The Effects of Listening Comprehension and Decoding Skills on Spelling Achievement of EFL Freshman Students

Reima Sado Al-Jarf (King Saud University)

Al-Jarf, Reima Sado. (2005). The effects of listening comprehension and decoding skills on spelling achievement of EFL freshman students. *English Language & Literature Teaching*, 11(2), 35-50.

Thirty six EFL freshman students at the College of Languages and Translation, King Saud University, Riyadh, Saudi Arabia were given a dictation, a listening comprehension test and a decoding test. The purpose of the study was to find out whether EFL freshmen students' spelling ability correlates with their listening comprehension and decoding skills. Data analysis showed that the typical EFL freshman student misspelled 41.5% of the words on the dictation, gave 49.5% correct responses on the listening comprehension test, and 52% correct responses on the decoding test. The median and mean scores showed that the subjects' spelling, listening and decoding achievement is low, which implied that the subjects were having spelling, listening comprehension and decoding difficulties. The students' spelling errors and correct listening comprehension and decoding responses revealed correlations between spelling strong ability, listening comprehension and decoding skills. This means that good spelling ability in EFL is related to good listening comprehension and good decoding skills. The better the listening comprehension and decoding abilities, the fewer the spelling errors. When listening comprehension and decoding skills are poor, spelling ability is also poor. Recommendations for spelling, listening and decoding instruction are given.

[EFL/listening comprehension/decoding skill/spelling ability]

I. INTRODUCTION

Spelling constitutes a major problem for L1 learners in general, and L2 learners in particular. It is problematic for children as well as adult learners and for disabled as well as non-disabled learners. Ability to spell words correctly by L1 and L2 learners should receive special attention in the classroom, because spelling, as Ehri (1987) argued, may influence how words are pronounced, what sounds people think are in words, how quickly people judge spoken word rhymes and how rapidly pronunciations change over the time. Classroom instruction should also focus on the factors that affect spelling achievement such as listening and word recognition abilities, phonological and morphological awareness.

A review of the L1 and L2 literature has shown that studies that investigated the relationship between spelling and listening are very few. Some researchers found that the spoken and written languages are intimately related in the early stages of children's acquisition of reading and writing skills (Treiman, 1985). Difficulties in the analysis of the spoken language can lead to difficulties with the written language. Truch (1994) also found that L1 children, adolescents, and adults who received 80 hours of instruction in the Auditory Discrimination in Depth Program made significant gains in decoding, word identification, spelling, and contextual reading. In L2, school children as well as college students can have spelling and language problems as a result of having listening comprehension difficulties. Ganschow and Sparks (1986) reported that college students who were experiencing severe problems learning a foreign language had deficiencies in listening comprehension.

In addition, a review of the L1 and L2 literature has indicated that numerous researchers have investigated the relationship between spelling and decoding (ability to associate the spoken sound with the written symbol) and reported that decoding was a strong factor in spelling achievement. For example, Yerdon (1994) compared the word recognition ability of 11 children with reading disabilities in third, fourth and fifth grades with their spelling development. Students' developmental spelling stage was assessed by graded word lists. Results showed a strong positive relationship between word recognition and spelling scores. He concluded that spelling instruction in the classroom can affect reading ability, and students should be given instruction and strategies in spelling that will help to increase their reading achievement. Bruck and Waters (1990) examined the influence of reading experience on spelling skill development of six grade students and found that students who were good at both skills consistently outscored their poor peers. Another study Massaro (1984) found a significant positive relationship between fourth grade students' decoding ability and their ability to make appropriate decisions in English spelling. In a study with second

and fifth grade levels, Shanahan (1981) used multiple measures of reading and writing. His findings suggested that the reading-writing relationship for children below the third grade level is best described as a word-recognition-word production (spelling) relationship. For proficient readers, the relationship is more a reading comprehension-prose production relationship. Shanahan (1982) also found that the word recognition factors drawn from the reading set were most related to the spelling variables of the writing set at both grade levels. A study by Zutell and Rasinski (1989) examined the relationship between oral reading abilities and spelling behaviors of third and fifth grade students. Each student read a selection one level above his/hr current grade level, spelled the words on the appropriate grade-level list of the Qualitative Inventory of Word Knowledge and took the appropriate level of the Gates-McGinitie Reading Tests. The students' oral reading was scored for accuracy, rate and phrasing and their spelling was scored for accuracy, phonetic quality and stage of spelling development. Results confirmed a strong relationship between spelling skill and oral reading ability.

Similar results were found among L1 Dutch and Norwegian elementary school students. Mommers and Boland (1987) followed up 582 Dutch students in first, second, third and sixth grade to examine the interrelationship between decoding skills, reading comprehension and spelling skills development. They found that in grade three the influence of reading comprehension on spelling was lower than in the first three grades, but in sixth grade this influence increased considerably. The direct influence of decoding skills on spelling was smaller than in the first three grades. Sovik and others (1996) also found high correlations at all grade levels between spelling and word identification and between linguistic components and achievement of Norwegian elementary school students. They stated that for Norwegian, the length and frequency of words and their interaction were significant factors in children's reading, writing speed, and spelling performance, whereas the regularity factor affected children's spelling only.

At the high school level, Shankwiler, Lundquist, Dreyder and Dickinson (1996) assessed the reading, spelling, and metalinguistic abilities in L1 9th and 10th grade students using an experimental spelling test (SPEL), a Morphology Spelling Test, a Test of Morphological Awareness, a Phoneme Deletion Test, a Decoding Skills Test, and a Controlled Words Decoding Test. They found that learning disabled as well as non-learning disabled students had deficiencies in spelling and decoding. Decoding was a major factor in spelling variance, whereas phonological and morphological awareness played a secondary role. Decoding predicted about half of the variance in spelling.

At the college level, good and poor spellers (50% error rate) were identified by Holmes and Ng (1993) using a misspelled word identification task. Findings showed that poor spellers take longer to make spelling judgments and lacked

word-specific information and knowledge of spelling rules. Poor spellers' inefficient processing was confined to orthographically structured stimuli.

The spelling and decoding skills of L1 and L2 children and adult, learning Dutch and English, were compared by some researchers. Verhoeven (2000) gave L1 and L2 Dutch-speaking children in first and second grade some tasks to test their vocabulary knowledge and word decoding skills (including grapheme knowledge and word blending), word spelling ability (including cipher knowledge and phonemic segmentation), and reading comprehension processes. The results showed that L2 children kept up with L1 Dutch-speaking children on word blending and word decoding tasks, but were less efficient than their L1 Dutch peers on word spelling and reading comprehension. Reading comprehension and vocabulary knowledge had more impact on L2 than L1 learners. In another study, Cook (1997) assessed the spelling of L2 and L1 learners, both children and adults. Results showed similar error rates in L1 children and L2 adults, and a similar distribution of errors both for L1 adults and children and for L2 learners across the familiar categories of letter insertion, omission, substitution, and transposition, apart from a lower proportion of omission errors for L2 users. Many of the errors reflected problems with sound /letter correspondences, some with individual words such as "because". Yet overall, L2 learners performed at a level equivalent to a 15-year-old child, unlike most other areas of language.

Unlike L1, there is a dearth of studies that focus on the effect of listening and decoding skills on the spelling ability of EFL college students. A study by Miele (1998) examined teaching and learning issues surrounding orthography in a community college setting. Her findings indicated that students with poor spelling skills had limited phonological and lexical competence and highlighted the need for addressing spelling in ESL classes. Therefore, the present study aims to find out whether EFL freshman students' spelling ability correlates with their listening and decoding skills and whether there is a significant difference between freshman students' ability in spelling, listening and decoding. Investigating the factors that affect spelling development of freshman college students at the College of Languages and Translation (COLT), King Saud University would have practical significance, since English spelling constitutes a major difficulty for students, especially at the early stages of the training program. Although students at COLT take four courses of listening, speaking, reading, writing, and two grammar and vocabulary building courses in each of the first four semesters of college, the spelling skill is almost ignored. Spelling receives little attention in instruction and evaluation with the exception one type of exercise that combines listening, reading and spelling, which the students practice in every unit of the textbook. In this exercise, the students listen to a dialog from an audio-tape, one sentence at a time, while reading the printed version of the dialog and fill in the missing words that they hear in the flow of spoken dialog. However, the aim of such an exercise is to provide listening not spelling practice. As an instructor of the Listening II course, the author noticed that the students were having listening, decoding and spelling problems when doing the afore-mentioned exercise. Therefore an investigation into the influence of listening and decoding on spelling achievement, and whether poor spelling is associated with poor listening and poor decoding skills would have invaluable implications for spelling, listening and decoding instruction. Any improvement in listening and reading instruction would be expected to result in an improvement in spelling achievement.

II. QUESTIONS

The present study attempted to answer the following questions: (1) Is there a significant difference between EFL freshman students' ability in spelling, listening comprehension and decoding, (2) Does EFL freshmen students' spelling ability correlate with their listening comprehension and decoding skills, that is, are good spelling skills associated with good listening comprehension and good decoding skills?

III. SUBJECTS

Subjects of the present study consisted of 36 EFL female students who were Saudi and native speakers of Arabic. All of the subjects were in their freshman year (second semester) of the translation program at the College of Languages and Translation (COLT), King Saud University, Riyadh, Saudi Arabia. Their ages ranged between 18-19 years old. They were all enrolled in their listening II course that the author taught and were concurrently taking the following EFL courses: listening (3 hours), speaking (3 hours), reading (4 hours), writing (4 hours), grammar (2 hours), vocabulary building (2 hours) and dictionary skills (2 hours). All of the subjects had 6 language courses in EFL in their first semester of college: listening (3 hours), speaking (3 hours), reading (4 hours), writing (4 hours), grammar (2 hours) and vocabulary building (2 hours).

IV. IN-CLASS INSTRUCTION

At the College of Languages and Translation, the *Interactions II: A Listening and Speaking Skills* textbook with a set of audio-tapes, by Elaine Kirn and Pamela Hartman was assigned by the department to be used for classroom instruction.

Each week, the students covered all the exercises in a unit was covered. The typical listening unit consists of the following tasks: (a) listening to a dialog from an audio-tape and filling out blanks in the printed version of the dialog (i.e. the students hear the words that they have to write in the blank), (b) listening to a lecture, then filling out an outline and answering comprehension questions, and (c) listening to short conversations and practicing pronunciation, stress, and intonation. In addition to the tasks and skills covered in the textbook, the instructor taught stress, intonation, assimilation and elision rules. She gave additional listening, pronunciation, stress, and decoding exercises to help students practice those rules.

V. DATA COLLECTION AND ANALYSIS

1. Instruments

The spelling, listening comprehension and decoding data were collected using three tests: (i) a dictation, (ii) a listening comprehension test and (iii) a decoding test. The three tests were given in the middle of the semester (6 weeks after the beginning of the semester) and were conducted in the language lab in one class session. The dictation, listening comprehension and decoding tests were similar to the tasks in the Interaction II textbook that the students practiced in their listening classes. The following is a description of each test:

- (i) The dictation consisted of a taped dialog taken from the students' textbook "Interaction II" textbook. It was a cloze-like type of test in which 100 words were randomly deleted from the printed dialog and replaced by blanks. The students heard the dialog from the audio-tape sentence by sentence while following the sentences that they heard in the printed version of the dialog. While listening to the dialog, the students had to fill in the blanks in the printed dialog from the part of the dialog they had heard. They had to write the exact word that they heard in the flow of the dialog. There were pauses between the sentences of the dialog to give the students ample time to write the word they had heard in the blank.
- (ii) The listening comprehension test consisted of 3 subtests: (A) A taped lecture, an outline of main ideas and supporting details in the lecture, multiple-choice comprehension questions and vocabulary items from the lecture to be defined on the basis of their meanings in the lecture; (B) Short paragraphs that give short pieces of information, several graphic illustrations and inferential listening comprehension questions and (C) A

graph and some statistics to be entered on the graph and inferential comprehension questions.

For subtest (A), the students were required to listen to the lecture from the tape and to fill out the printed outline based on the content of the lecture that they had heard. For subtest (B), the students listened to the short dialogs from the tape, answered multiple-choice questions and defined the vocabulary items based on their meaning in the lecture. In subtest (C), the students listened to short paragraphs from the tape and answered inferential comprehension questions, and labeled the graphic illustrations on the basis of the information given in the texts they had heard.

(iii) The decoding test consisted of 25 stretches of discourse, which were taken from the different units in the students' textbook (Interactions II). The stretches of discourse were selected in order to test the students' ability to convert the printed symbols into spoken sounds. The students read each stretch of discourse aloud and audio-taped her oral reading.

2. Scoring the tests

The students' responses were marked by the author. In scoring the dictation, any response that did not match the target word to be entered in the blank in part or in full or if the target word was not supplied (left blank) was marked as a misspelling. Spelling errors of each student were totaled and the raw scores were converted into percentages.

In grading the listening comprehension test, each missing idea in the outline was counted as an error. Faulty answers to multiple-choice questions or faulty labels on the graph were counted as an error. A student's total listening comprehension score represented the total of the correct responses on the three listening comprehension subtests. Listening comprehension raw scores were converted into percentages as well.

A student's decoding of the 25 stretches of discourse was marked for mispronunciations and misapplication of stress rules. Each mispronounced phoneme and each incorrectly stressed word were counted as incorrect responses. A student's decoding score represented all the words that were correctly pronounced and correctly stressed by the student. Decoding raw scores were then converted into percentages.

3. Reliability

Reliability of the spelling, listening and decoding test scores was calculated using the Kuder-Richardson 21' formula. The Kuder-Richardson reliability coefficient of the spelling test was .94, of the listening comprehension test was .93 and of the decoding test was .90.

4. Statistical Analysis

The mean, median, standard deviation, standard error, range and sum of the spelling, listening and decoding scores were computed using SPSS. To find out whether there is a difference between EFL freshman students spelling, listening and decoding means scores, a one-way Analysis of Variance (ANOVA) was computed. To find out whether there is a relationship between EFL freshman students' spelling ability and listening comprehension skills and between their spelling and decoding skills, the spelling and listening, and the spelling and decoding scores were correlated.

IV. RESULTS

1. Distribution of the Student Scores

Table (1) shows that EFL freshman students in the present study produced a total of 1433 misspelled words, a total of 1902 correct responses on the listening test, and a total of 1857 correct responses on the decoding test. The typical EFL freshman student misspelled 41.5% of the words on the dictation (range = 0 to 80%), gave 49.5% correct responses on the listening comprehension test (range = 15 to 95%), and 52% correct responses on the decoding test (range = 13 to 94%). Median and mean scores show that the subjects' spelling, listening and decoding achievement is low, which implies that the subjects are having spelling, listening comprehension and decoding difficulties. Large variations were found in the listening scores (SD =21.50), decoding scores (SD = 20.08) and spelling errors (SD =18.00).

TABLE 1
Description of the Misspelling, Listening Comprehension and Decoding Scores

Skill	N	Mdn	Mean	SD	SE	Range	Total
Spelling	36	41.4	39.8	18.00	3.00	00-80	1431
Listening	36	49.5	52.8	21.50	3.58	15-95	1902
Decoding	36	53	51.6	20.08	3.35	13-94	1857

2. Relationship between Spelling, Listening and Decoding

Results of the Analysis of Variance (ANOVA) revealed a significant difference between the spelling, listening and decoding means scores (F=4.73; P< .05). Results of the Scheffe test rendered a significant difference between the spelling and listening mean scores (F=3.88; P< .05), and between the spelling and decoding mean scores (F=3.18; P< .05). This means that the mean score is higher for the listening skill than it is for spelling and for spelling than it is for reading.

As to the relationship between the spelling, listening comprehension and decoding abilities by EFL freshman students, results presented in Table (2) show that there is a negative correlation between EFL freshman students' spelling and listening comprehension scores. This means that good spelling ability in EFL is related to good listening comprehension. The better the listening comprehension ability, the fewer the spelling errors. When listening comprehension is poor, spelling ability is also poor.

As to the relationship between spelling and decoding, Table (2) shows that there is a negative correlation between the EFL freshman students' spelling errors and their decoding scores. Here again, good spelling ability is related to good decoding skills. The better the decoding ability, the fewer the spelling errors. When decoding ability is poor, spelling ability is also poor.

TABLE 2
Correlation Coefficients between the Misspelling, Listening, and Decoding Scores

Skills	Correlation
Misspellings and Listening	75**
Misspellings and Decoding	73**
Listening and Decoding	.65*

^{**} P< .01

A third result in Table (2) is that there is a positive correlation between listening comprehension and decoding scores. In other words, good decoding skills are associated with good listening comprehension skills and poor decoding skills are associated with poor listening comprehension skills.

Finally, correction results in Table (2) show that the correlation between spelling and listening is slightly higher than it is between spelling and decoding, whereas the correlation between listening and decoding is the lowest, which means that the relationship between spelling and listening and spelling and decoding is stronger than the relationship between listening and decoding.

^{*} P<.05

VII. DISCUSSION

Findings of the present study have shown that there is a strong relationship between EFL freshman students' spelling and decoding skills. This result is consistent with findings of other studies in the L1 literature. Pitts and Hirshmen (1986) found significant differences between reading abilities and spelling scores of under-prepared college freshmen students as measured by vocabulary, comprehension and total reading and spelling scores using a dictation format, a multiple choice format and independently produced discourse. Wilson (1996), Gill (1989), Juel, Griffith and Gough (1986), Zutell and Rasinski (1989), Shankwiler, Lundquist, Dreyder and Dickinson (1996), Yamada and Kawamoto (1991). Mommers and Boland (1987), Bruck and Waters (1990), Massaro (1984), Shanahan (1981), Sovik and other (1996) all found strong correlations between spelling and decoding skills.

The L1 literature gives several causes of the strong relationship between spelling and reading achievement. For example, Bahr and Black (1989) pointed out that spelling achievement results from knowledge of letter-sound correspondences, which in turn results from verbal IQ and the extent to which reading is carried on using full graphemic cues. Zutell and Rasinski (1989) pointed out that a common body of conceptual word knowledge underlies both spelling and decoding. In this regard, Holmes (1993) indicated that poor spellers' failure to retain detailed knowledge of spellings results from their partial-analysis strategy of word-recognition. Another cause is poor phonological awareness. Results of studies by Rohl and Pratt (1995), Shankweiler and others (1996), McDonald and Cornwall (1995), Truch (1994), Stuarts and Masterson (1992), Levinthal and Hornung (1992) indicated that phonolgical awareness predicted later reading and spelling. Foorman and others (1993) examined first and second grade students' skills in segmenting, reading and spelling 50 words with regular and exceptional spelling patterns and found that phonology is a prerequisite to reading and spelling. Miele (1998) also indicated that students with weak spelling skills had limited phonological and lexical competence.

Instruction in auditory discrimination was found to be another factor that affects good listening and spelling skills. L1 children, adolescents, and adults who received 80 hours of instruction in the Auditory Discrimination in Depth Program made significant gains in decoding, word identification, spelling, and contextual reading (Truch, 1994).

On the basis of the above research findings, EFL freshman students' spelling, listening comprehension and decoding difficulties may be due to insufficient knowledge of letter-sound correspondences and phonological awareness,

insufficient use of graphemic cues, a partial analysis strategy in word recognition, and insufficient auditory discrimination skill.

Findings of prior studies in L1 and L2 have reported several instructional strategies which can be adopted for developing EFL freshman students' spelling ability. For example, Jongsma (1990) reported that all L1 research supports some degree of formal word study. It was also found that community college students who had difficulty with English spelling responded positively to rule-based instruction, which aimed at increasing their understanding of the English orthographic system (Miele, 1998). A structured, graded, multifaceted approach to spelling instruction can be used (Jones, 1988). Integration of oral reading and spelling instruction should be based on word origin and word structure, as they are relevant to oral reading and spelling (Henry, 1988 & 1994). In addition, Morley (1984) suggested a category of tasks for adult and teenage EFL learners that consists of structural analysis listening, with an emphasis on analysis in sound patterns, spelling patterns and some grammatical elements. This task is subdivided into discrimination-oriented listening practice and sound-spelling listening practice.

VIII. RECOMMENDATIONS

Since the spelling, listening comprehension and decoding abilities of EFL freshman students are closely related, and subjects seem to have spelling, listening and decoding problems, it is recommended that spelling instruction be integrated in the reading and listening courses offered at COLT. Before instruction, spelling, listening and decoding skills of EFL freshmen students should be assessed, weakness and problems diagnosed, and listening strategies, word recognition skills and spelling stages determined. To develop the subjects' spelling, listening and decoding abilities, this study recommends that EFL freshman students be gradually introduced to sound-symbol correspondences in the first 10 minutes of each listening and reading class sessions. Instruction in sound-symbol correspondences may cover the following:

- (a) Pronunciation of vowels and vowel digraphs, vowel digraphs with the same pronunciation, silent vowels & final silent e.
- (b) Pronunciation of consonant letters and consonant digraphs, different pronunciations of consonants, consonant graphemes with the same sound, silent consonants, double consonants and geminates.
- (c) Hidden sounds as in: pleasure, pressure, soldier, usually, Asia, explosion, nation, partial, racial...etc.
- (d) Adding –ed, -ing and –er to verbs, adding –s, -es to verbs and nouns.

- (e) Pronunciation of -ed, and -s, -es as in: washed, parked, landed, waved, laughed, washes, parks, lands, laughs.
- (f) Spelling rules for plural nouns.
- (g) Adding prefixes, adding verb-forming, noun-forming, adjective-forming and adverb-forming suffixes, variants of the same suffix, adding a combining vowel or a combing consonant before suffixes.
- (h) Spelling rules for apostrophe, contractions, hyphenation.
- (i) Homonyms, heteronyms and homophones: *import* (N, V), *present* (V, Adj) use (V, N), bass, be & bee, see & see, sight & site.
- (j) Words that are commonly confused: *alter & altar, except & accept, all ready & already.*
- (k) Assimilation rules (the tendency of a sound to be made like the surrounding sounds) as in the following cases:
 - o Voicing and unvoicing of consonants of a following sound: newspaper, I have to go.
 - o Voicing and unvoicing of the inflectional endings -s and -ed: parts, tapes, laughs, parks, locked, passed, laughed, finished.
 - o Changing /dy/ to /dj/: graduate, education.
 - o When word final consonants /s/, /z/, /t/, /d/ are followed by /y/ at the beginning of the next word: *miss you, please you, won't you, did you, kiss you, tease you, hit you, would you.*
- (l) Elision (the process of omitting a sound in certain circumstances) as in the following cases:
 - o k is omitted in the sequence skt: I asked her
 - o /v/ is elided in 'of' especially before /th/: some of the best
 - o /th/ is elided in numeral such as: fifth, sixth, months
 - o The sequence tt is reduced to t: I want to go, I've got to leave
 - o n, t, d, th are deleted when they occur between two consonants such as n & m, n & s, or 1 & s: handsome, grandmother, kindness, depends, accidents, Pants, , Months, fields, builds. Thus Lends & lens, Winds & wins, Fields & feels, Builds & bills sound alike.
 - o In American English, t is omitted after n: *internet, interrupt, international, interactive, advantage.* Thus *lends & lens, winds & wins, fields & feels, builds & bills* sound alike.
 - o The combinations nch, ndg, ltch, ldg are reduced to nsh, nj, lsh, lz as in: *clinch, bench, branch, revenge, strange, filtch, indulge.*
 - o In compounds, a combination of two consonants is reduced to one: *cupboard, background, raspberry*
 - o The vowel between d or t and a final 1 is deleted: *middle, total, bottle, riddle, cattle.*

- o The vowel between any consonant and a final n is deleted: *sudden*, *eaten*, *nation*, *reason*, *happen*, *open*, *darken*.
- (m) In American English, t or tt is substituted by a glottal stop: *Button, mountain, student, bottle, maintenance.*
- (n) t is changed into a flap as in: butter, letter, little, bottle, water, bitter.
- (o) Vowel Linkage as in: an apple, seem ill and see mill, beat it.
- (p) Pause and Juncture that help the listener distinguish between pairs such as: see mill and seem ill; good buy and good-bye, all together & altogether, may be & maybe, all ways & always, all together & all together, every one & everyone, some times & sometimes.
- (q) Stress rules in words, compounds and sentences:
 - o Words that have two different stress patterns such as: *absent, affect, conduct, content, convert, export, import.*
 - o Words ending in -ate: advocate, affiliate, associate, donate, debate, inflate, locate, climate, private, senate, accurate, chocolate.
 - o Words ending in -ment: *comment*, *complement*, *document*, *experiment*, *comment*.
 - o Words ending in -age: page, cage, advantage, language, marriage.
 - o Words ending in -ain: maintain, entertain, obtain, certain, fountain, domain.
 - o Changing the stress pattern of derivatives: photograph & photography.
 - o Stress in compound words: *gold watch, female student, Mayflower, dinning room, post office, by-product, outward.*
 - o Stress in sentences.
- (r) Differences in American and British spelling (color & colour, center & centre, dialog & dialogue, butter, international...etc).
- (s) Differences in American and British pronunciation: either, often, laboratory, deletion of final r etc...

The above spelling/pronunciation generealizations will help students hear phonemes and phoneme combinations in isolation and in the flow of speech, develop their phonemic and morphological awareness, explore sound-symbol relationships and discover spelling patterns. Students should see, hear and pronounce examples illustrating each spelling and pronunciation generalization. They should be encouraged to say words out loud over and over again. Overpronunciation correlates positively with posttest spelling scores (Ormod, 1988). The instructor can encourage the students to organize words in groups to help the see generalize and compare. They can keep their own word families and add examples that illustrate the different spelling and pronunciation generalizations to their own lists. While reading, they should note examples of spelling generalizations in context. Review lessons may be given every now and then. To

reinforce spelling development, the instructor may encourage the students to read for pleasure. College-level ESL students who did more free reading tended to make fewer spelling errors (Polak and Krashen, 1988).

Finally, future studies may investigate the effectiveness of the proposed spelling-pronunciation program by comparing the spelling achievement of EFL freshman students who have received instruction in sound-symbol correspondences with those who have not.

REFERENCES

- Bahr, D., & Black, H. (1989). The relationship between reading using full graphemic cues and spelling. (ERIC Document Reproduction Service No. ED 306 551).
- Bruck, M., & Waters, G. (1990). Effects of reading skills on component spelling skills. *Applied Psycholinguistics*, 11(1), 425-437.
- Cook, V. J. (1997). L2 users and English spelling. *Journal of Multilingual and Multicultural Development*, 18(6), 474-488.
- Foorman, B., & Others (1993). Links among segmenting, spelling, and reading words in first and second grades. *Reading and Writing: An Interdisciplinary Journal*, 5(1), 1-15.
- Ganschow, L., & Sparks, R. (1986). Learning disabilities and foreign language difficulties: Deficit in listening skills? *Journal of Oral reading, Writing, and Learning Disabilities International*, 2(4), 305-319.
- Gill, J. (1989). The relationship between word recognition and spelling in the primary grades. *Reading Psychology*, 10(2), 117-136.
- Henry, M. (1994). Integrating oral reading and spelling instruction for the disabled reader. *Oral reading and Writing quarterly Overcoming Learning Difficulties*, 10(2), 143-158.
- Henry, M. (1988). Beyond phonic: Integrating oral reading and spelling instruction based on word origin and structure. *Annals of Dyslexia*, 38, 258-275.
- Holmes, V., & Ng, E. (1993). Word specific knowledge, word recognition strategies and spelling ability. *Journal of Memory and Language*, 32(2), 230-257.
- Jongsma, K. (1990). Reading-spelling links (questions and answers). *Reading Teacher*, 43(8), 608-610.
- Juel, C., Griffith, P., & Gough, P. (1986). Acquisition of literacy: A longitudinal study of children in first and second grade. *Journal of Educational Psychology*, 78(4), 243-255.

- Levinthal, C., & Hornung, M. (1992). Orthographic and phonological coding during visual word matching as related to oral reading and spelling abilities in college students. *Oral Reading and Writing*, 4(3), 231-243.
- McDonald, G. W., & Cornwall, A. (1995). The relationship between phonological awareness and oral reading and spelling achievement eleven years later. *Journal of Learning Disabilities*, 28(8), 523-527.
- Miele, C. A. (1998). Orthography and English as a second language in a community college pre-academic program. (ERIC Document Reproduction Service No. ED 427 829).
- Mommers, M., & Boland, T. (1987). The development of decoding skills, reading comprehension and spelling skills in Dutch primary schools: A longitudinal investigation. (ERIC Document Reproduction Service No. ED 283 122).
- Rohl, M., & Pratt, C. (1995). Phonological awareness, verbal working memory and the acquisition of literacy. *Oral Reading and Writing: An Interdisciplinary Journal*, 7(4), 327-360.
- Shanahan, T. (1982). The nature of the reading-writing relationship: A multivariate approach. (ERIC Document Reproduction Service No. ED 233 337).
- Shankweiler, D., Lundquist, E., Dreyder, L., & Dickinson, C. (1996). Reading and spelling difficulties in high school students: Causes and consequences. *Journal of Experimental Child Psychology*, 45(2), 168-187.
- Snowball, D. (1997). Spelling strategies: Make smart use of sounds and spelling patterns. *Instructor*, 106(5), 34-35.
- Stuarts, M., & Masterson, J. (1992). Pattern of oral reading and spelling in 10-year-old children related to prereading phonological abilities. *Journal of Experimental Child Psychology*, 54(2), 168-187.
- Treiman R. (1985). Phonemic analysis, spelling and oral reading. *New Directions* for Child Development, 27, 5-18.
- Truch, G. (1994). Stimulating basic oral reading processes using auditory discrimination in depth. *Annals of Dyslexia*, 44, 66-80.
- Verhoeven, L. (2000). Components in early second language reading and spelling. *Scientific Studies of Reading*, *4*(4), 313-330.
- Wilson, V. (1996). The relationship among orthographic components of word identification and spelling for grades 1-6. Paper presented at the Annual Meeting of the Society for the Scientific Study of Oral reading, New York, NY.
- Yamada, J., & Kawamoto, N. (1991). Oral reading, spelling and recognition of briefly exposed words and non-words. *Perceptual and Motor Skills*, 73(2), 387-395.
- Zutell, J., & Rasinski (1989). Oral reading and spelling connections in third and fifth grade students. *Oral Reading Psychology*, 10(2), 137-155.

Sovik, N., & Others (1996). The relationship between linguistic characteristics and reading/writing performances of Norwegian children. *Reading and Writing: An Interdisciplinary Journal*, 8(2), 199-216.

Examples in: English

Applicable Languages: English Applicable Levels: College

Reima Sado Al-Jarf College of Languages and Translation, King Saud University P.O. Box 69827, Riyadh 11557, Riyadh, Saudi Arabia Phone/Fax: 966-14682847

e-mail: reemasado@msn.com

website: http://reemasado.tripod.com

Received in April, 2005 Reviewed in May, 2005 Revised version received in June, 2005