Deficiencies in spelling ability are present in varying degrees among elementary and secondary school students. Often these deficiencies are accompanied by related reading difficulties. As a means of combating spelling difficulties and thereby also of combating reading difficulties, it is suggested that the visual-auditory-kinesthetic-tactile (VAKT) approach be used in learning to spell. Originally designed by Grace Fernald, the method provides multimedia exposure through sight, hearing, and touching. Six steps to be followed in using the VAKT method are (1) inspect the whole word to be learned, (2) pronounce or enunciate the whole word, (3) write the whole word while pronouncing each syllable, (4) dot the "i's" and cross the "t's" in the left to right sequence, (5) pronounce each syllable and underline it, and (6) pronounce the whole word again. Reports of the use of the VAKT method seem to indicate that it is a valuable means of learning to spell and that its value might well transfer to other reading skills. References are included. (MS)
USING THE VISUAL-AUDITORY-KINESTHETIC-TACTILE
TECHNIQUE TO SOLVE SPELLING

PROBLEMS IN ELEMENTARY AND SECONDARY CLASSROOMS

by

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There is sufficient ground to assert that many students in elementary and secondary classrooms show deficiencies in various degrees in the art of spelling. Concomitantly, most of these inefficient spellers are also plagued by a variety of reading deficiencies. This vicious circle is evidenced by Furness(3) who reports correlation coefficients between reading and spelling ranging from .80 to .85 and by Spache(7) who reports a correlation of .60 between spelling and vocabulary. Plessas and Petty(6) as well as Staiger(8) emphasize that good readers are most often good spellers and poor readers are invariably poor spellers. With almost no exception the writer can attest to these findings supported by 510 research samples from elementary classrooms and 465 from secondary classrooms. Inefficient spelling skills then do not dwell in isolation. Instead, poor readers in addition to having reading deficiencies will also have spelling deficiencies.

What are some of the sources known to contribute to inefficient spelling? Cole(1), Marksheffel(5) and others suggest that spelling errors can be attributed to (first) an individual's attitude toward spelling, (second) the difficulties inherent in the English language, and (third) inappropriate
methods in teaching spelling. While little or nothing at present can be done about the second attribute, the third statement appears of particular interest, for the teaching of spelling does definitely influence if not to some extent determine the individual's attitude toward spelling. Elementary and secondary students, for instance, are not inefficient spellers because they attend now grade four or six or ten, but rather are afflicted with varying spelling disorders of longer standing prior to being promoted from one grade to another. Grace M. Fernald (2) refers to student failure to spell as being "due to bad habits forced upon the child by the school in the attempt to teach him to spell."

Without belaboring existing weaknesses in the teaching of spelling, it suffices that many elementary and secondary students in public and separate schools have been engatively conditioned and that, in part, they are psychologically the product of it. In most cases they are aware of this condition by professing that they have not learned to spell yet, that they regard themselves as failures in spelling, and that they have given up hope to learn what they now believe being the impossible. In some students the prolonged history of spelling failure resulted in the "I don't care" attitude of apparent indifference to any and all conventional spelling of English words. In other students, repeated failure provoked them to retort to active and/or
passive resistance to write words incorrectly over and over again. A few, nevertheless, struggle on incessantly to memorizing letter names in sequential order which, through some sort of magic predilection, are supposed to convert themselves into meaningful English words.

This predicament and sometimes distress of physical and psychological nature appears to be eminently pronounced by silent defiance to opposing views to improving spelling in spite of. Yet, it must be recorded, that personal barricades of indifference, resistance, and defiance diminish gradually when spelling instruction begins with the student's tentative instructional level and, then, proceeds by using a multi-media approach in accordance with his own capability.

While it is beyond the scope of this paper to discuss how to ascertain students' instructional spelling levels, it interests to state that without such knowledge teaching spelling becomes a hazardous enterprise equal to a blind man leading the blind. Effective instruction through application of the multi-media approach is also dependent upon cognition of students' tentative instructional spelling levels(5).

Why utilizing a multi-media approach in teaching elementary and secondary students to spell? It is with great reluctance from my part to repeat over and over again that educational institutions in spite of seemingly advanced research knowledge concerning the laws of learning and in spite of what is known about and
of individual psychology perniciously adhere to antiquated methods of learning; i.e., one specific technique by which all students must be taught and are forced to learn. Yet, the clamor is widely heard that not all students learn to spell and that all students are different. May be these are just blatant clichés, meaningless otherwise. Perhaps, human unawareness plus the temptation of easy applicable and workable mechanical instruments and materials help to ignore the well-known psychological maxim that no two individuals learn the same word to spell in the same way. Consequently, well trained and efficient college and high school instructors know that there is neither "one-technique-for-all" in learning to spell nor a "panacea" method to remediate and ultimately to prevent the common spelling quandary.

What is a multi-media approach in teaching elementary and secondary students with spelling problems how to spell? The Visual-Auditory-Kinesthetic method or technique, abbreviated known as V.A.K., is such a multi-media approach which can assist students in grades one to twelve in correcting efficaciously faulty spelling and simultaneously lead students to work independently in the acquisition of new words(9). Holmes' Substrata-Factor theory indicates that at the high school level approximately two-thirds of the students are predominantly visually minded, somewhat less than one-third will learn better through their auditory senses, and a small percentage, mostly boys must rely heavily upon the proprioceptive or kinesthetic senses as their most efficient input channel.
Therefore it can be concluded that functional instruction in learning to spell must be accountable to a multi-media approach such as the Visual-Auditory-Kinesthetic-Tactile approach. In part, this technique is reflected in the literature by the Fernald-Keller Tracing Method, the Monroe Sounding-Tracing Method, The Gates Visual Approach, and the Horn-Ashbaugh Visual Procedures. In addition, other numerous clinical modifications of the Visual-Auditory-Kinesthetic-Tactile technique are reported in the literature, such as The Cooper Method, The Hegge-Kirk-Kirk Method, the Gillingham-Stillman Method, and The McGinnis, Kleffner, and Goldstein Association Method.

After deliberating only the bare essentials implicit in educational and psychological theories, the question of how to make the multi-media of the Visual-Auditory-Kinesthetic-Tactile technique instructional for the teacher and functional for the student deserves to be answered.

As an electrician must know all tools and the various jobs they can perform, so the classroom and subject area teachers must know the tools and their various jobs they can perform in spelling diagnosis and remediation.

Visual denotes visual discrimination characterizing an experience that belongs to the sense of vision by which differences and likenesses in complex visual patterns and spatial sequences of given symbols are seen. Auditory denotes auditory
discrimination pertaining to an experience that belongs to sense of hearing by which similar sounds are heard and temporal sequences of sounds distinguished. Kinesthetic-Tactile denotes the sense that yields knowledge of movements in terms of lip- and throat movements in recalling sounds as well as in terms of finger-hand movements in recalling tracing the word.

None of these media exist in isolation or separation while attempting to learn to spell. It may also be extremely difficult to discern when and where the visual act ends, the auditory act begins, and to what extent visual and auditory senses are participating and, perhaps, supporting Kinesthetic-Tactile movements. Each sensory faculty is related to the other and all are interrelated in the sense to initiate the encoding process or intake of the word to be spelled and to secure correct association of symbol and sound together with recall in the decoding process or output of the finished response.

It may be suggested at this point that elementary and secondary students may be capable of recognizing and attaching meaning to a word they read, but may be quite unable yet to spell the same word correctly. The latter depends on student proficiency to associate forty-four English sounds to twenty-six letter symbols in the encoding process, on his listening skills, his personal attention and motivation and his recall power in order to reproduce or decode each symbol as to place, sequence, and form. Visual discrimination beyond superficial
recognition is at work. The complex pattern of the word and the spatial orientation of the symbols require meticulous inspection from left to right. This process involves studying the word precisely for visual recall; that is, recall after the stimulus has been removed. However, at this stage of perception not all students do profit in equal measure from visual discrimination. Therefore, students visual image of the word in print or script may be either vague, or blurred, or even nonexistent. Auditory discrimination then by which the word is sounded out needs to support or assist the visual act. Pronouncing and sometimes enunciating the whole word, its syllables, and then the whole word again helps to establish auditory imagery. By means of this auditory function an individual can more distinctively recall the word or the letter symbols in terms of the respective sounds. In the case of the kinesthetic individual, movement is employed. Many a times, when the word has been properly and sufficiently pronounced, lip- and throat movements may aid the kinesthetic inclined student to think the word in terms of the acquired sound movements. Should the lip- and throat movements fail to either produce or assist in the clear kinesthetic image, the part of the tactile method or tracing must be applied. In tracing, the word to be learned is first written or printed by the teacher with crayola on a paper 4" x 11". With forefinger and the middle finger held stiff contacting the letter symbols, the word is traced. Thus, the visual-
auditory-kinesthetic-tactile technique allows students to study the word through stimulation of one or more of the senses in accordance with his individual needs. The visual perceptive student will picture the word as he has not only recognized but inspected it. The auditory perceptive student, while his visual word image is either incomplete or nonexistent, will pronounce the word in order to write it correctly. The predominantly kinesthetic-tactile perceptive student needs to retort to thinking in terms of lip-, throat-, or finger movements in order to reproduce the letter sequence within a word in every detail.

Most of the students as most people will greatly benefit by combining visual, auditory, kinesthetic, and tactile functions in learning to spell. The possible combination of four faculties stimulated by sensory interaction results in the Visual-Auditory-Kinesthetic-Tactile Technique does permit each student to develop independently this type of word image which will give him all the details of the word he is attempting to learn. The aforementioned portends that in spelling all the details of a word must be perceived and then reproduced correctly without seeing or hearing the stimulus. In spelling, the whole word is either correct or incorrect; no partial correctness is acceptable at all.

To let students partake in and become knowledgeable recipients
of the multi-media approach, the Visual-Auditory-Kinesthetic-Tactile Technique must be taught to them in such a manner that they become skillful masters in using independently this technique. Sheer informational memorization of each step is useless in time and effort. Each step must be understood to the extent that the student can perform each step to the succeeding one, and in the final analysis, apply each step within the entire technique in his attempt in learning independently to spell. Elementary and secondary students need to learn and to practice the following six steps:

1. Inspect the whole word to be learned.
2. Pronounce or enunciate the whole word.
3. Write the whole word while pronouncing each syllable.
4. Dot the "i's" and cross the "t's" in the left to right sequence.
5. Pronounce each syllable and underline it.
6. Pronounce the whole word again.

When the tactile approach is needed as will in many or all primary grades and with all severely inefficient spellers regardless of grade and age, the teacher will write with crayola the word in script or print on a 4" by 11" paper following steps two through six. The students at all time will watch and observe the teacher who is tracing the word with his two fingers stiff following again steps two through six. After teacher's demonstration of writing (kinesthetic) and then tracing (tactile)
the word to be learned, the student then will trace the word applying the same steps till they express a desire to write the word on the reverse side of the same 4" by 11" paper.

In conclusion, these six steps of the Visual-Auditory-Kinesthetic-Tactile Technique, while being in agreement with sound educational procedures and psychological theories, will assure each student to learn to spell individually and independently. Individually, because he can select the approach by which he learns most easily and has a chance to learn it in his own way. Independently, because the student knows sequence and content of each step and of the technique as a whole and can, therefore, apply the Visual-Auditory-Kinesthetic-Tactile Technique wherever and whenever he needs it.
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