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WHOLESOMENESS: AN ATTITUDE DIMENSION OF AGRICULTURE

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Every individual preparing for a place in today's technical world of work must have general education ability to read, write and compute, a vocational competence realistic for gainful employment, and most important of all, proper working habits and attitudes. Proverbs 3:13 states, "Happy is the man that findeth wisdom, and the man that getteth understanding." It can also be said, happy is the man who has good working habits and good attitudes. A good attitude coupled with determination can add much to knowledge and experience. Most persons who lose their job do so because of undesirable attitudes, poor working habits, or inability to get along with other people. Attitude is the key to personal success.

An attitude is an evaluation, ranging from negative to positive, of some thing or idea. Attitudes are complex, intense, and vital to one's being and actions. Attitude is a dimension of connotative meaning. Connotative meaning is the underlying or additional meaning held in relation to some explicit or recognized meaning of some thing or idea. For example, consider the concept flower. An explicit meaning is "blooms or bloom; a plant raised for its bloom." The connotative meaning to a florist might be beneficial, productive, or profitable; to a hobbyist -- beautiful, pleasant, sweet, or healthy; or to a robust individual -- small, weak, feminine or light.

Osgood, Smith and DiVesta each selected concepts and adjectives peculiar to his field of specialization. Suitable antonyms were selected for each of the adjectives and constructed into seven-point scales.

good ____:____:____:____:____:____:____ bad

The concepts and scales were paired in every possible combination and placed into a data collecting schedule. The raw scores from the scales were factor analyzed, which is a method

of determining the number and nature of common underlying variables among large numbers of measures. The underlying variables in this situation are the dimensions of connotative meaning.

This process was utilized in determining the connotative meaning dimensions for agriculture. Concepts and adjectives were selected from the various fields of agriculture. The six concepts selected to represent the various areas of agriculture were milk, flower, lumber, agricultural mechanics, agricultural journalism, and U.S. Agricultural Policy. In this study six concepts were rated on 32 adjectives scaled by 103 Pennsylvania agriculture teachers and 90 Pennsylvania State University students in agriculture. A validation group of 66 agriculture teachers rated six alternate concepts on the 32 scales.

The findings of the study revealed four dimensions in order of importance with their scales:

(1) Evaluative

Helpful-obstructive
Practical-impractical
Desirable-undesirable
Superior-inferior
Adaptable-unadaptable
Effective-ineffective
Profitable-unprofitable
Good-bad
Beneficial-harmful
Productive-barren

(2) Wholesomeness

Fresh-stale
Living-dead
Beautiful-ugly
Sweet-sour
Clean-dirty
Healthy-unhealthy
Pleasant-unpleasant

(3) Potency

Heavy-light
Large-small
Hard-soft
Manly-feminine
Strong-weak
Deep-shallow

(4) Activity

Free-confined
Sharp-dull
Fast-slow
Active-passive
Progressive-archaic

The wholesomeness dimension is unique for agriculture. An extensive review of literature failed to cite a comparable dimension. The dimension was labeled wholesomeness because of the association of the adjectives with nature and rural living.

This study revealed that agriculture teachers and students were able to differentiate among the concepts in agriculture according to the wholesomeness dimension. They could also

differentiate among the four dimensions for a given concept. Agriculture teachers and agriculture students share the same connotative meaning dimensions for concepts in agriculture.

It was concluded that words used to express feeling in agriculture are either evaluative, wholesome, potent, or active. It was suggested that the wholesomeness dimension measures the esthetic values or attitudes and the evaluative dimension measures the economic or materialistic values.

Use of the Agricultural Semantic Differential

The following is a suggested procedure for using the Agricultural Semantic Differential to measure attitudes:

1. Select five to twenty key concepts to represent the area to be measured.

   Example: Ornamental horticulture -- grass, turf, shrubs, fertilizer, architect, etc.

2. Decide whether esthetic, economic, or a combination of attitudes are to be measured and use the appropriate scales.

3. Pair every possible combination of concepts and adjective scales into schedule as shown:

   Grass

Fresh	____:____:____:____:____:____:____	Stale
Dead	____:____:____:____:____:____:____	Living
Beautiful	____:____:____:____:____:____:____	Ugly
Sweet	____:____:____:____:____:____:____	Sour
Dirty	____:____:____:____:____:____:____	Clean
Healthy	____:____:____:____:____:____:____	Unhealthy
Pleasant	____:____:____:____:____:____:____	Unpleasant

4. Subject the exercise to individuals.

5. Scoring is done by rating the favorable word a maximum seven and pro-rating to the unfavorable word with a minimum score of one. The possible choices for the concept "grass" would be as follows:

7 -- extremely related to fresh
6 -- closely related to fresh
5 -- slightly related to fresh
4 -- neutral or unrelated
3 -- slightly related to stale
2 -- closely related to stale
1 -- extremely related to stale

6. The esthetic attitude for "grass" could be interpreted from the average of all the ratings on the scale as follows:

positive attitude -- above 4
neutral attitude -- even 4
negative attitude -- below 4

Further study of the Agricultural Semantic Differential can serve to (1) improve its construct validity, (2) compare the wholesomeness and evaluative dimension, (3) investigate potential usefulness in predicting academic or occupational success, counseling students and evaluating programs by measuring attitude change.

BIBLIOGRAPHY

1. DiVesta, F. J. A Developmental Study of the Semantic Structure of Children -- Technical Report No. 8, Research Grant No. HD--00872, National Institute of Child Health and Development, 1964.

2. Larrabee, David E., Sr. Development of Semantic Differential Scales for Measurement of Concepts in Agriculture. Thesis, D. Ed. The Pennsylvania State University, 1969.

3. Osgood, C. E., G. J. Suci, and P. H. Tannenbaum. The Measurement of Meaning. Urbana, Illinois: University of Illinois Press, 1957.

4. Smith, Raymond G. "Development of a Semantic Differential for Use with Speech Related Concepts," Speech Monographic. Volume 26 (1959), pp. 262-272.

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