DOCUMENT RESUME

ED 045 718 TM 000 293

AUTHOR Curran, Robert L.; Gordon, Ira J.
TITLE Philosophies of Educators in Twelve Florida School Systems.
INSTITUTION Florida Educational Research and Development Council, Gainesville.
PUB DATE 69
NOTE 40p.

EDRS PRICE EDRS Price MF-$0.25 HC-$2.10
DESCRIPTORS Attitude Tests, *Beliefs, College Students, Educational Objectives, *Educational Philosophy, Educational Research, Opinions, *Professional Personnel, Questionnaires, *Rating Scales, School Systems, Teachers, Test Validity
IDENTIFIERS *Florida Education Opinionnaire

ABSTRACT

To determine their professional opinion system, a questionnaire was administered to 3,252 school system personnel in twelve Florida counties and to 303 University of Florida sophomores, seniors, and graduate students. The subjects were classified as adherents of the cooperative or competitive democracy doctrines of education, according to their scores on the measure. They also completed the Professional-Social Characteristics Questionnaire. Data analyses included a one-way analysis of variance, F-ratio of differences among groups, t-ratio difference between two means, and product-moment correlation of educators' opinion systems and the socioeconomic beliefs of key "influentials" in each county. Professionals agreed on the educational ends and means and were biased toward the competitive doctrine. When classified on the bases of the differentiating professional-social variables, they differed in educational doctrines; no differentiated group had a consistent doctrine. Compared with the student groups, the professionals were more biased toward the competitive doctrine than the only student group that showed such a bias, the sophomores. Generally, professionals in the more abstract or academic group were less biased, and the concrete or applied group were more biased toward competitive education. The opinionnaire's ability to discriminate reliably among groups supports its validity as a test. (PR)

PHILOSOPHIES OF EDUCATORS

In Twelve Florida School Systems

by

Robert L. Curran
and
Ira J. Gordon

College of Education
University of Florida

Prepared for the

Florida Educational Research and
Development Council

College of Education
University of Florida
Gainesville, Florida

1969

Preface

The bulletin you are about to read reports the opinions held by educators (3252) in twelve member school systems of the Florida Educational Research and Development Council and by University of Florida students (303) about the necessary ends and means of education. The opinions of these people were collected by the Florida Education Opinionnaire.

What is your philosophy of education in relation to those people who responded? To find out, we invite you to do the following: 1.) complete the Florida Education Opinionnaire on the next page; 2.) score yourself (scoring procedures are on page 3 of Opinionnaire; 3.) classify yourself according to the professional-social variables (see page 1); and 4.) as you read the bulletin, compare your score on the Opinionnaire with the means of the groups of educators differentiated in the study, particularly the groups with which you think you belong and/or do not belong.

FLORIDA EDUCATION OPINIONNAIRE

The following 24 statements are representative of differing educational beliefs. On the line preceding each statement place the number which best represents your opinion.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

The design of this opinionnaire requires that every statement be appraised so please respond to each statement as instructed above.

____ 1. In this period of rapid change, it is highly important that education be charged with the task of preserving intact the long established and enduring educational aims and social objectives.

____ 2. The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future.

____ 3. In assessing what man knows, there are no absolutes, only tentative conclusions based on the current accumulation of human experience.

____ 4. Required reading of literary works, even though it may bring an unfavorable attitude toward literature, is necessary in a sound educational program.

____ 5. To learn means to devise a way of acting in a situation for which old ways are inadequate.

____ 6. In the interest of social stability, the youth of this generation must be brought into conformity with the enduring beliefs and institutions of our national heritage.

____ 7. Learning is a process of mastering objective knowledge and developing skills by drill, trial and error, memorization, and logical deduction.

____ 8. The teacher must indoctrinate her students with correct moral principles in order to bring about their healthy moral development.

____ 9. Moral education is the continuous criticism and reconstruction of ideals and values.

____ 10. The traditional moral standards of our culture should not just be accepted; they should be examined and tested in solving the present problems of students.

____ 11. The backbone of the school curriculum is subject matter; activities are useful mainly to facilitate the learning of subject matter.

____ 12. A teacher may properly teach that some laws are unchanging and certain in their essential nature.

____ 13. Moral learning is experimental; the child should be taught to test alternatives before accepting any of them.

____ 14. Minimum standards of achievement, in the form of requirements to be met equally by all students, must be demanded at every level of education.

____ 15. Existing knowledge is tentative and is subject to revision in light of new facts.

____ 16. A knowledge of history is worthwhile in itself because it embraces the accumulated wisdom of our ancestors.

____ 17. An activity to be educationally valuable should train reasoning and memory in general.

____ 18. The teacher is a channel of communication, transmitting knowledge from those who know to those who do not know.

____ 19. The best preparation for the future is a thorough knowledge of the past.

____ 20. The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage.

____ 21. Child life is not a period of preparation, but has its own inherent value.

____ 22. The aim of instruction is mastery of knowledge.

____ 23. There is no reality beyond that knowable through human experience.

____ 24. Learning is essentially a process of increasing one's store of information about the various fields of knowledge.

Scoring Procedures

Responses to statements 3, 5, 9, 10, 13, 15, 21, and 23 are scored 4 for "Strongly Agree," 3 for "Agree," 2 for "Neither Agree nor Disagree," 1 for "Disagree," and 0 for "Strongly Disagree."

Responses to the other sixteen statements are scored 0 for "Strongly Agree," 1 for "Agree," 2 for "Neither Agree nor Disagree," 3 for "Disagree," and 4 for "Strongly Disagree." Straightforward adding of the scores for the 24 statements gives the net score. There are 97 possible scores ranging from 0 to 96. A score of 96 signifies a consistent cooperative democracy doctrine. A score of 0 signifies a consistent competitive democracy doctrine. A score between these points signifies an opinion-mix of the two doctrines and specifies the bias of the opinion. The scale measures opinions in generalized, not particular situations and, furthermore, situations that lack the tangible forces of actual people in transactions.

In the summer of 1965, the Florida Educational Research and Development Council joined with Robert Curran and Ira Gordon in a two-pronged attack on the problem of knowing the professional opinion system of American educators. The first and immediate objective had two phases. One was to identify in terms of an instrument called the Florida Education Opinionnaire which Curran, Gordon and Doyle (1966) had designed, the opinions about the necessary ends and means of education held by the educators in the Council's school system membership. The second phase was to determine whether the professional opinion system of these educators was related to the following professional-social variables that are commonly used to differentiate among educators:

Professional-Social Variables:

1. school system of which a member
2. grade-level and "type," or function (e.g., comprehensive vs. vocational) of school to which assigned
3. predominant social caste and class of population in the attendance area of school (as identified by knowledgeable informants)
4. rural, urban or metropolitan characters of population in the attendance area of school (as defined by Rand McNally. Commercial Atlas and Marketing Guide, 1965)
5. professional role or function of the educator
6. length of professional experience in school system of which presently a member
7. total length of professional experience
8. amount of professional training
9. major department or college of university study
10. sex
11. conservatism-liberalism of socioeconomic beliefs of influential laymen in the community of the school system (as defined by Kimbrough and Hines' Florida Scale of Civic Belief -- reference 7)

The second objective was to test further the usefulness of the Education Opinionnaire for knowing the professional opinion system of American educators.

The Procedure

Twelve of the sixteen counties surveyed responded to the Florida Education Opinionnaire: Alachua, Citrus, Collier, Columbia, Dade, Flagler, Highlands, Hillsborough, Lake, Manatee, Polk, and Volusia. In the cases of Citrus, Collier, Columbia, Flagler and Highlands school systems, we tried to get the data on every one of the professional personnel because of the relatively small numbers. In the cases of the other seven school systems, we drew a proportionately stratified random sample of the educators. In the event of a school-faculty (not counting the main administrator who was always sampled) of less than forty members, a 100 percent sample was sought. Otherwise, excepting Dade County Junior College, the attempted sample was twenty percent. We sought a ten percent sample of the educators in Dade County Junior College. Excepting Collier County we sought a response to the Florida Scale of Civic Beliefs from every "key influential" so designated by the school superintendent and school board of the county. In the case of Collier County we sought responses from fifteen randomly sampled from the 42 who had been designated.

Members of the local professional personnel in each of the twelve participating school systems administered the following data-gathering instruments: 1.) a Professional-Social Characteristics Questionnaire (Appendix 2) and 2.) the Florida Education Opinionnaire. We collected 3,252 useable returns from the 3,712 professional respondents (Appendix 3). By mail, from the 86 key influentials we received 55 useable returns (Appendix 4). For details on coding, checking, and analyses of data see Appendix 5.

We made two checks of the accuracy of the coding of the data and the

entry of the coded-data onto sheets from which data cards were key punched at the computing center of the University of Florida. The first check was a complete one of the code-entries for the grade-level and "type," social caste and class, and "RUM" (rural, urban, or metropolitan) school-characterizations of each respondent-educator who was assigned to a specific school. The error rates found were four, eleven, and sixteen percent respectively. The errors were corrected. No error was found in the second check -- the code-entries for the school system and specific-school or other unit characterizations of each respondent-educator. Because the remaining data were nearly as fool-proof against error of coding and code-entry as those of school system and sub-system unit-assignment, error in respect to these data was assumed to have been negligible. Data card key-punching was systematically verified.

The data were computer analyzed with one-way analysis of variance and the F-ratio of difference among groups, the t-ratio of difference between a given two means and, for the relation between the professional opinion system of the educators in a school system and the socioeconomic beliefs of the county's key influentials, the product-moment correlation. All probability tests assumed no difference or relation. This reduced the error of mistaking a chance difference or relation for a real one; but, of course, it invited the opposite error. If an indicated probability of chance was equal to or less than five times in 100 occurrences ($P \leq .05$), it was taken to mean a possible difference or relation; if $P < .10$, it was taken to mean a possible difference or relation of significance.

Eight statements (numbers 3, 5, 9, 10, 13, 15, 21, and 23) of the

Florida Education Opinionnaire relate to the idea of "cooperative democracy." The most complete spokesman of this doctrine of education was John Dewey. Cooperative democracy means that decision making is achieved by the most complete or public participation in a given setting by those who influenced the decision and who are going to be influenced by it. To the degree that there is such a sharing of experience, the curriculum that would emerge would deal judiciously in terms of all the available alternatives and the possible consequences these alternatives would have on the interests of the people involved. The sharing of experiences is such that each one who influences or is influenced by the decision controls what is done effectively because the ideas make good sense to him before they are implemented.

The remaining statements (sixteen) represent the doctrine that the necessary ends and means of education in any given situation are whatever the elite in that situation say they are. This doctrine may be labeled "competitive democracy." The technical philosophical bases of this view are derived from the ideas of Plato and Aristotle and are referred to in the language of conventional philosophy as either "idealism" or "realism." In practice, however, they have been adapted in the American culture with a substitution of competition for absolutism. This is why it is called in these pages "competitive democracy." Because this has been the dominant version of democracy in American education, this doctrine of education is what Americans most easily think of whenever they think about educational philosophy.

The Findings

Table 1. shows that the mean opinion of the combined professionals

of the twelve school systems was a mix biased slightly toward the competitive democracy doctrine. Relative to the three groups of 1964-65 University of Florida education students, the professional group was probably more biased toward the competitive democracy doctrine than the only student group who showed such a bias, i.e., the sophomores. By also considering Table 1. it is, furthermore, evident that the school system group of professionals who showed

Table 1.

Education Opinionnaire scores by 1964-65 University of Florida College of Education students and by the combined twelve systems' professionals.

Group	N	Education Opinionnaire Mean	S. D.
U. F. Graduate Students	42	63. 50	11. 83
U. F. Seniors	211	57. 36	10. 66
U. F. Sophomores	50	46. 98	7. 79
FERDC Professionals	3252	44. 75	10. 04

least of the bias was equivalent to the sophomore group. The educators in the field then were as a group less disposed to the cooperative democracy doctrine of education than the sophomores and clearly distinct from the seniors and graduate students. Some of the typical supervising teacher-intern problems may stem from such a difference. Even if reluctantly the supervising teacher is habituated and otherwise restricted to what she has experienced as the "practicalities" -- given in no small part by the more competitive democracy professional opinion system of the educators in the school system. The intern is at least superficially habituated by his school of education experience to a doctrine of education biased toward cooperative democracy. Their stay

together is brief. The intern is transient but ego-involved. The supervising teacher is superordinate and needs to live with the system after the intern is done. Each is frustrating to the other on such pivotal decisions as deciding what is to be studied, why and how and evaluation, or "grading."

Table 2. shows an opinion difference among the professionals grouped by school system. Although there were differences from the Alachua group to the Flagler group, the twelve groups were rather homogeneous relative to either the possible (scale scores range from 0 to 96) or the student groups' differences.

Table 2.

Education Opinionnaire Variance among the professionals grouped by school system

Group	N	Education Opinionnaire Mean	S. D.
Alachua	380	46.94	10.69
Dade	452	46.70	11.66
Citrus	133	46.18	9.53
Hillsborough	373	45.55	10.48
Collier	232	45.44	9.79
Volusia	274	44.31	9.14
Manatee	294	44.24	8.77
Highlands	209	43.97	8.96
Polk	380	43.48	9.04
Columbia	211	42.38	9.43
Lake	251	42.08	9.72
Flagler	63	40.13	7.86

	Sum Sq.	d. f.	Mean Sq.	F-ratio	P
Between Groups	9351.82	11	850.16	8.64	<.001 (significant)
Within Groups	318731.6-	3240	98.37		
Total	328082.9-	3251			

Table 3. shows an opinion difference among the principals, or equivalents, and faculty members grouped by school grade level. Note that the elementary

Table 3.

Education Opinionnaire variance among professionals grouped by school level

Group	N	Education Opinionnaire Mean	S. D.
Junior College and Vocational	115	47.85	11.07
Junior High School	571	45.70	9.79
High School	844	44.96	9.96
Elementary School	1305	43.78	9.68
K. or 1 through 12	252	42.21	9.02

Between Groups	4291.16	4	1072.79	11.21	<.001 (significant)
Within Groups	294976.7-	3083	95.68		
Total	299267.8-	3087			

level professionals were exceeded only by the K or 1 through 12 school professionals in bias against the "Deweyan" and toward the competitive democracy doctrine of education. Table 3 suggests that the lower the school grade level the more the professionals' bias toward the competitive democracy educational doctrine. Our usual myth is that elementary teachers and principals are more "child-centered" and secondary and higher school professionals, more "subject-centered." This may be true; but, if it is, either the Opinionnaire did not measure opinion as sensitive to the concrete sociological stresses that shape them, or the child-versus subject-centered distinction is not a distinction between the two culture-doctrines of education. In any event, based on conventional logic, the data do not support the myth. When Table 4 is also considered, it appears that, if the vocational school professionals' scores were separated from those of the junior college professionals in Table 3, the junior college rofessionals' mean would be biased toward the cooperative democracy, doctrine

of education

Table 4 does not show an opinion difference between the combined junior college and high school professionals and those of the vocational schools. The P<.10, however, suggests that a difference might have occurred had the number of vocational schools (three) been materially larger.

Table 4.

Education Opinionnaire Difference between professionals grouped by school type

Group	N	Education Opinionnaire Mean	S. D.
Junior College and High School	909	45. 44	10. 20
Vocational School	50	42. 86	8. 2 6

S. E.	d. f.	T-ratio	P	
1. 47	957	1. 757	< .10	(possible difference)

Tables 5 and 6 do not show an opinion difference in the cases of either the supervisors of curriculum and instruction or the guidance workers and

Table 5.

Education Opinionnaire difference between more-than-one school and one school supervisors of curriculum and instruction

Group	N	Mean	S. D.
More-than-one school	52	46. 27	11. 33
One school	154	46. 22	12. 37

S. E.	d f	T-ratio	P
1. 95	204	0. 025	N. D.

counselors between those who were assigned to one school and those who were assigned to more than one school. Of the four groupings, only the more-than-one school guidance workers and counselors showed a disposition toward

Table 6.

Education Opinionnaire difference between more-than-one school and one school guidance workers and counselors

Group	N	Education Opinionnaire Mean	S. D.
More-than-one school	13	50.92	11.22
One school	112	47.24	10.32

S. E.	d. f.	T-ratio	P
3.08	123	1.197	N. D.

the educational philosophy of cooperative democracy. However, the means of the two groups of guidance workers and counselors were quite numerically different, and the number were very few in the more-than-one school group (Table 6). One might ask if a substantially larger number of cases would have increased the probability that the differences were not just chance?

Table 7 shows a difference among administrators (exclusive of superintendents) assigned to more than one school, principals, and superintendents.

Table 7.

Education Opinionnaire variance among superintendents, administrators (more than one school) and principals or equivalents

Group	N	Education Opinionnaire Mean	S. D.
Administrators	44	53.00	10.49
Principals	204	47.90	10.98
Superintendents	8	44.75	9.87

	Sum Sq.	d. f.	Mean Sq.	F-ratio	P	
Between Groups	1069.75	2	534.88	4.52	$>.01$	(significant)
Within Groups	29912.43	253	118.23			
Total	30982.18	255				

Note that administrators (exclusive of superintendents) assigned to more than one

school showed more evidence of greater bias toward the cooperative democracy doctrine than even the guidance workers and counselors who were also assigned to more than one school.

Table 8 shows a difference among the teachers, including librarians,

Table 8.

Education Opinionnaire variance among teachers grouped by teaching field and librarians

Group	N	Education Opinionnaire Mean	S. D.
Science	162	46.52	9.56
Language Arts	219	46.48	10.25
Mathematics	195	45.31	9.42
Art or Music	93	45.05	9.32
Librarian	91	45.00	10.88
Social Studies	165	44.84	9.43
Business Education	66	44.56	9.97
Agriculture	29	44.24	5.73
Foreign Language	93	44.24	10.53
Home Economics	58	43.84	9.89
Elementary School	1111	43.26	9.38
Physical or Driver Education	161	42.62	8.81
Distributive Education	38	42.21	9.34
Industrial Arts	53	41.98	8.03

	Sum Sq.	d. f.	Mean Sq.	F-ratio	P
Between Groups	4260.83	13	327.76	3.62	$<.001$ (significant)
Within Groups	227870.3-	2520	90.42		
Total	232131.1-	2533			

grouped by teaching field. No group's mean departed from the norm bias toward the competitive democracy doctrine of education. In the order of Table 8, however, with but two exceptions, the groups in the more academic or abstract fields showed less evidence of the bias, and the groups in the more applied or concrete fields, more. It is no strain on reason to take this as

consonant with the suggestion of Table 3 that the lower the school grade-level the more the professionals' bias toward the competitive democracy doctrine of education. The exceptions were the teachers of art or music in the less and the teachers of foreign language in the more evidence categories. The elementary school professionals' position in the order of Table 8 is according to form: they were exceeded by only three of the thirteen groups in evidence of the generally characteristic bias.

A t-test was made for opinion difference between every two of the role, or function, differentiated groups of the professionals. Appendix 5 presents only the groups between which a difference was shown ($P \leq .05$) or suggested ($P < .10$). The name of the group relatively more disposed to the cooperative democracy doctrine of education is underlined. Sizes, means and standard deviations are available in Tables 5, 6, 7, 8.

Table 9 summarizes the evidence in Appendix 5. Note the absence of even a suggestion that the superintendents differed in educational doctrine from any other functional group, but also note both the number of cases (only eight) and the relative position of their mean score. If there had been a substantially larger number of superintendents, the t-test might have suggested that they were more biased toward the competitive democracy doctrine of education than even the principals, and might have shown that the superintendents were markedly different from the guidance workers and counselors and the other administrators of more than one school. It is also noteworthy that apart from the supervisors of curriculum and instruction and the superintendents, the set of non-teaching groups was less biased toward the competitive democracy doctrine than the set

Table 9.

Summary of Appendix 12.
Philosophically Different Functional Groups on the Education Opinionnaire
Numbered from 1 (highest) to 19 (lowest) Mean

	1*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Admin./more-than-one school		C**	B	A	A	A	A	A	A	A		A	A	A	A	A	A	A	A
2. Guidance workers and counselors							D	E	E	C		D	C	C	C	A	A	A	A
3. Principals							B	C	D	B		C	B	B	B	A	A	A	A
4. Teachers, science													E	E	E	A	A	B	A
5. Teachers, language arts													E	E	E	A		B	A
6. Supervisors, c and i															C	A	A	C	A
7. Teachers, mathematics																B	B	E	B
8. Teachers, art or music																E	D		D
9. Librarians																	E		E
10. Teachers, social studies																D	C		D
11. Superintendents																			
12. Teachers, business Ed.																			
13. Teachers, agriculture																			
14. Teachers, foreign language																			
15. Teachers, home economics																			
16. Teachers, elementary sch.																			
17. Teachers, phys. or driver ed.																			
18. Teachers, distributive educ.																			
19. Teachers, industrial arts																			

* Column numbers identify row-named groups

** A indicates the row group's mean was higher than the column-numbered group's at P. 001
B indicates the row group's mean was higher than the column-numbered group's at P. -01
C indicates the row group's mean was higher than the column-numbered group's at P. -02
D indicates the row group's mean was higher than the column-numbered group's at P. -05
E indicates the row group's mean was higher than the column-numbered group's at P. -10

Blank cells mean either no difference or the difference was noted earlier in this table.

of teaching, including librarian, groups. Within the latter, generally those of the more academic or abstract fields were less marked by it.

Table 10 shows a difference among the professionals grouped by time

Table 10.

Education Opinionnaire variance among professionals grouped by years in present system

Group	N	Education Opinionnaire Mean	S. D.
Less than 1 year	464	45.80	9.85
1-3 years	650	45.59	9.84
4-9 Years	935	44.49	9.62
16 -21 years	328	44.34	11.30
10-15 years	527	44.27	10.36
28 or more years	147	43.96	10.26
22-27 years	134	42.89	10.03

	Sum Sq.	d.f.	Mean Sq.	F-ratio	P
Between Groups	1173.37	6	295.56	2.93	< .01 (significant)
Within Groups	320989.1-	3178	101.00		
Total	322762.4-	3184			

in their present systems. The seemingly major sources of the differences are three. The professionals who had been in their present systems from less than a year to and including three years were least marked by the generally characteristic bias. Those whose term ranged from four through fifteen years together with those of 28 or more years were next in strength of bias. Most biased toward the doctrine were those of 22 through 27 years in their present systems. In general, one would have to make only two exceptions (and they merely one-step reversals) if he claimed that Table 10 shows that the less time in the professionals' present systems, the relatively less their opinion bias toward the

competitive democracy doctrine of education.

The claim is strengthened by Table 11. Its $P < .10$ does suggest an increase of the usual bias with increase of total time of professional practice.

Table 11.

Education Opinionnaire variance among professionals grouped by total years of practice

Group	N	Education Opinionnaire Mean	S. D.
Less than 1 year	199	46.51	9.12
1-3 years	411	45.60	9.44
16-21 years	403	45.43	10.37
10-15 years	563	44.89	10.38
4-9 years	757	44.72	9.72
28 or more years	342	44.41	11.11
22-27 years	279	43.90	10.84

	Sum Sq.	d. f.	Mean Sq.	F-ratio	P
Between Groups	1193.41	6	198.90	1.94	< .10 (possible difference)
Within groups	302960.4-	2947	102.80		
Total	304153.7-	2953			

The ordering of means, however, forced a two-step reversal between the time-ordered positions of two groups and a one-step reversal between two others of the seven groups. Mobility or immobility was more related to the professionals' opinions than total time of practice.

Table 12 shows an opinion difference among the professionals grouped by certification rank and no certification. Among the five groups, those of rank 1 were the only ones whose mean opinion was more (and dramatically so) biased toward the cooperative democracy doctrine of education. Note parenthetically that the rank 1 certificate professionals evidenced this unusual bias more than any so-far-considered professional grouping with whom they shared the distinction.

Table 12.

Education Opinionnaire variance among professionals grouped by certification rank

Group	N	Education Opinionnaire Mean	S. D.
Rank 1	71	54.47	12.24
Rank 2	903	46.99	10.89
Rank 3	2133	43.56	9.26
None	14	42.21	9.60
4-6	31	41.97	9.47

	Sum Sq.	d.f.	Mean Sq.	F-ratio	P
Between groups	14583.14	4	3645.78	37.72	<.001 (significant)
Within groups	304183.7-	3147	96.66		
Total	318766.9-	3151			

Those of rank 2 showed the usual bias but, probably, less than those of rank 3 who may have had less than those of either no certification or ranks 4 through 6 (provisionals). The two latter groups do not appear to differ.

Table 13 shows a difference among the professionals grouped by department or college of university study. Probably the major source of the

Table 13.

Education Opinionnaire variance among professionals grouped by department or college of university study

Group	N	Education Opinionnaire Mean	S. D.
Arts and science	740	45.63	9.73
Education	1967	44.84	10.34
Music	112	43.94	9.73
Art	135	43.56	9.76
Physical education	194	42.23	8.41

	Sum Sq.	d.f.	Mean Sq.	F-ratio	P
Between groups	2083.25	4	520.81	5.16	<.001 (significant)
Within groups	317029.6-	3143	100.87		
Total	319112.8-	3147			

difference was between the physical education majors (showing most of the usual bias) and the combined arts and science and education majors (least). In respect to the latter two groups there is no evidence here that arts and science majors are more "conservative," or less "radical," than education majors as educators. If anything, the reverse is evidenced.

Table 14 shows that the men leaned less toward the competitive democracy doctrine of education than the women. Considering that elementary

Table 14.

Education Opinionnaire difference between professionals grouped by sex

Group	N	Education Opinionnaire Mean	S.D.
Male	1128	45.47	10.42
Female	1980	44.44	9.82

S.E.	d.f.	t-ratio	P
0.38	3106	2.750	$<.01$ (significant)

school professionals are distinguished from those of other school grade-levels by being mostly (indeed predominantly) women, the question arises whether the greater or greatest bias of elementary school professionals is more a school grade-level function or more a culturally-conditioned sex-role function.

Table 15 shows an opinion difference among the professionals grouped by the predominant social class of the student population of the school. There may have been no difference between the middle and the upper class-school professionals. The two together probably were less biased toward the competitive democracy doctrine of education than were the lower class-school professionals.

Table 15.

Education Opinionnaire variance among professionals grouped by school's predominant social class

Group	N	Education Opinionnaire Mean	S. D.
Upper	694	45.06	9.88
Middle	1485	44.77	9.74
Lower	897	43.70	9.92

	Sum Sq.	d. f.	Mean Sq.	F-ratio	P
Between groups	901.66	2	450.83	4.67	>.01 (significant)
Within groups	296694.8-	3073	96.55		
Total	297596.4-	3075			

Table 16 shows that the professionals of the predominantly Negro schools were even more oriented toward the competitive democracy doctrine than their counterparts in the predominantly white schools.

Table 16.

Education Opinionnaire difference between professionals grouped by school's predominant caste

Group	N	Education Opinionnaire Mean	S. D.
White	2193	45.44	9.94
Negro	883	42.23	9.19

S. E.	d. f.	t-ratio	P
0.39	3074	8.293	<.001 (significant)

Bear in mind that Table 15 shows at least that the professionals of the predominantly lower class schools were more biased toward the competitive democracy educational doctrine than the professionals of the middle class and upper class schools. Note that the probabilities of Tables 17 and 18,

however, do not even suggest such an opinion difference by social class within caste, either Negro or white. The contradiction is perhaps only

Table 17.

Education Opinionnaire variance among professionals grouped by school's predominant class within caste (Negro)

Group	N	Mean	S. D.
Upper	182	43.26	10.05
Middle	364	42.19	8.52
Lower	337	41.71	9.41

	Sum Sq.	d.f.	Mean Sq.	F-ratio	P
Between groups	283.31	2	141.65	1.68	N. D.
Within groups	74326.50	880	84.46		
Total	74609.75	882			

Table 18.

Education Opinionnaire variance among professionals grouped by school's predominant class within caste (white)

		Education Opinionnaire	
Group	N	Mean	S. D.
Upper	512	45.70	9.74
Middle	1121	45.61	9.97
Lower	560	44.89	10.04

	Sum Sq.	d.f.	Mean Sq.	F-ratio	P
Between groups	233.87	2	116.93	1.18	N. D.
Within groups	216238.8-	2190	98.74		
Total	216472.6-	2192			

nominal. Table 15 may show an opinion variance with variance in social class of school which is accumulative and not statistically evidenced unless the effect of social class difference is piled up to a critical force by combined within-

caste social class differences. Lacking the effect of the social class differences peculiar to the other caste, neither Table 17 nor Table 18 shows an opinion difference among the professionals grouped by school's predominant social class within caste, either Negro or white. Having the combined effects of the social class differences within both castes, Table 15 shows an opinion difference by class.

The explanation not only dispells the contradiction but also reasons from the evidence of Tables 15 through 18 and serves to explain why among the professionals grouped by school grade-level those of the K or 1 through 12 schools showed most bias toward the competitive democracy educational doctrine. Note first that in Tables 15, 17, and 18, the higher the school's predominant social class, the higher the mean Opinionnaire score of the professionals at the school. Such consistency is not probable by chance. Note next the substantial disparity between the within-Negro caste mean scores by class in Tables 17 and the within-white caste mean scores by class in Table 18: the Negro upper class score was lower than the white lower class score. The effect of class variance upon the professionals' opinions was in the same direction within each caste, but the two effects taken together in Table 15 magnified each other because each started so far from the other on the opinion scale.

It is true that Table 16 shows that the professionals of the predominantly Negro schools were more biased toward the competitive democracy doctrine than their colleagues of the white schools. One could argue that this caste difference is what Table 15 expresses, Table 15 being misnamed. The

argument is reinforceable by comparing the N's in Table 17 with the N's in Table 18 and pointing out the disproportions of the two distributions. The Negro N's are skewed toward the middle, and especially, lower classes as compared with the roughly 1-2-1 ratio of the white N's distribution. To adopt this explanation of Table 15 in place of the one in terms of caste-class interaction is, however, to brush aside the consistency evidence of opinion variance with social class variance.

Either explanation makes good sociological sense of the strongest bias toward the competitive democracy doctrine on the part of the K or 1 through 12 school professionals in Table 3. Among the groups of schools by grade-level in the table, the K or 1 through 12 schools are probably distinguished by being predominantly Negro and lower class. Nevertheless, to adopt the explanation of opinion variance with variance in both caste and class, the effect of either caste or class variance upon the professionals' opinions being magnified or compounded by the interaction of substantially different within-caste class effects is to take the more inclusive one.

Table 19 shows that the professionals of the predominantly metropolitan attendance-area schools were less biased toward the competitive democracy doctrine than those of either the rural or the urban attendance-area schools. The latter two groups of professionals were apparently of like mind about education. Do not confuse the evidence in Table 19 with that in Table 2. To differentiate county school systems as relatively rural, urban and metropolitan is quite different from the much more precise differentiation of specific school attendance areas as rural, urban and metropolitan. A relatively

Table 19.

Education Opinionnaire variance among professionals grouped by school's socio-economic setting

Group	N	Education Opinionnaire Mean	S. D.
Metropolitan	851	46. 26	10. 93
Rural	654	43. 81	9. 50
Urban	1585	43. 80	9. 24

	Sum Sq.	d. f.	Mean Sq.	F-ratio	P
Between groups	3708. 20	2	1854. 10	19. 36	< .001 (signif.)
Within groups	295598. 8-	3087	95. 76		
Total	299307. 0-	3089			

metropolitan county school system can also be significantly rural or urban in specific attendance areas. There is much less chance of such counteraction or interaction in the case of specific schools.

As Table 20 indicates, there was no evident relation between county

Table 20.

Relation between county professionals' Education Opinionnaire mean and county key influentials' Florida Scale of Civic Beliefs mean

County	P. E. O. Mean	K. I. F. S. C. B. Mean
Alachua	46. 96	164
Dade	46. 70	200
Hillsborough	45. 55	158
Collier	45. 44	150
Volusia	44. 31	195
Manatee	44. 24	186
Polk	43. 48	157
Columbia	42. 38	169
Flagler	40. 13	160

r = .15; t = 1. 074; P = chance

educators' mean on the Education Opinionnaire and county key influentials' mean on the Florida Scale of Civic Beliefs. This finding goes against expectations. One would think that the more "conservative" or "radical" the key lay influentials in a community the more competitive democracy or cooperative democracy the educational doctrine of the schoolman in the community.

Relative to either what the Florida Education Opinionnaire permitted or the 1964-65 University of Florida education students' opinions, the combined professionals of the twelve school systems were 1.) of common persuasion about the necessary ends and means of education and 2.) biased toward the competitive democracy doctrine rather than toward the cooperative democracy alternative. When the professional educators were classified into groups on the bases of almost every one of the professional-social characteristics commonly used to differentiate them (see list on page 1), they differed in doctrines of education. No group of the educators that was differentiated on any of the professional-social variables had a consistent doctrine of education--each group's opinion was a mixture of the two basically alternative doctrines. Among all of the groups distinguished on the professional-social characteristics, only the following deviated from the norm-bias toward the competitive democracy and instead were biased toward the educational philosophy of experimentalism, or cooperative democracy: those of rank 1 certification, administrators (other than superintendents) of more than one school and the guidance workers and counselors of more than one school, listed in order from most to least deviant. Generally, the more

academic or abstract group of the professionals was less marked by the disposition to the competitive democracy educational opinion, and the professionals in the more applied or concrete subject field and school group were more marked by the bias. Had there been more cases of superintendents, the group's relatively middle amount of bias toward the educational doctrine of competitive democracy might have shown itself stronger than that of the principals, or equivalents, and, certainly, the deviant groups noted above. Opinion differences existed among the educators grouped by school system, by school grade-level, by school type, by role (or function) of educator, by length of time in present school system, slightly by total length of time of practice, by rank of certificate, by college or university major, by sex, by school's predominant caste and, subtly, social class of student population and by school's socio-economic setting (the "RUM") variable. There was no evident significant correlation between the educators' professional opinions and the degree of liberalism-conservatism of the civic beliefs of key influentials in the communities.

Insofar as discriminating among groups that conventional wisdom expects to have different educational philosophies is taken as evidence of validity, the Education Opinionnaire proved dramatically valid. If validity of measure of educational opinion is taken to mean measure of genuinely held opinion, there is no reason for doubting the validity of the Opinionnaire. It may as well be assumed that in the generalized, socially intangible situations which the Opinionnaire presented, the educators expressed their genuine opinions.

Whether their opinions in either specific but still socially intangible

situations or specific and socially concrete situations are adequately predictable on the basis of their responses to the Opinionnaire is an unanswered question. Quite probably the prediction would be no more adequate than the degree to which care were taken to translate the items into terms of situational differences. If an answer to the question were sought by controlled observation of behavior or by participant observation of day-to-day transactions, the prediction would be no more adequate than the care with which an effort were made to understand the two alternative culture-doctrines of education, the particular Opinionnaire responses of the given group of educators in point, and the non-professional aspects of the situation in which the group was observed.

*****

Information concerning a list of the field workers, a detailed sample description, the coding key for the Professional-Social Characteristics Questionnaire, the data card format, the analysis instructions for the Computing Center or the computer printouts can be secured from Dr. Robert Curran, College of Education, University of Florida. A copy of the Florida Scale of Civic Beliefs can be secured from Dr. Ralph Kimbrough or Dr. Vynce Hines of the University of Florida's College of Education, Gainesville, Florida.

Appendix 1.

FLORIDA EDUCATION OPINIONNAIRE

The following 24 statements are representative of differing educational beliefs. On the line preceding each statement place the number which best represents your opinion.

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

The design of this opinionnaire requires that every statement be appraised so please respond to <u>each</u> statement as instructed above.

____ 1. In this period of rapid change, it is highly important that education be charged with the task of preserving intact the long established and enduring education aims and social objectives.

____ 2. The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future.

____ 3. In assessing what man knows, there are no absolutes, only tentative conclusions based on the current accumulation of human experience.

____ 4. Required reading of literary works, even though it may bring an unfavorable attitude toward literature, is necessary in a sound educational program.

____ 5. To learn means to devise a way of acting in a situation for which old ways are inadequate.

____ 6. In the interest of social stability, the youth of this generation must be brought into conformity with the enduring beliefs and institutions of our national heritage.

____ 7. Learning is a process of mastering objective knowledge and developing skills by drill, trial and error, memorization, and logical deduction.

____ 8. The teacher must indoctrinate her students with correct moral principles in order to bring about their healthy moral development.

____ 9. Moral education is the continuous criticism and reconstruction of ideals and values.

____ 10. The traditional moral standards of our culture should not just be accepted; they should be examined and tested in solving present problems of students.

FLORIDA EDUCATION OPINIONNAIRE - page 2.

____ 11. The backbone of the school curriculum is subject matter; activities are useful mainly to facilitate the learning of subject matter.

____ 12. A teacher may properly teach that some laws are unchanging and certain in their essential nature.

____ 13. Moral learning is experimental; the child should be taught to test alternatives before accepting any of them.

____ 14. Minimum standards of achievement, in the form of requirements to be met equally by all students, must be demanded at every level of education.

____ 15. Existing knowledge is tentative and is subject to revision in light of new facts.

____ 16. A knowledge of history is worthwhile in itself because it embraces the accumulated wisdom of our ancestors.

____ 17. An activity to be educationally valuable should train reasoning and memory in general.

____ 18. The teacher is a channel of communication, transmitting knowledge from those who know to those who do not know.

____ 19. The best preparation for the future is a thorough knowledge of the past.

____ 20. The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage.

____ 21. Child life is not a period of preparation, but has its own inherent value.

____ 22. The aim of instruction is mastery of knowledge.

____ 23. There is no reality beyond that knowable through human experience.

____ 24. Learning is essentially a process of increasing one's store of information about the various fields of knowledge.

Scoring Procedures

Responses to statements 3, 5, 9, 10, 13, 15, 21, and 23 are scored 4 for "Strongly Agree," 3 for "Agree," 2 for "Neither Agree nor Disagree," 1 for "Disagree," and 0 for "Strongly Disagree."

Responses to the other sixteen statements are scored 0 for "Strongly Agree," 1 for "Agree," 2 for "Neither Agree nor Disagree," 3 for "Disagree," and 5 for "Strongly Disagree." Straightforward adding of the scores for the 24 statements gives the net score. There are 97 possible scores ranging from 0 to 96. A score of 96 signifies a consistent cooperative democracy doctrine. A score of 0 signifies a consistent competitive democracy doctrine. A score between these points signifies an opinion-mix of the two doctrines and specifies the bias of the opinion. The scale measures opinions in generalized, not particular situations and, furthermore, situations that lack the tangible forces of actual people in transactions.

Appendix 2.

PROFESSIONAL-SOCIAL CHARACTERISTICS QUESTIONNAIRE

Please answer the questions below with appropriate checkmarks (✓) or words. Characteristics, not you, are to be identified in the study of F. E. R. D. C. school systems' educational philosophy.

1. Your present main role:

	Superintendent	Asst. Supt.	County-wide	Part of County	One School
Administrative					
Supervisory: Curric. or Inst.					
Guidance or Counseling					

	Ag.	Art or Music	Bus. Educ.	Dist. & Ind.	Elem.	Home Ec.	Ind. Arts
Teaching							

	Lang.	Lang. Arts	Math	P. E.	Sci.	Soc. Stud.
Teaching						

Librarian ☐

Other (state) _____

	-1	1-3	4-9	10-15	16-21	22-27	28 or more
2. No. years in present system							
3. No. years practicing educator							

4. Sex	F.	M.

5. Rank of Certificate	1	2	3	4	5	6	None

6. Major Dept. or college of university study	Art	A&S	Educ	Music	P. E.

Appendix 3.

Sample Size by County and in Total

County	Original Sample	Final Sample
Alachua	419	380
Brevard	435 Withdrew	---
Citrus	143	133
Collier	253	232
Columbia	228	211
Dade	512	452
Flagler	68	63
Highlands	242	209
Hillsborough	485	373
Lake	292	251
Levy	134 Withdrew	---
Manatee	335	294
Marion	395 Withdrew	---
Polk	389	380
Taylor	123 Withdrew	---
Volusia	346	274
Total	(4799) 3712 after withdrawals	3252

Appendix 4.

Number of Nominated and Sampled Key Influentials

County	Nominated and Originally Sampled	Final Sample
Alachua	9	4
Citrus	0	0
Collier	42*	5
Columbia	6	5
Dade	7	6
Flagler	1	1
Highlands	0	0
Hillsborough	20	13
Lake	0	0
Manatee	11	10
Polk	12	7
Volusia	5	4

* From whom 15 were randomly sampled and, by mail, asked to answer and return the Florida Scale of Civic Beliefs

Appendix 5.

Education Opinionnaire Difference Between the Professionals Grouped by Role, or Function[1].

Group	vs.	Group	t-ratio	P
Teachers, agriculture		Teachers, language arts	1.766	$<.10$
"	"	" science	1.753	$<.10$
"	art or music	" Elem. Sch.	1.784	$<.10$
"	"	" Ind. arts	2.095	$<.05$
"	"	" Phys. or driver Ed.	2.044	$<.05$
"	Dist. Ed.	" Lang. arts	2.566	$>.01$
"	"	" mathematics	1.871	$<.10$
"	"	" science	2.552	$>.01$
"	Elem. Sch.	" Lang. arts	4.317	$<.001$
"	"	" mathematics	2.811	$<.01$
"	"	" science	4.073	$<.001$
"	"	" social studies	2.009	$<.05$
"	home Ec.	" Lang. arts	1.793	$<.10$
"	"	" science	1.786	$<.10$
"	Ind. arts	" Lang. arts	3.458	$<.001$
"	"	" mathematics	2.577	$<.01$
"	"	" science	3.405	$<.001$
"	"	" social studies	2.156	$<.05$
"	"	librarians	1.903	$<.10$
"	foreign Lang.	Teachers, Lang. arts	1.738	$<.10$
"	"	" science	1.726	$<.10$
"	Lang. arts	" Phys. or driver Ed.	3.940	$<.001$

1. Underlined group has higher Education Opinionnaire score. $P \leq .05$ indicates a difference; $P < .10$, a possible difference.

Group	vs.	Group	t-ratio	P
Teachers, mathematics		Teachers, Phys. or driver Ed.	2.780	<.01
"	Phys. or driver Ed.	" science	3.816	<.001
"	"	" social studies	2.193	<.02
"	"	librarians	1.782	<.10
supervisors, "C and I"		Teachers, Dist. Ed.	2.320	>.02
"	"	" Elem. Sch.	3.343	<.001
"	"	" home Ec.	2.366	<.02
"	"	" Ind. arts	3.061	>.001
"	"	" Phys. or driver Ed.	3.304	>.001
"	"	Admin., more than one Sch.	3.773	<.001
guidance Wkrs. & Cnslrs.		Teachers, agriculture	2.393	<.02
"	"	" art or music	1.916	<.10
"	"	" Bus. Ed.	1.990	<.05
"	"	" Dist. Ed.	3.046	<.001
"	"	" Elem. Sch.	4.491	<.001
"	"	" home Ec.	2.366	<.02
"	"	" Ind. arts	3.911	<.001
"	"	" foreign Lang.	2.361	<.02
"	"	" mathematics	2.011	<.05
"	"	" Phys. or driver Ed.	4.309	<.001
"	"	" social studies	2.352	>.02
"	"	librarians	1.783	<.10
"	"	Admin., more than one Sch.	2.928	<.02

Group	vs.	Group	t-ratio	P
Admin., more than one Sch.		Teachers, agriculture	4.594	<.001
"	"	" art or music	4.286	<.001
"	"	" Bus. Educ.	4.215	<.001
"	"	" Dist. Educ.	4.926	<.001
"	"	" Elem. Sch.	6.023	<.001
"	"	" home Ec.	4.473	<.001
"	"	" Ind. arts	5.714	<.001
"	"	" foreign Lang.	4.559	<.001
"	"	" Lang. arts	3.773	<.001
"	"	" mathematics	4.469	<.001
"	"	" Phys. or driver Ed.	6.007	<.001
"	"	" science	3.697	<.001
"	"	" social studies	4.681	<.001
"	"	librarians	4.102	<.001
"	"	principals or equivalents	2.901	<.01
principals or equivalents		teachers, agriculture	2.785	<.01
"	"	" art or music	2.302	>.02
"	"	" Bus. Educ.	2.304	>.02
"	"	" Dist. Educ.	3.348	>.001
"	"	" Elem. Sch.	5.665	<.001
"	"	" home Ec.	2.685	<.01
"	"	" Ind. arts	4.401	<.001
"	"	" foreign Lang.	2.741	<.01

Group	vs.	Group	t-ratio	P
principals or equivalents		teachers, mathematics	2.525	$>.01$
"	"	" Phys. or driver Ed.	5.092	$<.001$
"	"	" social studies	2.879	$<.01$
"	"	librarians	2.106	$<.05$

REFERENCES

1. Ahman, J. S., and Glock, M. D. Evaluating Pupil Growth. Boston: Allyn and Bacon, 1958.

2. Brown, Bob Burton. The Experimental Mind in Education. New York: Harper and Row, 1968.

3. Curran, R. L., Gordon, Ira J., and Doyle, James. "A Short Test of One's Educational Philosophy," Educational and Psychological Measurement, 26:383-393, Summer, 1966.

4. Dewey, John. Democracy and Education. New York: Macmillan, 1916.

5. Edwards, A. L. Techniques of Attitude Scale Construction. New York: Appleton-Century, Crofts, Inc., 1957.

6. Guilford, J. P. Psychometric Methods. New York: McGraw-Hill, 1954.

7. Hines, Vynce A. "Development and Factor Analysis of a Scale of Liberalism-Conservatism," Gainesville: College of Education, University of Florida, the author, mimeographed.

8. Huhne, T. E. Speculations. London: Paul, French, Trubner, 1924.

9. Lodge, R. C. Philosophy of Education. New York: Harper and Brothers, Publishers, 1947.

10. Myrdal, Gunnar. An American Dilemma. New York: Harper and Brothers, Publishers, 1944.

11. Oliver, W. A. "Teachers' Educational Beliefs Versus Their Classroom Practices," Journal of Educational Research, 47:47-55, September, 1953.

12. Stanley, Wm. O. Education and Social Integration. New York: Bureau of Publications, Teachers College, Columbia University, 1953.