Change in Teaching Practices: Case of Phonics Instruction in India
Renu Gupta*
Bangalore, India

Abstract

Whencountries adopt educational reforms, teachers adapt them to local conditions. This paper uses the case of phonics instruction in India to examine how an unfamiliar instructional method is understood and implemented. The data is based on classroom observations and interactions with multimedia scriptwriters. The data show that components of the program are understood if they address a recognized classroom problem and fit familiar routines. However, since there is a fundamental mismatch between the objectives of phonics instruction, which emphasizes reading, and societal demands for written products, the adults choose local objectives, which constrain their implementation of the new program.

© 2013 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license. Selection and/or peer-review under responsibility of Academic World Education and Research Center.
Keywords: Education reform, phonics, teacher beliefs, India.

1. Introduction

In the past few decades, several Asian countries have been advocating educational reforms, but there are concerns about how teachers implement these changes. Research finds that teachers have strong beliefs about teaching and learning that originate in their schooldays (Lortie, 1975) and are resistant to change. Studies find that teachers do not implement top-down programs wholesale; instead, culture may determine what teachers accept (Clarke (2003) for India and Li, Wang and Wong (2011) for China) and teachers may ‘domesticate’ the pedagogy to suit local constraints (Cheah, 1998 for Singapore).

In this paper, I use the case of phonics instruction in India to show how an unfamiliar approach is interpreted and implemented. Phonics, here, is merely an example of pedagogical change, and not necessarily what I advocate. The purpose of the study was to identify some factors that influence teachers’ acceptance of change.

2. Data Collection

Classes were observed and videotaped at two schools (rural and urban) in South India for the two years preceding Grade 1. The rural school had implemented phonics with the help of a consultant, whereas the urban school used the traditional alphabet-spelling approach, in which children are taught the letter names and then spell out words. In addition, I worked with three instructional designers (IDs) based in North India to develop a multimedia phonics

*Corresponding Author: Renu Gupta. Tel.: +9-080-2213-3257
E-mail address: renu@stanfordalumni.org
Program for this age group; interactions over six months were done via telephone, email, and two face-to-face meetings.

2.1. Background of the adults

2.2. All the teachers and IDs had acquired literacy in English through the alphabet-spelling approach, which bypasses sound and emphasizes sight word recognition. All of them had the required teaching certificate. However, the teacher education programs emphasize content knowledge and general pedagogical knowledge (organizing lessons, class management), but do not address pedagogical content knowledge (Shulman, 1986), i.e., how to transform content to teach students. The place of reading in Indian education

The popular perception in India among the general public and in the education system is that literacy in English merely involves learning the letter names and the focus is on visible products, such as copying letters and recitation. As a consequence, reading (as an act of comprehension) is neglected and even misunderstood. One teacher in the rural school told me: “These children are not reading because they are not copying the letters.” In class, teachers used terms that are central to initial reading—picture, word, letter, sound, and spelling—interchangeably.

Phonics differs from this approach by emphasizing reading, rather than writing, and focuses on sounds. For this reason, it is of interest because it allows us to observe (a) how teachers handle instruction that goes against their own practice of using sight words and (b) whether teachers are able to shift their focus from writing to reading.

3. Data analysis and interpretation

The data have to be treated with caution, not merely because it is limited but because it is inferred from my observations. I could not depend on interviews, because both teachers and IDs felt that they were being evaluated.

3.1. Interference from visual strategy

Phonics focuses on the sounds of the letters, but because the adults in the study are unused to sounding out words, they relied on a visual strategy. This is also a result of being fluent readers; literate adults think that the word sugar begins with the sound [s], instead of [sh] (Treiman & Bourassa, 2000).

<table>
<thead>
<tr>
<th>Letter</th>
<th>Word with target sound</th>
<th>Words provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>apple</td>
<td>ark, ape</td>
</tr>
<tr>
<td>E</td>
<td>egg</td>
<td>eel, eagle, ear, erect</td>
</tr>
<tr>
<td>I</td>
<td>in</td>
<td>ice cream</td>
</tr>
<tr>
<td>O</td>
<td>orange</td>
<td>owl, old</td>
</tr>
<tr>
<td>U</td>
<td>umbrella</td>
<td>uniform, unicorn</td>
</tr>
</tbody>
</table>

When selecting words for instruction, the IDs relied on letters and not sounds; for rhyming words, they gave the words plant and ant, which do not rhyme in British/Indian English. The vowels presented a bigger hurdle. Since the English letters for vowels represent multiple sounds, phonics begins by teaching only one sound for each vowel,
which are termed ‘short vowels’. However, for six months the IDs continued to provide words that begin with the required letter (Table 1).

In the classroom, teachers also relied on a visual strategy although they were teaching sounds. When practising the medial and final sounds in words, one teacher used the words case/rose (medial) and socks/stars/seeds (final) to elicit the [s] sound. This puzzled the children who could hear the teacher saying [z] in three of the cases, but were asked to respond with [s].

3.2 Mapping to familiar routines

Both teachers and instructional designers readily took to articulating phonemes in isolation to replace letter names. This appears to be a response to a perceived problem. Even in the urban school, which does not teach phonics, teachers occasionally had to focus on the sounds of the letters and told me that the letters <h> and <w> were especially difficult for children. This can be seen in one spelling exercise:

Child: [for wall] w-a-l-l hall
Teacher: w says what? /w/

Since teachers recognize a problem with letter names, they are open to changes.

In the rural school, phonics instruction begins with the letter <a> to represent the sound /æ/. The letter <a> is written on the blackboard along with pictures of four objects—apple, ant, arrow, and axe. Teachers elicit the meanings of these words from the children and give the mother tongue equivalent. In subsequent sessions, the English words are written beneath the pictures, but the focus remains on the sound. Class chant is followed by groups of four children coming to the blackboard and each child saying the words. This instruction is a departure from conventional literacy instruction that focuses on forming letters and spelling words.

A close look at the phonics lessons show that the pattern is almost identical to the traditional method used to teach Indic scripts, such as Kannada and Devanagari, in which instruction begins with the vowels and each letter is illustrated with pictures of objects that begin with the target sound. (See Alexander (2001, pp. 281-2), Lesson 11.4 for a transcript of a Hindi lesson). In the phonics class, the teachers write the 26 letters on the blackboard in the form of a matrix, which is similar to the way the symbols are arranged in the Indic scripts. Students chant the sounds of the English letters along the rows, as they would for an Indic script.

Further, in the lower grades, the same teacher handles English and an Indian language. It appears that teachers understand phonics through their teaching of the Indian languages and link it to familiar routines and mental representations.

3.3 Meeting global objectives

Once the 26 letters, each representing one sound, have been taught, phonics instruction seems to halt, thereby ignoring two critical components of phonics: multiple sounds for a letter and blending sounds to read words. For
instance, teachers taught the ‘short vowel’ for the letter <a>, but not its use for the sounds in *ape*, *car*, and *all*. After one year of such instruction, a child in the rural school read out the word *ball*:

Child: /b/-/æ/-/l/-/l/-/bæll/.

Instruction also ignored blending sounds to read a word. Both teachers and students continued to articulate distinct phonemes in Year 2.

Teacher: /k/-/l/-/o/-/ə/-/d/- cloud.

A similar resistance is seen in the IDs, who could not understand the need to lengthen sounds. Over four months they created four lessons on blending sounds in 20 words, but in each word the sounds were articulated as distinct phonemes. For instance:

Audio: /m/-/æt/-/mæt/.

The obvious explanation is that the analogy with the Indic scripts stops with the phonemes, and then teachers have no routines or mental models to follow.

However, a different picture emerges when we look at the place of phonics in the classroom. It turns out that phonics plays a very small role and the primary objective is still production in terms of writing/copying. This objective is not driven by teachers, but comes from broader societal understandings of literacy. Parents demand written products. The consultant had taught the teachers phonics for writing, and did not realize that phonics is used to teach reading; hence, the program required children to form the letters before they began phonics. The textbooks reinforced the objective of writing through activities, such as crossword puzzles and writing words in boxes. This leaves teachers in a bind: should they use letter sounds or letter names? When teaching children to read words, teachers alternated between the two methods:

Teacher: [points to individual letters in the word *can*]

Child [uses a combination of letter names and sounds]: c -/æ/-a- n.

Teacher: [uses letter names]: c-a-n?

Child [gives the sound]: /k/ [gives letter names]: c-a-n.

Teacher: Say the first sound…[gives the sound] /k/

Even if teachers want to go beyond letter sounds to tackle reading, the textbooks and inadequate training limit them to using the new approach to meet the objectives of writing/copying.

### 3.4 Content Knowledge vs. Pedagogical Content Knowledge

Shulman (1986) pointed to the importance of pedagogical content knowledge, in which teachers transform content so that their students can understand it. This is particularly important in this study, where the children are only 3:6 years old and do not understand English. Yet, both the teachers and the IDs tended to transmit content knowledge. In the classroom, children were taught technical terms, such as phonograms, and chanted rules, such as “Two letters, one sound”. The IDs designed a phonics program that used terms such as onset, rime, and grapheme. In both cases, instruction or teaching is missing and needs to be addressed in teacher education programs.

### 4. Discussion and Conclusion

This exploratory study of how teachers understand and implement a new program, such as phonics, indicates some factors that impact educational reform. In line with research on other Asian countries, parental and community objectives drive instructional objectives.

Change occurs when teachers recognize a strong need. Teachers in the study knew that letter names were confusing, so they readily accepted the technique of using sounds. However, it is not enough to merely give them a method; it has to be systematized, either through a set of daily lessons plans or by mapping it to a familiar system and teaching techniques, which in this case was the format and techniques for teaching the Indian languages. Within innovation, teachers’ own practices limit uptake. If they use a visual strategy, it interferes with an approach that is based on sounds. This is particularly true of language instruction, because language permeates daily life.
The larger concern is that teachers do not understand the concept of instruction. This is evident in this study, where pre-primary children are expected to recite terms and rules. The Indian educational system is being criticized for its emphasis on rote memorization and reproduction of facts, but teacher education has to grapple with this issue and then train teachers to teach rather than to transmit information.

References


