

ATTITUDE AND PERSONALITY CHANGE IN PROSPECTIVE  
VOCATIONAL TEACHERS RESULTING FROM APPRENTICESHIP  
PROGRAMS

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"To neglect educating and training the disadvantaged portion of our society is a waste of human resource which is detrimental to the welfare of our nation. Therefore, it is imperative that we place special emphasis on educating and training more than thirty-five million disadvantaged persons in this country."<sup>1</sup> One of the problems most readily apparent to educators is that of procuring teachers who are qualified to competently deal with the disadvantaged.

Investigators of the problem of working with disadvantaged children have identified that teachers often have low expectations for disadvantaged students' learning ability and often view the disadvantaged problem with distaste rejecting as unworthy of their efforts the children who most need to learn the value of learning.<sup>2</sup> Two commonly identified factors that affect the success of the teachers in dealing with disadvantaged are the teacher's personality integration and the teacher's attitude toward the disadvantaged.

The key to improved instruction for disadvantaged children is improved training for their teachers.<sup>3</sup> Making prospective teachers acquainted with the problems of teaching the disadvantaged before they ever take charge of a classroom is perhaps the most effective long range approach to improved teacher training.<sup>4</sup> An increased emphasis is placed on compensatory education for the disadvantaged, educators cannot ignore the necessity of providing prospective teachers with realistic and direct experience that sharpen their awareness of cultural and social class concept.<sup>5</sup>

Additional research in extended externships or apprenticeships is needed to discern if they prepare teachers more adequately to teach disadvantaged youth.<sup>6</sup>

## The Problem

This study was conducted to determine if a vocational apprenticeship program for prospective vocational education teachers would produce a change in apprentice attitude and self-actualization.

## The Apprenticeship Program

Teacher educators feel insecure in trying to develop pre-service teacher programs and local school districts and universities must work together to solve the problem.<sup>7</sup> Teacher training institutions purporting to equip candidates for teaching in almost any type of environment must give more than cursory attention to whatever tasks, difficulties, and procedures appear vital in successful teaching in poor neighborhoods.<sup>8</sup>

In order to assist in resolving some of these problems, the apprenticeship programs with vocational agriculture programs and programs for the disadvantaged were studied.

The ten week training programs for apprentices were conducted during the summer of 1971. The apprenticeship programs entailed the prospective vocational teacher being placed with a vocational agriculture program or a program for the disadvantaged for the ten week training period. The apprentices were under the direction of the local school, Purdue Agriculture Education staff, and Indiana State Department of Public Instruction, Vocational Division, personnel.

## The Samples

The samples of this study were composed of twenty-five apprentices with vocational agriculture programs, seven apprentices with programs for the disadvantaged, eight non-participating for the program with the disadvantaged, and seven supervisors of programs for the disadvantaged.

The program was funded, and the apprentices were paid by the Indiana State Department of Public Instruction, Vocational Division.

Apprentices with programs for the disadvantaged. The names of volunteers for the apprenticeship program were pooled and the participants selected at random. The apprentices were randomly assigned to schools. The schools were selected by scribing a forty-mile diameter circle around the location at which the apprentice wished to reside for the summer. A list of schools within the circle were compiled and ranked by random selection. Final assignment was made by the university coordinators who contacted the schools, in rank order, until an accepting school was found.

Apprentices with vocational agriculture programs. Twenty-five apprentices were selected from those volunteering for this program. The apprentices were allowed to choose the school with which they wished to work from those previously indicating a willingness to cooperate in the program. Apprentices were not allowed to return to their home high school or to work under one of their former vocational agriculture instructors.

Non-participating applicants for the program with the disadvantaged. This group was comprised of those volunteering for the apprenticeship program with the disadvantaged but not selected in the random selection to participate in the program. This group was termed the control group.

Supervisors of programs for the disadvantaged. School personnel directly responsible for the apprentice with the disadvantaged during the apprenticeship program comprised this group. The schools are those selected at random and agreeing to cooperate in the apprenticeship program.

### The Design

The posttest-only control group design was selected "to avoid experimenter-introduced pretest bias due to the 'give away' repetition of highly unusual content (as in attitude studies)."<sup>9</sup>

### The Instruments

Measurement of attitude was obtained using the semantic differential (SD). Concepts of disadvantaged children (DC), parents of disadvantaged children (PD), and myself (My), the apprentice, were selected. Each concept was scaled using thirty-five items by the method prescribed.<sup>10</sup> For each concept the following scales were used:

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. good - bad                 | 18. healthy - sick            |
| 2. beautiful - ugly           | 19. active - passive          |
| 3. valuable - worthless       | 20. cautious - rash           |
| 4. nice - awful               | 21. refreshed - weary         |
| 5. fair - unfair              | 22. colorful - colorless      |
| 6. kind - cruel               | 23. interesting - boring      |
| 7. happy - sad                | 24. sensitive - insensitive   |
| 8. fast - slow                | 25. aggressive - defensive    |
| 9. sociable - unsociable      | 26. competitive - cooperative |
| 10. willing - unwilling       | 27. sophisticated - naive     |
| 11. clean - dirty             | 28. public - private          |
| 12. pleasurable - painful     | 29. humble - proud            |
| 13. successful - unsuccessful | 30. thrifty - generous        |
| 14. progressive - regressive  | 31. honest - dishonest        |
| 15. reputable - disreputable  | 32. peaceful - belligerent    |
| 16. believing - skeptical     | 33. relaxed - tense           |
| 17. wise - foolish            | 34. positive - negative       |
|                               | 35. quick - slow              |

Self-actualization, the second domain of interest, was investigated using the Personal Orientation Inventory (POI). The POI is produced and marketed by the Educational and Industrial Testing Service, San Diego, California. Self-actualization refers to the tendency of an individual to develop and utilize his unique capabilities, of potentialities, free of inhibitions and emotional turmoil of those less self-actualized.<sup>11</sup> The author has identified twelve dimensions of the concept:

1. Time Incompetence (Ti)
2. Time Competence (Tc)
3. Other Directed (O)
4. Inner Directed (I)
5. Self-Actualized Value (SAV)
6. Existentiality (Ex)
7. Feeling Reactivity (Fr)
8. Spontaneity (S)
9. Self Regard (Sr)
10. Self Acceptance (Sa)
11. Nature of Man (Nc)
12. Synergy (Sy)
13. Acceptance of Aggression (A)
14. Capacity for Intimate Contact (C)

### Test Administration

The evaluation instruments, POI and SD, were administered to apprentices during separate group meetings following the apprenticeship programs. Administration of instruments to supervisors and non-participating applicants were either administered separately under independent supervision or were mailed, completed privately, and returned. Responses were gained from all people involved. However, one non-participating applicant failed to respond to the POI, and mean values for the dimensions of that group were substituted.

### Results

The data obtained for the comparison groups was analyzed using analysis of variance and the Newman-Keuls Sequential Range test by the usual computerized techniques. Analysis of variance yield F-ratio and probability level results. All items, scales and dimensions, that showed a probability level less than .10 ( $p < .10$ ) were analyzed by the Newman-Keuls test, which reports significance at the .05 ( $p < .05$ ) and .01 ( $p < .05$ ) levels. The Newman-Keuls test is a conservative test. Therefore, results from analysis of variance at less than the .05 level ( $p < .05$ ) were not always significant by the Newman-Keuls test. Further data was obtained using evaluation forms which requested opinions from those associated with or taking part in the programs.

Table 1 summarizes the results of the Newman-Keuls test on items of the POI. These results illustrate those dimensions of self-actualization that were found significant at the .05 or .01 ( $p < .05$  or  $p < .01$ ) levels.

Table 2 summarizes the results of the Newman-Keuls test on the scales of the SD. These results illustrate those scales that were found significant at the .05 or .01 ( $p < .05$  or  $p < .01$ ) levels.

TABLE 1

NEWMAN-KEULS SEQUENTIAL RANGE TEST (q) TO DETERMINE LOCATION OF ANALYSIS OF VARIANCE SIGNIFICANT DIFFERENCE (p .10) ON ITEMS OF THE POI BY COMPARISON GROUP

Level and Group	q by Group <sup>+</sup> for POI Scales		
	Ti	Tc	Fr
A NoVa p Level	0.0137	0.0138	0.0049
2 versus 3	3.429	3.286	3.107 <sup>a</sup>
2 versus 4	0.571	0.571	2.714 <sup>a</sup>
4 versus 3	4.000 <sup>b</sup>	3.857 <sup>a</sup>	0.393
1 versus 3	1.240	1.080	0.050
1 versus 4	2.760	2.777	0.343
2 versus 1	2.189	2.206	3.057 <sup>b</sup>

<sup>a</sup>Significant at .05 level

<sup>b</sup>Significant at .01 level

TABLE 2

N-K TEST FOR SD

SD Item	ANoVa p Level	q by Comparison Group <sup>c</sup>					
		2 vs 3	2 vs 4	4 vs 3	1 vs 3	1 vs 4	2 vs 1
DC-1	0.06	0.18	1.14	1.32	0.41	1.73 <sup>a</sup>	0.59
DC-15	0.10	0.70	1.00	0.30	0.01	0.31	0.69
DC-17	0.16	0.77	1.43	0.66	0.74	0.07	1.50 <sup>a</sup>
DC-27	0.10	0.39	1.29	0.89	0.95	0.06	1.34
PD-27	0.03	1.21	1.43	0.21	0.02	0.19	1.23
PD-28	0.03	1.32	1.14	0.18	0.17	0.35	1.49 <sup>a</sup>
PD-29	0.03	0.57	0.57	1.14	1.80 <sup>b</sup>	0.66	1.23
My-16	0.05	1.45	0.14	1.59	1.08	0.51	0.37
My-17	0.10	1.14	0.29	0.86	0.72	0.14	0.42
My-31	0.02	1.34	1.00	0.34	0.51	0.17	0.83

<sup>a</sup>Significant at .05 level

<sup>b</sup>Significant at .01 level

<sup>c</sup>The groups in Tables 1 and 2 are identified as: (1) apprentices with vocational agriculture programs; (2) apprentices with programs for the disadvantaged; (3) non-participating applicants for the program with the disadvantaged; and (4) supervisors of programs for the disadvantaged.

## Summary

The Newman-Keuls test on the scales of the personal orientation inventory showed significant difference to exist between apprentices with programs for the disadvantaged and non-participating applicants, and between apprentices with programs for the disadvantaged and supervisors of programs for the disadvantaged, on the Feeling Reactivity (Fr) scale at the .05 level, and between apprentices with disadvantaged programs and apprentices with vocational agriculture programs on the Feeling Reactivity scale at the .01 level.

When selected items of the semantic differential were analyzed by the Newman-Keuls test, it showed that: (a) between apprentices with disadvantaged programs and non-participating applicants a significant difference existed at the .05 level on the honest - dishonest scale of the myself concept; (b) between apprentices with vocational agriculture programs and non-participating applicants a significant difference existed at the .01 level on the humble - proud scale of the parents of disadvantaged children concept; (c) between apprentices with vocational agriculture program and supervisors a significant difference existed at the .05 level on the good - bad scale of the disadvantaged children concept; and (d) between apprentices with programs for the disadvantaged and apprentices with vocational agriculture programs a significant difference at the .05 level existed on the wise - foolish scale of the disadvantaged children concept, and on the public - private scale of the parents of disadvantaged children concept.

Several aspects of the apprenticeship program could be further illuminated by a study directed toward their resolvment. Some of what are: (1) would a pre-apprenticeship training program further enhance the apprentice's changes in attitude and self-actualization; (2) did the differential effects of exposure to disadvantaged children, parents of disadvantaged children, or other effects have separate effects upon the apprentice's attitude and self-actualization changes; (3) how permanent are the effects of an apprenticeship program; (4) were responses to the SD and POI given in a socially acceptable manner; and (5) would a larger number of participants have provided more nearly significant results at the .05 or .01 level?

## Implications

This investigation into attitudes lent credance to the assertion that apprentices perceived disadvantaged children and parents of disadvantaged children in a more favorable manner. Personality evaluation illustrated that apprentices tended to live more in the "here and now" and were more aware of their own needs and feelings as a result of the apprenticeship programs.

The attitude of many new teachers toward the disadvantaged has been likened to that of a psychiatrist who would object to associating with mentally ill patients or a social worker who insisted on a case load of families with no domestic difficulties.<sup>12</sup> What can be done to assist in resolving this situation? The adjustment that the teacher must make is a difficult one, at best, for both the teacher and the student. This predicament can be ameliorated by providing prospective vocational teachers with an earlier experience in working with disadvantaged children. An apprenticeship program can assist in altering the attitudes and personal orientation of the apprentices congruent with the goal of working with disadvantaged children in a more effective manner.

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## REFERENCES

<sup>1</sup>James I. Dawson, "Making Agriculture Relevant for the Disadvantaged," The Agricultural Education Magazine, XLIII (April, 1971), 242.

<sup>2</sup>G. K. Hodenfield and T. M. Stinnett, The Education of Teachers (Englewood Cliffs: Prentice Hall, Inc., 1961), p. 86-87.

<sup>3</sup>Donald H. Smith and Nancy L. Arnez, "Inner City Studies: Graduate Training for Teachers of the Disadvantaged," Journal of Teacher Education, XX (Fall, 1969), 347.

<sup>4</sup>Edmund W. Gordon and Doxey A. Wilkerson, Contemporary Education for the Disadvantaged (New York: College Entrance Examination Board, 1966), p. 54.

<sup>5</sup>Julia Boleratz and Marjorie East, "A Cross-Cultural and Cross-Class Experience for Preteachers," Journal of Teacher Education, XX (Winter, 1969), 4.

<sup>6</sup>Kathryn B. Daniel, Perspectives in the Education of Dis-advantaged Children, ed. Milly Cowles (Cleveland: The World Publishing Co., 1967), p. 300.

<sup>7</sup>David L. Clark, Problems of School Men in Depressed Urban Centers, ed. Arliss L. Roaden (Columbus: The Ohio State University, 1969), p. 93.

<sup>8</sup>R. D. Strom, The Tragic Migration (Washington: National Department of Home Economics, 1964), p. 16-20.

<sup>9</sup>Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Design for Research (Chicago: Rand Mc Nally and Company, 1963, p. 26.

<sup>10</sup>Charles E. Osgood, George J. Suci and Percy Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1967), p. 19-195.

<sup>11</sup>E. L. Shostrom, Manual for the Personal Orientation Inventory (San Diego: Educational and Industrial Testing Service, 1968), p. 5.

<sup>12</sup>Hodenfield and Stinnett, op. cit., p. 66.

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