabeth Ralston

Corporate Source: East Tennessee State University

Publication Date: Not yet published

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.

- Level 1
  "PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
  __________Sample__________
  TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

- Level 2
  "PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER
  COPY HAS BEEN GRANTED BY
  __________Sample__________
  TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Edward J. Dwyer
Position: Professor (Dwyer) Assoc Prof (Ralston)
Printed Name: Edward J. Dwyer
Organization: East Tenn State Univ.
Address: CULI Box 70684
East Tenn State Univ.
Johnson City, TN 37614
Telephone Number: (423) 439-7593
Date: 12 Nov '99
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of this document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS).

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price Per Copy:</th>
<th>Quantity Price:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name and address of current copyright/reproduction rights holder:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC Clearinghouse on Teaching and Teacher Education
One Dupont Circle, Suite 610
Washington, DC 20036-1186

If you are making an unsolicited contribution to ERIC, you may return this form (and the document being contributed) to: