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# A Study of Attitudinal Responses of Selected School District Personnel and Related Others Regarding Six Performance Contracting Hypotheses in Seventeen Selected Performance Contracting Projects in the United States for the Year 1970-71

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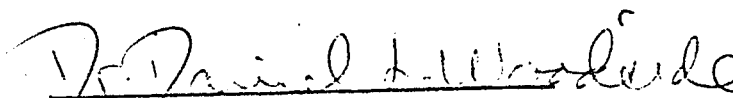
A STUDY OF ATTITUDINAL RESPONSES OF SELECTED SCHOOL  
DISTRICT PERSONNEL AND RELATED OTHERS REGARDING  
SIX PERFORMANCE CONTRACTING HYPOTHESES IN  
SEVENTEEN SELECTED PERFORMANCE  
CONTRACTING PROJECTS IN THE  
UNITED STATES FOR THE  
YEAR 1970-71

By

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B. A. , LaSalle College, 1955

M. Ed. , Temple University, 1969



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DISSERTATION ABSTRACT

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## DISSERTATION ABSTRACT

Performance contracting advocates have indicated that it could provide the opportunity to demonstrate new learning systems and to act as a catalyst in education to generate leverage for school officials to make change. Such changes or impacts were identified as the following: (1) a low-risk/low-cost means for experimentation, (2) a means for integration, (3) a means to facilitate community and parent control and involvement, (4) a means to rationalize the collective bargaining process, (5) a means to humanize the classroom for both teacher and student, and (6) a means to increase instructional efficiency in areas such as staff and facilities. On the other hand, national educational organizations have not always viewed performance contracting with equanimity. This attitudinal study has been an attempt, therefore, to provide information which can be of value to policy makers to make the most effective educational decisions.

The purpose of this attitudinal study of selected school district personnel and related others was made for the following reasons: (1) to determine respondent attitudes about performance contracting in six hypotheses, (2) to measure the convergent and divergent attitudes among school district personnel and related others, and (3) to validate the hypothesis regarding six performance contracting hypotheses that significant differences do exist among school district personnel and related others.

The sources of information for this study were the Office of Economic Opportunity, Education Turnkey Systems, education technology companies, superintendents, and project directors. Other information came from some past literature, current literature, and other related studies.

The research methodology employed in this ex-post facto study consisted of the following: (1) an examination of previous research and literature, (2) the development of the survey that was sent to 374 selected school district personnel and related others, and (3) the attitudes of school district personnel and related others were determined by responses given to position, age, school, education, length of service, and region.

The six hypotheses were measured on an adapted Likert scale that ranged from A-strongly disagree, B-tend to disagree, C-questionable, D-tend to agree, E-strongly agree, and F-am not qualified to respond. Data were also analyzed to determine median, modal, and interquartile ranges. Data at the  $P = .05$  level of significance were measured by two standard deviations of contingency table ratios from the expected mean value.

From these analyses, the following findings resulted:

1. Seventy-five and seven tenths percent of the respondents held questionable attitudes regarding the six hypotheses as against twenty-four and three tenths percent who held tend to disagree attitudes.
2. The groups of selected school district personnel found performance contracting's hypothesis questionable. The selected groups disagreed with all six hypotheses. On the average, Fifth groups of related others, on the average, however, were evenly divided between questionable and tend to disagree attitudes regarding the six hypotheses.

3. Each age group held an attitude in the questionable range toward the six hypotheses on the average. However, all age groups tended to disagree with hypothesis five on the average.
4. All school groups on the average took a questionable position about hypotheses one and six but tended to disagree with hypotheses two, three, four, and five.
5. By length of service all groups on the average held questionable attitudes about hypotheses one and six and tended to disagree about hypotheses two, three, four, and five.
6. By education all groups on the average regarded to hypotheses one, five and six as questionable and tended to disagree with hypotheses two, three, and four.
7. By region, two thirds of the groups held on the average questionable attitudes about the hypotheses.
8. Convergence and divergence of attitudes by all variables to all the hypotheses converged in the questionable median.
9. Older groups, ages forty through fifty-nine significantly agreed with hypothesis six.
10. Local teacher association negotiators and presidents significantly disagreed with the second, third, fourth, fifth and sixth hypotheses.
11. School board presidents and school board negotiators significantly disagreed with hypothesis one.
12. The West Coast region significantly disagreed with hypotheses one, five and six.
13. The South region significantly disagreed with hypothesis four.
14. The South and Midwest regions significantly disagreed with hypothesis two.
15. The Midwest, the Northwest, and the West Coast regions significantly disagreed with hypothesis five.
16. There were no significant differences expressed by length of service and by education groups.

From the findings, the following conclusions resulted:

1. Length of service in the same school district and educational background do not influence the attitudes of respondents toward performance contracting.
2. Age, school, and region do influence the attitudes of respondents toward performance contracting.
3. Region influenced attitudes toward performance contracting more than any other classification variable.
4. School board presidents and school board negotiators do not feel that performance contracting is a means to humanize the classroom.
5. Older respondents feel that performance contracting is a means to increase the instructional efficiency in such areas as mathematics and reading.
6. Local teacher association presidents and local teacher negotiators disagreed with performance contracting to a greater degree than any other group.
7. Groups by position feel that performance contracting has a questionable impact upon education.
8. Respondents agree to some impacts of performance contracting upon education but are split into two groups of opinions about other impacts.
9. The percentage of groups of selected school district personnel that feel that performance contracting has a questionable impact upon education is larger than the percentage of groups of related other personnel.
10. Local teacher association presidents and negotiators, the Midwest, the Northwest, and the West Coast disagreed that performance contracting is a low-risk, low-cost means for experimentation.

## ACKNOWLEDGMENTS

This writer wishes to express his appreciation for the invaluable assistance and cooperation given by all those who helped make this study possible. Particular thanks is expressed to Dr. Daniel Woodside under whose special direction this study has been pursued, and under whose tutelage the study evolved. Thanks is also extended to Dominick DiNunzio for his encouragement and interest in the study. Grateful acknowledgment is made also for the valuable assistance received from Dr. Pietro Pascale for the computer programming and the cooperation from the many superintendents of schools and professional personnel who participated in the study. The author is especially grateful to his wife, Barbara and children, who put up with many privations over the many months, but nevertheless provided the encouragement, interest, patience, and understanding during the study. Final thanks are given to Dr. Michael Kean and Dr. Pietro Pascale who read and checked the material in the study and offered valuable insights.



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## CHAPTER I

### THE PROBLEM AND ITS SCOPE

The developers of performance contracting and turnkey<sup>1</sup> operations have maintained that managerial innovations are a feasible solution to a twentieth century irony: Adept in developing science and technology, the United States as a society has been inept in developing the managerial innovations to apply science and technology in an effective and non-disruptive manner.<sup>2</sup> Further, they have maintained that performance contracting as a catalyst in education can provide the opportunity not only to demonstrate new learning systems but also to generate the leverage for school officials to make the changes necessary to ensure effective adoption of technology through the turnkey approach to institutional reform.<sup>3</sup>

What educational implications there are in this concept of performance contracting appear to have received their impetus from a series of performance contracting projects since Texarkana,<sup>4</sup> an educational landmark project,

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<sup>1</sup> Management support component turn operation of program over to district personnel for further implementation.

<sup>2</sup> Charles Blaschke, "From Gold Stamps to Green Stamps," Nation's Schools (September, 1971), p. 51.

<sup>3</sup> Ibid.

<sup>4</sup> Initial test results in Texarkana project showed potential dropouts to be achieving a growth of 2.2 grade levels in reading and 1.4 grade levels in math after only a half year of instruction.

conducted by a private corporation to remove the math and reading deficiencies of about 400 students on a guaranteed performance basis. The contractor in that project guaranteed an increase in student performance of one grade level in either math or reading in a specified number of classroom hours of instruction for a specified maximum cost.<sup>5</sup> Results, however, were contaminated, and the Federal evaluation of the Texarkana experiment was highly critical of the contractor on these grounds;<sup>6</sup> further if the contractor did not achieve the guaranteed results, the technology company would receive no remuneration. However, to place in proper perspective, there have been several instances when some teachers taught to the test. These teachers were not involved in performance contracts.<sup>7</sup>

Subsequent OEO funded performance contracting projects, forty-seven in 1970 alone, and since the 1969 Texarkana project, numbering better than 100, attest to the growth of performance contracting.<sup>8</sup> However, performance contracting, for what concerns this investigator, shall be alluded to later on in this chapter.

Since various educational sectors on either the local, state or national levels have been generally concerned with educational inputs when they could

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<sup>5</sup> \_\_\_\_\_, "Introduction," Performance Contracting in Education: The Guaranteed Student Performance Approach to Public School System Reform (Champaign, Illinois: Research Press, 1970), p. 1.

<sup>6</sup> \_\_\_\_\_, "The Customer Passes the Test or Else," Business Week, No. 2140 (September 12, 1970), p. 42.

<sup>7</sup> \_\_\_\_\_, "Board to Probe UTLA Evidence on Reading Tests," Los Angeles Times, (November 3, 1970), Part II, p. 1.

<sup>8</sup> Reed Martin and Peter Briggs, "What Actually Happened This Year," Education Turnkey News, Vol. 1, Number 11-12, February-March, 1971, pp. 4-5.

be as vitally concerned with outputs, they have regarded the effectiveness of performance contracting programs with some measure of caution, skepticism, and outright opposition.<sup>9</sup> Where both performance contractors and educator's groups should have been working at points where they agree, since their objectives seem to be similar, aside from profit and learning incentives, such groups have been somewhat resolute and cautious concerning the purported validity and efficacy of performance contracting's technology, claims, and outputs. Nevertheless, educators can still learn much from the experiences of technology companies regardless of OEO's February pronouncement of performance contracting's failure in its 1970-71 national experiment. Regardless of the failure, the performance contracting experiment should have a high factor of research value for school districts whose resources are limited. At a time when less than one-half of 1 percent of our educational budget has been spent on research compared with 5 percent of our health budget and ten percent of our defense,<sup>10</sup> educators can learn much from OEO's national experiment.

Meyer in a newspaper article, however, reported that even the best experts in education and psychology fail in coming up with solutions for improving education - money and bold new techniques have no lasting reproducible effect. The Rand Corporation, he continued, put it together by stating that increasing expenditures on traditional educational practices is not

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<sup>9</sup> \_\_\_\_\_ . "How Education Groups View Contracting," Nation's Schools, 86 (October 1970), pp. 86-87.

<sup>10</sup> Robert B. Semple, Jr. , "Nixon Proposes Re-Examination of Aid to Schools," New York Times (March 4, 1970), p. 28.



likely to improve educational outcomes substantially.<sup>11</sup>

It is clear that educational leaders will need to research new measurements of achievement — if they have gleaned nothing more from performance contracting — and also begin the responsible assessment of how well the policy-making process is working to achieve successes in other impacts; such as desegregation, community involvement, etc., regardless of new buildings, optimum pupil-teacher ratios, and expensive equipment. Performance contracting then could enhance objectivity in evaluation and research in education<sup>12</sup> and counter the notion that schools are sometimes among the most innovative resistant institutions in our society.<sup>13</sup>

#### Need for Study

Local property taxes are at an all time high, school costs are sky rocketing and bond issues are being voted down.<sup>14</sup> A host of other serious problems; such as, collective bargaining conflicts, de facto segregation, the question of community control of education, humanization within the school community, and deficiencies in math and reading face student, teacher, administrator, and community alike. "The public schools in the big cities of

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<sup>11</sup> Philip Meyer, "Experts Got 0 in Study on Schools." The Philadelphia Inquirer, March 16, 1972, p. 8.

<sup>12</sup> B. J. Chandler, "What School Boards Should Know About Performance Contracting," (New York: March 1, 1971), p. 5.

<sup>13</sup> Howard R. Boozer, "The Growth and Development of Special Training Within Private Industry for Professional Paraprofessional and Technical Personnel." (Chicago, Illinois: March 15, 1971), p. 9.

<sup>14</sup> J. P. Stucker and G. R. Hall, Performance Contracting Concept in Education (Santa Monica, California: Rand Corporation, May 1971), p. 3.

this nation..." Shedd stated, "don't have the money or the staff to provide even a basic education for all their pupils."<sup>15</sup> The public, meanwhile is demanding greater accountability. In the poverty area schools of our nation's fifteen largest cities, for example, the rate of those that drop out before graduation reaches 70%. It is estimated that fifteen million students do not read well enough to understand what is being taught.<sup>16</sup> Many urban schools, consequently, are in fact graduating functional illiterates. At a White House briefing, Dr. Patrick Moynihan and Dr. James E. Allen, Jr. stressed the belief that although the education system had worked well for the mass of Americans, it has failed the poor, and that increasing funds for existing compensatory programs would only compound this failure.<sup>17</sup>

Such a state of affairs of urban and rural educational decay, if allowed to continue unchecked, could become a national disaster. As Nathan Glazer has put it, "The demand for economic equality is now not the demand for equal opportunities for the equally qualified, but also the demand for equality in education..."<sup>18</sup>

In a survey based on 1962 pre-induction examinations of draftees, for example, the rejection rates for failure to pass the Armed Forces

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<sup>15</sup> Testimony given by Dr. Mark R. Shedd, Superintendent of Philadelphia Schools to the Senate Select Committee on Equal Educational Opportunity, Washington, D. C., September 21, 1971, p. 1.

<sup>16</sup> "Performance Contracting in Education," op. cit., p. 36.

<sup>17</sup> Robert B. Semple, Jr., op. cit., p. 28.

<sup>18</sup> Nathan Glazer, Slavery, Stanley M. Elkins (New York: Grosset and Dunlap, 1963), p. 34.

Mental Test as cited in Table 1.<sup>19</sup> The implication for educators is clear: schools have fared poorly at least for blacks who represent a large segment of disadvantaged minorities. It is reasonable to assume that other minorities suffer similar disadvantages.

Moreover, better federal programs with more carefully built-in evaluative features are needed if any real progress is to be made to correct a quickly deteriorating urban-rural educational crisis. The federal government is also aware that it must spend far beyond its present rate of 8% but undoubtedly "will insist on a searching re-examination of the entire approach to learning before any massive increases in funds for education take place;<sup>20</sup> and may sooner or later need "to nationalize the big city school systems of this country."<sup>21</sup>

Hopefully, President Nixon's Revenue Sharing Plan may yet meet with the success that he envisioned when he favored federal aid through revenue sharing as the system "most consistent with local control of education."<sup>22</sup> He had hoped that such a plan might reduce or alleviate the financial plight of urban centers to meet their educational crises. He further indicated that the federal government did not intend to call for "fundamental studies

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<sup>19</sup> \_\_\_\_\_, "The Tangle of Pathology," The Negro Family: The Case for National Action, Office of Policy Planning and Research, United States Department of Labor, March, 1965, p. 41.

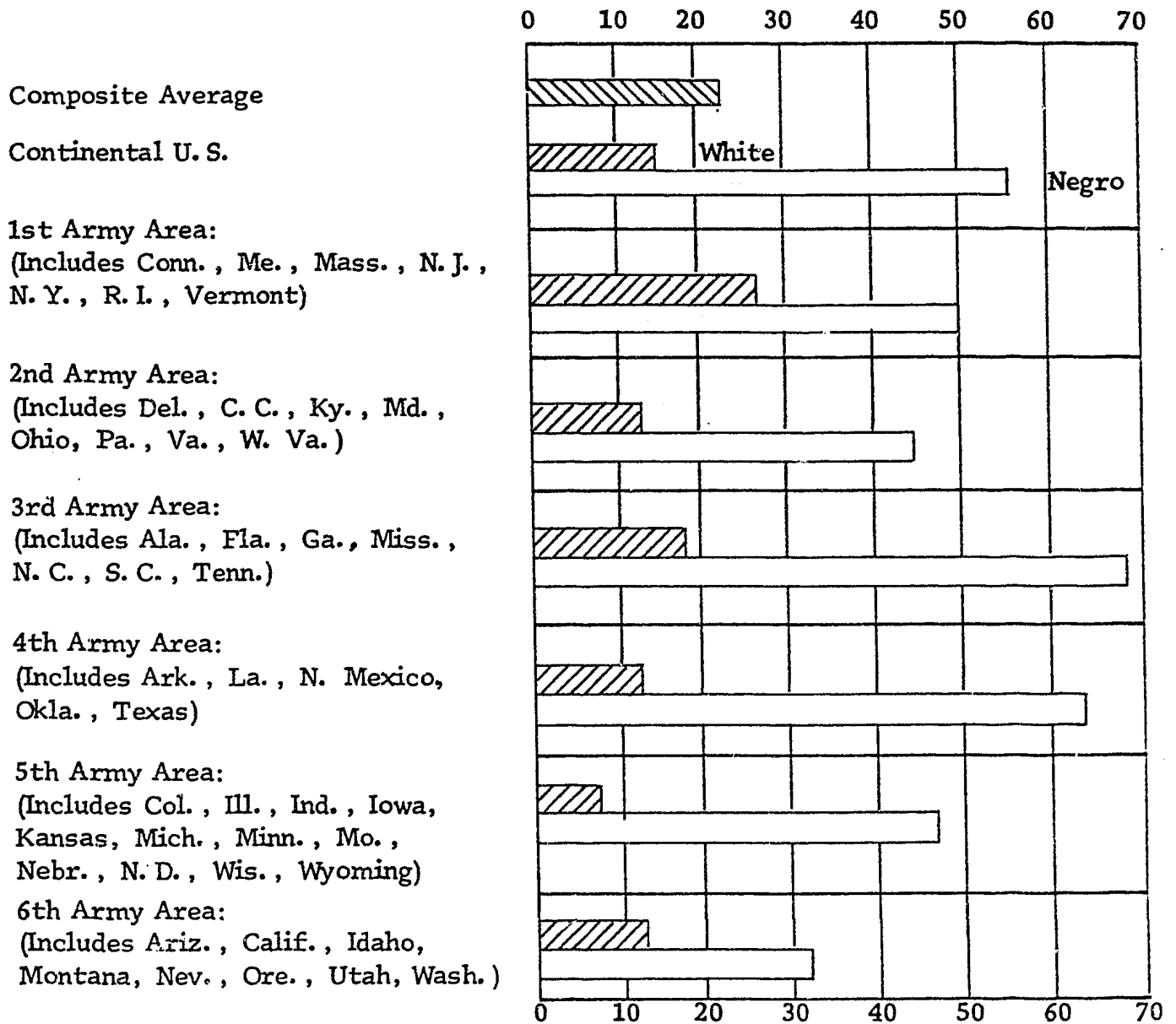
<sup>20</sup> Semple, op. cit., p. 1.

<sup>21</sup> Mark R. Shedd, op. cit., p. 14.

<sup>22</sup> President Richard M. Nixon's March 3, 1970 Education Message.

TABLE 1

THE REJECTION RATES FOR FAILURE TO PASS THE  
ARMED FORCES MENTAL TEST BY COLOR<sup>1/</sup>



Source: See Footnote No. 19.

<sup>1/</sup> Based on 1962 pre-induction examination of draftees; does not include results of examination for enlistments.

that should lead to far-reaching reforms before going ahead with major new expenditures for 'more of the same'.<sup>23</sup>

The performance contracting project in Texarkana generated sufficient support from the government's Office of Economic Opportunity which funded additional performance contracting projects. Subsidies amounting to \$4,753,369 cited in Table 2<sup>24</sup> were provided by the OEO in the seventeen projects throughout the United States beginning in September, 1970 and ending in June, 1971.<sup>25</sup>

In view of these data, it appears that the federal government has continued to have a high priority interest in education. The passing of the \$1.5 billion Emergency School Aid Act by the Congress in late 1971 is also a testament to greater federal commitment to education.<sup>26</sup>

Although Batelle Memorial Institute's Final Report sounded the failure of performance contracting's achievement levels<sup>27</sup> and its failure to help the disadvantaged,<sup>28</sup> there are yet other broader program objectives of

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<sup>23</sup> Ibid.

<sup>24</sup> Reed Martin and Peter Briggs, op. cit., p. 4.

<sup>25</sup> Charles Blaschke, "Selection Criteria," Performance Incentive Remedial Education Experiment, Final Report to Office of Economic Opportunity (August, 1971), pp. 9-13.

<sup>26</sup> \_\_\_\_\_, "Education News Service" Washington, D. C., Capitol Publications, Inc., November, 1971, p. 1.

<sup>27</sup> \_\_\_\_\_, Final Report: Office of Economic Experiment in Educational Performance Contracting (Columbus, Ohio: Batelle Columbus Laboratories, March 14, 1972), p. 142 and p. 150.

<sup>28</sup> Charles F. Thomson, "OEO Contract Teaching Project, Says It Failed to Help Disadvantaged," The Evening Bulletin (February 1, 1972), p. 1.

performance contracting in addition to achievement levels in math and reading that should have value for educators. These should also be considered and evaluated. To be sure the concept of accountability has already left its mark upon the educator mentality and has become part of educational lexicon. Estes said, "Performance contracting is one implication or one manifestation of the concept of accountability. Performance contracting may not last indefinitely; accountability is here to stay."<sup>29</sup> As President Nixon pointed out, "School administrators and school teachers alike are responsible for their performance, and it is in the interests of their pupils that they be held accountable."<sup>30</sup> "Success," he continued, "should be measured not by some fixed national norm, but rather by the results achieved in relation to the actual situations of the particular school and the particular set of pupils."<sup>31</sup>

It would seem that the various educators groups; such as, the National Educational Association, the American Federation of Teachers, the American Association of School Administrations, and the National Schools Boards Association should still view with interest and as valid considerations some other impacts as outgrowths of performance contracting. Obviously there are still other impacts of vital concern to educators that should be seriously evaluated for whatever gains school districts may make of them for the advantage of children.

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<sup>29</sup> Nolan Estes, "Education Performance Contracting: The Dallas Project," Paper Presented at American Association of School Administrators Annual Convention. Atlantic City, N. J., Feb. 20-24, 1971, p. 16.

<sup>30</sup> "Excerpts from the President's Special Message to Congress on Educational Reform," New York Times (March 4, 1970), p. 28.

<sup>31</sup> Ibid.

TABLE 2  
 LOCATION, TOTALS, AND SOURCES OF FUNDING FOR  
 SEVENTEEN PERFORMANCE CONTRACTING PROJECTS IN  
 THE UNITED STATES 1970-71

	<u>Total \$</u>	<u>Source \$</u>
Anchorage, Alaska	444,632	O. E. O.
Rockland, Maine	299,211	O. E. O.
Athens, Georgia	301,770	O. E. O.
Selmer, Tennessee	286,991	O. E. O.
Wichita, Kansas	294,700	O. E. O.
Hammond, Indiana	342,528	O. E. O.
Jacksonville, Florida	342,300	O. E. O.
Fresno, California	299,015	O. E. O.
Las Vegas, Nevada	298,744	O. E. O.
Philadelphia, Pennsylvania	296,291	O. E. O.
Grand Rapids, Michigan	322,464	O. E. O.
Hartford, Connecticut	320,573	O. E. O.
Taft, Texas	243,751	O. E. O.
McComb, Mississippi	263,085	O. E. O.
Portland, Maine	308,184	O. E. O.
Stockton, California (Incentive)*	55,154	O. E. O.
Mesa, Arizona (Incentive)*	33,976	O. E. O.
	<u>\$4,753,369</u>	

Source: Reed Martin and Peter Briggs, "What Actually Happened This Year," Education Turnkey News, Vol. 1, Number 11-12, February-March, 1971, p. 4.

\* Added by the investigator

Therefore, it is the investigator's purpose to determine if performance contracting may be a technique for addressing other educational needs. It undoubtedly involves more than merely an exclusive concentration in determining achievement gains. Other broader program objectives or impacts may be achievable through performance contracting; such as desegregation, heightened community support, a rationalized collective bargaining process, a low-risk/low cost means for experimentation, and a means to humanize the classroom for both teacher and student. Consequently, a performance contracting program may likely generate these impacts other than only those on student achievement. It will probably have affective or volitional impacts on students — this would be another study in itself. It will surely have some impacts — positive, negative, or both — on teachers and school officials.<sup>32</sup> Thus these impacts are relevant and should be considered.

#### Statement of the Problem

The problem involves a parametric study of attitudinal responses of selected school district personnel and related others in seventeen performance contracting projects in the United States for the year 1970-71 to determine significant differences and divergence and convergence beliefs of selected school district personnel and related others regarding six performance contracting hypotheses.

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<sup>32</sup> J. P. Stucker and G. R. Hall, The Performance Contracting Concept in Education, (Santa Monica, California: Rand Corporation, May, 1971), p. 43.



The proponents of performance contracting have maintained that it could be:

1. A low-risk/low-cost means for experimentation.
2. An educationally effective, politically palatable means for racial integration.
3. A feasible means to facilitate community and parent control and involvement.
4. A means to rationalize the collective bargaining process.
5. A means to humanize the classroom for both teacher and student.
6. A means to increase instructional efficiency in areas such as math and reading.<sup>33</sup>

#### Delimitations of the Problem

This study was limited to OEO's seventeen performance contracting projects including fifteen subcontract ones and two classroom teacher incentive ones begun in September 1970 and concluded in June 1971, limited to school district personnel and related others.

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<sup>33</sup> Charles Blaschke, op. cit., p. 51.

Note: It should be further noted that Mr. Blaschke et alia have formulated these assumptions or hypotheses. His personal role is President of Education Turnkey Systems and was as principal investigator for the Office of Economic Opportunity. It should not be construed by the reader that the investigator is defending Mr. Blaschke's assumptions nor their accuracy, validity, or truth. This matter is appropriately left to the selected school personnel and related others who were involved directly in the performance contracting project within their respective districts.

Specifically the study was limited to sixty-nine school sites that included forty elementary experimental schools, grades 1-3, twenty-nine secondary schools, grades 7, 8, 9. Included were two high schools, where the ninth grades were housed, and one middle school. These experimental schools included urban and rural blacks, whites, Mexican-Americans, and Eskimos as target populations as cited in Figure I.

Teachers were not surveyed in Fresno, Las Vegas, and Philadelphia because Westinghouse Learning Corporation hired its own personnel for its performance contract project. It was felt by the investigator that an unusually high incidence of bias might exist among these personnel in favor of performance contracting; thus for this reason, they were excluded from the study. However, other school district personnel in those districts and related others in those districts were included in the study since their attitudes although perhaps still biased would be hopefully more objective. In addition Jacksonville and Hammond teachers were not surveyed because none were used by the contractors. Paraprofessionals were employed, however, exclusively.

The estimate of school district personnel and related others, as reported in this study, was limited to an adapted Likert rating scale and the subjective judgment of the individual respondent. Therefore, this study was limited to those aspects of respondent background and response that the selected instrument is designed to identify.

Finally, the investigation is hopefully encouraged by the fact that this study was successful in establishing that there are some significant

Figure 1

SUBCONTRACTOR AND TEACHER INCENTIVE  
SCHOOL MATCHING

Firm	SCHOOL DISTRICT	REGION	STUDENT POPULATION											
			URBAN					RURAL						
			Wh.	Blk.	MA	PR	Eskimo	Wh.	Blk.	MA	PR	Ind.		
Singer-Graflex	McComb, Miss. Portland, Me.	South Cen. Northeast	X								X			
QED	Rockland, Me. Anchorage, Alaska	Northeast Northwest						X		X				
Westinghouse	Las Vegas, Nev. Fresno, Calif. Philadelphia, Pa.	Southwest West Coast Northeast	X	X X X	X									
Plan Education	Athens, Ga. Wichita, Kan. Selmer, Tenn.	Southeast Midwest South	X	X						X	X			
Alpha	Taft, Texas Hartford, Conn. Grand Rapids, Mich.	Southwest Northeast Great Lakes	X	X								X		
Learning Found.	Jacksonville, Fla. Hammond, Ind.	Southeast Great Lakes	X	X						X	X			
Classroom Teachers	*Mesa, Arizona *Stockton, Calif.	Southwest West Coast	X	X	X									

Source: Charles Blaschke, Performance Incentive Remedial Education Experiment, Final Report to Office of Economic Opportunity: Washington, D. C., August, 1971, p. 14.

\* Mesa and Stockton added by the investigator.

differences in attitude patterns of school district personnel and related others as they were revealed by the selected instrument.

### Purposes of the Study

The investigation of attitudinal responses of selected school district personnel and other interested parties was made in an effort

1. to determine respondent attitudes about performance contractors' six hypotheses,
2. to measure the convergent and divergent attitudes among school district personnel and related others,
3. to validate from these findings significant differences among school district personnel and related others regarding the six selected hypotheses asserted by performance contractors.

Therefore, such a study should help to determine the accuracy of such impacts as they were manifested via the attitudinal responses of school district respondents to the six hypotheses included in the survey. Since all the respondents were in some way involved in the performance contract within their district in the year 1970-71, their experience, both actual and vicarious, have merit for this parametric study.

The findings may either help shape new interest in certain aspects of performance contracting for educators and others, or may finally lay to rest a useless experiment and a moribund concept as it presently exists. Nevertheless, whatever the findings, educator groups and other interested parties

will have an opportunity to assess at first hand the views of those who were most clearly associated with performance contracting in actual practice during 1970-71. Hopefully, such policy-makers may be better able to make educational decisions in light of these data.

### Research Methodology

These steps in the development of subsequent research and the development of the instrument were undertaken by the researcher and constitute the rationale for the study:

1. Examined previous research and literature pertinent to performance contracting.
2. Sent letters to Office of Economic Opportunity, education technology companies, Education Turnkey Systems asking for their cooperation in this study. Conducted personal interviews with school superintendents, OEO officials, project directors, and officials of Education Turnkey Systems.
3. Requested school district superintendents involved in the study to participate and to submit names and addresses of school personnel and related others.
4. Developed the instrument for this study, designed to gather information and to measure attitudes about performance contracting, only after careful analyses of problem to be resolved, personnel involved, ease of self administration,

moderate objectivity, and likelihood of greater responses that would be statistically useful and meaningful.

5. Submitted the survey for a pre-testing of the instrument in order to update and eliminate possible vagueness and ambiguities.
6. Updated areas of the instrument by adding sections to Part I, Background. The updating of the instrument did not affect the responses of the original respondents.
7. The final 14 Item Survey was then submitted to a pinpointed area sampling of 255 school district personnel and 119 related others in the seventeen participating school districts. Elementary and secondary teachers were randomly selected according to a table of random numbers.<sup>34</sup>
8. Coded the data, transcribed the data onto coding sheets, had the data keypunched, established a research design analysis for the data, and then submitted the cards for computer analysis\* on the basis of personal background and hypotheses respondency. Because written comments were few, scattered and varied, and could not be meaningfully clustered, they were arbitrarily eliminated from the study and filed.

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<sup>34</sup> Wilfred J. Dixon and Frank J. Massey, Jr., Introduction to Statistical Analysis. (New York: McGraw Hill Book Co., 1957), pp. 366-370.

\*IBM 360-91 Computer at Princeton Computer Center, Princeton, N. J., March 1972. Programming done by Dr. Pietro Pascale of Trenton State College.

9. Identified the medians; identified significant convergence-divergence attitudes among the various groups by median value analyses and degree of significance, computed by the standard deviation. Further analyzed the significance of relationship of personal variables; such, as age, school, length of service, education, and regions.
10. Summarized findings and made conclusions.

Definition of Terms Connected  
With the Study

1. Performance Contracting: A contract arrangement wherein a private corporation promises to provide certain services, usually managerial in nature, to a public institution.
2. Accountability: A term used to denote the process of evaluating whether or not the private corporation has met its promises, and if it has done so in a constructive manner.
3. Achievement Level: An ideally exact and quantitative measure of how much of a given subject the student has mastered.
4. Instructional Efficiency: A measure of cost/benefit of instructional techniques.
5. Attitude: "An enduring predisposition to behave in a consistent way toward a given class of objects." <sup>35</sup> Its adjective,

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<sup>35</sup> M. B. English and A. C. English, A Comprehensive Dictionary of Psychological and Psychoanalytic Terms. (New York: David McKay Company, 1958), p. 80.

attitudinal, refers to the manner, feeling, position or emotion with regard to a person, thing, or idea.

6. Humanize: In education an approach to make more human or gentle.
7. Rationalize: An approach to remove unreasonable elements of a process. In collective bargaining this means getting rid of ineffective techniques and finding those techniques that really do work.
8. Project Director: The chief executive responsible for the overall management of the performance contract project.
9. Project Analyst: The person responsible for evaluating the success of the project.
10. Director of Research: A member of the staff of an education institution or agency whose duties consist of one or more of the following functions: conducting research projects, formulating policies concerning research, approving research policies, deciding what use is to be made of research findings.<sup>36</sup>
11. Human Relations Specialist: A highly trained person with people and their relationships to one another. He helps to solve problems in companies, schools, the community, etc.  
He is a "people expert."

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<sup>36</sup> Carter V. Good, Dictionary of Education, (New York: McGraw-Hill Publishing Company, 1959), p. 176.



12. Turnkey Clause: The performance contract specifies that when certain programs have proven successful, then the corporation will "turn the keys" over to the school, that is, it will let the school implement the program.
13. Collective Bargaining: The process whereby a group of people with common self-interest pool their resources to attain a certain common goal.
14. Likert Scale: One consisting of 5, 4, 3, 2 or 1 which correspond respectively to complete approval, approval, neutrality, disapproval, and complete disapproval.<sup>37</sup>

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<sup>37</sup> Maurice Duverger, Introduction to the Social Sciences with Special Reference to Methods, (New York: Frederick A. Prager, 1964), p. 203.

CHAPTER II  
RELATED LITERATURE

Introduction

Before devising this research, the investigator reviewed the current literature and then made research findings. The purpose of this review was to acquaint the investigator with a description of performance contracting and its subsequent development. Since the concept and implementation of educational performance contracting is relatively recent, an attempt has been made to utilize mostly current information pertinent to this study. Consequently, the sub-topics of this chapter shall relate to performance contracting in the private and public sectors, toward a theory of performance contracting, a rationale for the hypotheses, other studies, and a review of the seventeen performance contracting projects, including Texarkana.

Performance Contracts in the Public  
and Private Sectors

Performance contracting is not a new concept. People have always been rewarded according to their performance, according to the results achieved. At the University of Bologna in the 15th century, for example, student-enacted statutes required the professor to start his lectures at the beginning of the book, cover each section sequentially, and complete the book by the end of the term; if the professor failed to achieve the schedule, he

forfeited part of funds that he himself had had to deposit at the beginning of the term.<sup>1</sup>

In the late 19th century England embarked upon a pay according to results. Test score of elementary school pupils in reading, writing, and arithmetic determined the amount the teacher was paid. The "Payment by Results" program begun in 1863 lasted until 1897.<sup>2</sup> Its demise was that payments for examination scores resulted in "a game of mechanical contrivance in which teachers will and must more and more learn how to beat us."<sup>3</sup>

In the year 1911 the Board of Estimate of the City of New York, critical of the demands made by the Board of Education on the city's treasury, launched a comprehensive survey of the city's schools, one aspect of which was an analysis of the tested arithmetic achievement of its pupils.<sup>4</sup> As a result of this survey, a number of textbooks in educational measurement, those published between 1912 and 1923, abound with references to the utility of standardized achievement test results as indicators of the effectiveness of schools and of teaching efficiency.<sup>5</sup>

Prior to 1968 there was little research in the area of performance contracting as it now pertains to educational services. However, performance contracts in the procurement of goods and services have existed in other

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<sup>1</sup>Roger T. Lennon, "Accountability and Performance Contracting," Speech presented at American Education Research Association, Annual Meeting (55th) New York, New York (February 4-7, 1971), p. 3.

<sup>2</sup>B. F. Chandler, op. cit., p. 2.

<sup>3</sup>Ibid.

<sup>4</sup>Roger T. Lennon, op. cit., p. 3.

<sup>5</sup>Ibid.

areas that concern themselves with efficiency incentives.<sup>6</sup> Hospital services, major defense systems, and NASA procurements are such examples.<sup>7</sup>

In one hospital study Evans similarly concerned himself with efficiency incentives as a consequence of rising hospital rates and non-optimal hospital care.<sup>8</sup> Also Schultze in an appropriate capsulation of the incentives for efficiency in hospital reimbursement by the Federal Government, indicated that there are no incentives for efficiency by hospitals reimbursed for "reasonable costs" simply because increased efficiency lowers Federal payments.<sup>9</sup>

In the area of defense procurements, the Procurement Act of 1947 became the foundation for defense procurement policy.<sup>10</sup> It required that, whenever possible, procurements should be based on a detailed specification of the product or service desired, with contracts awarded following an advertised formal price competition.<sup>11</sup> Various contracts were let but only under certain specified conditions and for specified purposes. These were at one extreme Firm Fixed Price (FFP) type of contract and other incentive

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<sup>6</sup> J. P. Stucker and G. R. Hall, The Performance Contracting Concept in Education (Santa Monica, Cal.: Rand Corp., May, 1971), p. 49.

<sup>7</sup> Ibid.

<sup>8</sup> R. G. Evans, "Efficiency Incentives in Hospital Reimbursement," Unpublished Ph. D. Dissertation, Harvard University, 1970, p. 4.

<sup>9</sup> C. F. Schultze, "The Role of Incentive, Penalties, and Rewards in Attaining Effective Policy," Vol. I, 91st Congress, 1st Session, U. S. Government Printing Office, Washington, D. C., 1969, p. 213.

<sup>10</sup> J. P. Stucker and G. R. Hall, op. cit., p. 53.

<sup>11</sup> Ibid.

contracts, most notably the Fixed Price Incentive Fee (FPIF) contract and the Cost Plus Incentive (CPIF) contracts. At the other extreme are the cost reimbursement contracts: the cost only (CR) and the Cost Plus Fixed Fee (FPFF) Materials (T-M) contract when only labor and materials are being procured, and the Labor-Hour(L-H) contract when only labor is procured.<sup>12</sup>

The contract types alluded to refer to cost incentive, i. e. , arrangements permitting the contractor to share any savings over some target price or cost. Many defense contracts, schedule and performance incentives are common.<sup>13</sup> Where the contractor's fee in a schedule incentive is dependent upon dates of delivery of products or completion of tasks, performance incentive are linked to the value of one or more product characteristics; such as accuracy, mean-time-between-failures, speed,etc.<sup>14</sup>

Lyons, a Department of Defense (DOD) authority, indicated that sophisticated contracting techniques, such as incentive-fee contracts, depend on clear definitions of products. He was explicit and crystallized performance incentives when he said that contractual incentives alone cannot be relied upon to increase contractor efficiency and that other interrelated management techniques and disciplines must also be stressed. Often, he went on, the key to good incentives is the preciseness of the statement of work or objectives .... that an incentive can be effective but that the cost estimate must be

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<sup>12</sup> Ibid. , p. 54.

<sup>13</sup> Ibid.

<sup>14</sup> Performance incentives are not a new invention. The Wright Brothers' first airplane contract with the U. S. Army had such a fee arrangement.

based on a good statement of work.<sup>15</sup>

NASA experience and practice have been similar to defense procurement contractual arrangements. However, it has developed what is uniquely called a Cost-Plus-Award-Fee (CPAF) contract that measures output objectively and quantitatively which the CPIF cannot do.<sup>16</sup> In so doing the CPAF contract spells out six elements:

1. Target cost estimate
2. A fixed base fee (may be zero) that does not vary with performance
3. An award fee based on a subjective evaluation of "performance"
4. The maximum total permitted for (2) plus (3)
5. Performance evaluation criteria
6. Schedule of fee payment dates<sup>17</sup>

What follows is the evaluation criteria concept appropriately summarized in the DOD/NASA Guide:

Criteria for evaluation should represent work "output," the contracting officer and project manager are concerned with results rather than the "input" to a contract. The standards assigned to the outputs<sup>18</sup> and the grading of the outputs are of extreme importance. There are many objective measurements or historical standards available to grade certain outputs and these can form the basis for the overall subjective evaluation of efficiency. Virtually all desired results are reducible to some standard of acceptability and effectiveness. When a sound description of what constitutes acceptable work or improved levels of work cannot be outlined, there should be no effort to incentivize the performance, and it should be performed under a CPEF Contract.<sup>19</sup>

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<sup>15</sup>R. D. Lyons, "Experiences with Incentives - Changes Needed," Defense Industry Bulletin, Vol. 6, No. 1, January, 1970, p. 23.

<sup>16</sup>\_\_\_\_\_. Department of Defense, National Aeronautics and Space Administration, Incentive Contracting Guide, October, 1969, U. S. Government Printing Office, Washington, D. C., 1969, p. 243.

<sup>17</sup>Ibid., p. 244.

<sup>18</sup>Output in this context refers to work performed and production processes and should not be confused with any "product" called for in the contract.

<sup>19</sup>Ibid., p. 246.

Figure 2

PERFORMANCE EVALUATION REPORT CRITERIA

		Submarginal 0-60	Marginal 61-70	Good 71-80	Very Good 81-90	Excellent 91-100
A Time of Delivery	(A-1) Adherence to plan schedule.	Consistently late on 20% of plans.	Late on 10% plans w/o prior agreement.	Occasional plan late w/o justification.	Meets plan schedule	Delivers all plans on schedule & meets prod. change requirements on schedule.
	(A-2) Action on Anticipated delays.	Does not expose changes or resolve them as soon as recognized.	Exposes changes, but is dilatory in resolu- tion on plans.	Anticipates changes, advise Shipyard, but misses completion of design plans 10%.	Keeps Yard posted on delays, resolves independently on plans.	Anticipates in good time, advises Shipyard, resolves independently and meets production schedule.
	(A-3) Plan Maintenance	Does not complete interrelated systems studies concurrently.	System studies com- pleted, but constr. plan changes delayed	Major work plans co- ordinated in time to meet production schedules.	Design changes from studies and inter- related plans issued in time to meet product schedules.	Design changes, studies resolved and test data issued ahead of pro- duction requirements.
B Quality of Work	(B-1) Work Appearance	25% dwgs. not com- patible with Shipyard repro. processes and use.	20% not compatible with Shipyard repro. processes and use.	10% not compatible with Shipyard repro. processes and use.	0% dwgs. prepared by Des. agent not compatible with Shipyard repro. processes and use	0% dwgs. presented Incl. Des. agent, vendors, subcontr. not compatible with Shipyard repro. processes and use.
	(B-2) Thoroughness and Accuracy of Work.	Is brief on plans tending to leave questionable situa- tions for Shipyard to resolve.	Has followed guidance, type and standard dwgs.	Has followed guidance, type & standard dwgs. questioning and resolving doubtful areas.	Work complete with notes and thorough explanations for anticipated question- able areas.	Work of highest caliber incorporating all pertinent data required including related activities.
	(B-3) Engineering Competence	Tendency to follow past practice with no variation to meet requirements job in hand.	Adequate engrg. to use & adapt existing designs to suit job on hand for routine work.	Engineered to satisfy specs., guidance plans and material provided.	Displays excellent knowledge of constr. requirements con- sidering systems aspect, cost, shop capabilities and procurement problems.	Exceptional knowledge of Naval shipwork & adaptability to work process incorporating knowledge of future planning in Design.

Figure 2

PERFORMANCE EVALUATION REPORT CRITERIA (Cont'd.)

		Submarginal 0-60	Marginal 61-70	Good 71-80	Very Good 81-90	Excellent 91-100
B Quality of Work (Contd.)	(B-4) Liaison Effectiveness	Indifferent to requirements of associated activities, related systems, and Shipyard advice.	Satisfactory, but dependent on Shipyard to force resolution of problems without constructive recommendations to subcontr. or vendors	Maintains normal contact with associated activities depending on Shipyard for problems requiring military resolution.	Maintains independent contact with all associated activities, keeping them informed to produce compatible design with little assist. for Yard.	Maintains expert contact, keeping Yard informed, obtaining information from equip. supplies w/o prompting by Shipyard.
	(B-5) Independence and Initiative	Constant surveillance req'd to keep job from slipping — assign to low priority to satisfy needs.	Requires occasional prodding to stay on schedule & expects Shipyard resolution of most problems.	Normal interest and desire to provide workable plans with average assistance & direction by Shipyard.	Complete & accurate job, free of incompatibilities with little or no direction by Shipyard.	Develops complete and accurate plans, seeks out problem areas and resolves with assoc. act. ahead of schedule.
C Effectiveness in Controlling and/or Reducing Costs	(C-1) Utilization of Personnel	Planning of work left to designers on drafting boards.	Supervision sets & reviews goals for designers.	System planning by supervisory, personnel, studies checked by engineers.	Design parameters established by system engineers & held in design plans.	Mods. to design plans limited to less than 5% as result lack engrg. system correlation.
	(C-2) Control Direct Charges (Except Labor)	Expenditures not controlled for services.	Expenditures reviewed occasionally by supervision.	Direct charges set & accounted for on each work package.	Provides services as part of normal design function w/o extra charges.	No cost overruns on original estimates absorbs service demands by Shipyard.
	(C-3) Performance to Cost Estimate	Does not meet cost estimate for original work or changes 30% time.	Does not meet cost estimate for original work or changes 20% time.	Exceeds original est. on change orders 10% time and meets original design costs.	Exceeds original est. on change orders 5% time.	Never exceeds estimates of original package or change orders.

Fig. 2 — CPAF "output" criteria



Figure 3

Ratings  
 Excellent (91-100)  
 Very good (81-90)  
 Good (71-80)  
 Marginal (61-70)  
 Submarginal ( 0-60)

Period of 19  
 Contract Number  
 Contractor  
 Date of Report  
 PNS Technical Monitor/s

CATEGORY	CRITERIA	RATING	ITEM FACTOR	EVALUATION RATING	CATEGORY FACTOR	EFFICIENCY RATING
A	TIME OF DELIVERY					
	A-1 Adherence to Plan Schedule		x .40 =			
	A-2 Action on Anticipated Delays		x .30 =			
	A-3 Plan Maintenance		x .30 =			
	Total Item Weighed Rating				x .30 =	
B	QUALITY OF WORK					
	B-1 Work Appearance		x .15 =			
	B-2 Thoroughness and Accuracy of Work		x .30 =			
	B-3 Engineering Competence		x .20 =			
	B-4 Liaison Effectiveness		x .15 =			
	B-5 Independence and Initiative		x .20 =			
	Total Item Weighed Rating				x .40 =	
C	EFFECTIVENESS IN CONTROLLING AND/OR REDUCING COSTS					
	C-1 Utilization of Personnel		x .30 =			
	C-2 Control of all Direct Charges other than labor		x .30 =			
	C-3 Performance to Cost Estimate		x .40 =			
	Total Item Weighed Rating				x .30 =	
<b>TOTAL WEIGHED RATING</b>						
Rated by:						
Signature(s)						

NOTE: Provide supporting data and/or justification for below average or outstanding item ratings.

Fig. 3— ASPR Contractor Performance Evaluation Report

Concluding the discussion of NASA's CPAF contract is a Performance Evaluation Report Criteria, Figure 2, which precisely establishes a sample form for aggregating the individual criteria;<sup>20</sup> and Figure 3 which identifies the Armed Forces Procurement Regulation (ASPR) for Contractor Performance Evaluation Report.<sup>21</sup>

### Toward a Theory of Performance Contracting

It has been over two years since the initiation of a performance contracting program in the Texarkana, Arkansas school, and already over a hundred such contracts are in effect or have been actively negotiated, including the state-wide plan in Virginia.<sup>22</sup> But both among the proponents and critics of this most recent conceptual innovation in education there seems to exist a wide diversity of understanding regarding the aims and underlying philosophy of the performance contract theory. Therefore, it will be the writer's aim to acquaint the reader with the literature which has produced no comprehensive theoretical statement concerning the benefits and costs of performance compared to other types of contracting.<sup>23</sup> Nevertheless, the literature does contain a formal theory of the employment relationship

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<sup>20</sup>J. P. Stucker and G. R. Hall, op. cit., pp. 62-63.

<sup>21</sup>Ibid., p. 64.

<sup>22</sup>\_\_\_\_\_, "Where It's Happening," Vol. 1, No. 2, Education Turnkey News, Washington, D. C., Education Turnkey Systems, Inc., May, 1970, p. 1.

<sup>23</sup>James P. Stucker, op. cit., pp. 1-2.

by H. A. Simon<sup>24</sup> and a theory of incentives by G. M. Yowell.<sup>25</sup>

In his theory Simon explains that there exists an authority relationship when party A enters into an employment contract with party B because B is employed to accomplish certain objectives results in return for payment. In contrast the sales contract does not imply an authority relationship but simply a money-commodity exchange.

Thus, for performance contracting there are three important implications:

1. The basic issue in considering a performance contract for results is whether it is or is not preferable to a contract for resources.
2. The basic distinction between the two types of contracts is authority relationship.
3. The preferred choice between the two basic contracts is, in part, a function of the uncertainty connected with the project.<sup>26</sup>

On the other hand, Yowell's theory of incentives is concerned with a choice that is applicable to either type of contract;<sup>27</sup> namely a sales contract and an employment contract. The theory of incentives' focus of interest, therefore, is on methods for indirectly guiding the actions of the agent-- a worker or contractor.<sup>28</sup> Yowell's formulation of a general decision-

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<sup>24</sup>H. A. Simon, "A Formal Theory of the Employment Relationship," Econometrica, Vol. 19, No. 3, July, 1951, pp. 293-305.

<sup>25</sup>G. M. Yowell, Jr., Optimal Rewards in Incentive Systems, EES Student Thesis Series, Department of Engineering, Economic Systems, Stanford University, Stanford, California, March, 1969.

<sup>26</sup>James P. Stucker, op. cit., pp. 5-6.

<sup>27</sup>Ibid., p. 7.

<sup>28</sup>Ibid.

theoretic incentive model is based under several sets of assumptions including certainty and uncertainty.<sup>29</sup>

What Yowell has done then is to establish the incentive relationship consisting of only two parties, manager and subordinate assuming that the basic relationship is formed for the benefit of both. Out of this relationship, Yowell forms the basic assumption that allows the subordinate (agent) to maximize his profit potential (or, in the case of uncertainty, his expected utility).<sup>30</sup> Thus it is the reward incentive that motivates the results the agent achieves.

A number of insights of both theories are directly applicable to performance contracting. For example, Yowell's statement of the reward (pricing) problem under conditions of uncertainty illustrates that the risk attitudes of both parties must always be considered and that the buyer cannot simply set up the best possible deal for himself and expect the seller to respond as he (the buyer) wishes.<sup>31</sup> Simon, however, indicates that in the authority relationship that the agent must accomplish certain results in return for payment or he does not receive payment.

While an actual theory does not exist, Simon's and Yowell's theories approach one and have been presented here.

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<sup>29</sup> Ibid., pp. 7-8

<sup>30</sup> Ibid., p. 8

<sup>31</sup> Ibid., pp. 45-46

Note: For a more theoretical review read H. A. Simon's "A Formal Theory of the Employment Relationship," G. M. Yowell, Jr.'s Incentive Theory, or James P. Stucker's analysis in The Performance Contracting Concept, Appendix: A Critique of the Theory.

Rationale for the Hypotheses

It should be pointed out that Blaschke et alia have developed the rationale and have formulated the six assumptions/hypotheses used in the instrument.<sup>32 33 34 35 36 37 38 39 40 41</sup> This rationale grew out of Blaschke's personal role as president of Education Turnkey Systems and as principal investigator for the Office of Economic Opportunity.

In the literature, except in references to Texarkana achievements and Blaschke himself, there is little attempt to rationalize support for increases in achievement levels of areas such as math and reading.

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<sup>32</sup> \_\_\_\_\_. "The Contracting Process," Section Two, Performance Contracting in Education: The Guaranteed Student Approach to Public School System Reform. (Champaign, Illinois: Research Press, 1970), pp. 15-23.

<sup>33</sup> Ibid., pp. 33-37.

<sup>34</sup> \_\_\_\_\_. "Where It's Happening," Vol. 1, No. 9-10. Education Turnkey News. Washington, D. C., Education Turnkey Systems, Inc., December-January, 1970, pp. 5-20.

<sup>35</sup> Reed Martin and Peter Briggs, "Private Firms in the Public Schools," Vol. 1, No. 11-12, Education Turnkey News. Washington, D. C., Education Turnkey Systems, Inc., February-March, 1971, pp. 2-12.

<sup>36</sup> \_\_\_\_\_. "Where It's Happening," Vol. 1, No. 8. Education Turnkey News. Washington, D. C., Education Turnkey Systems, Inc., Nov., 1970, pp. 2-8.

<sup>37</sup> \_\_\_\_\_. "Newsletter," Vol. 1, No. 1. Education Turnkey News. Washington, D. C., Education Turnkey Systems, Inc., April, 1970, pp. 1-2.

<sup>38</sup> \_\_\_\_\_. "Where It's Happening," Vol. 1, No. 2. Education Turnkey News. Washington, D. C., Education Turnkey Systems, Inc., May, 1970, p. 1.

<sup>39</sup> Charles Blaschke, "Policy Implications," Chapter Nine, Performance Incentive Remedial Education Experiment, Final Report to Office of Economic Opportunity: Washington, D. C., Education Turnkey Systems, Inc., Aug., 1971, pp. 190-191; p. 193.

<sup>40</sup> Ibid., pp. 117-156.

<sup>41</sup> "From Gold Stamps to Green Stamps," op. cit., pp. 52-53.

Although OEO's Interim Report dealt a blow to achievement gains, they are arguable on statistical grounds.<sup>42</sup> As voluminous and as detailed as the August, 1971 Final Report to the Office of Economic Opportunity is, no attempt was made to include the nature and extent of math and reading achievement gains or losses if any. This was the function of Batelle Memorial Institute, an independent testing auditor, subcontracted for these services.

These are the most definitive rationale for the hypotheses:

1. A means to humanize the classroom for both the teacher and the student

Blaschke noted that as a result of the first year of performance contracting, teachers began to perceive themselves as "learning and resource partners." He felt that instruction was not only "learner centered," but also "learner controlled." Continuing, he pointed out that teachers' attitudes toward the projects ranged from extremely negative to extremely positive and that the majority of the teachers felt that performance contracting did allow some degree of flexibility to do what they had always wanted to do.

Student reaction to the project indicated a "smile factor" and attendance was generally significantly higher than in control sites (through the availability of make-up classes, actual attendance in one performance contracting site was greater than the number of regularly scheduled hours

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<sup>42</sup>James A. Mecklenburger and Donald M. Goldenbaum, "Performance Contracting: How OEO Failed Performance Contracting," Nation's Schools, Vol. 89, No. 4 (April, 1972), p. 32.

available); and dropout rates were significantly reduced in the vast majority of sites. In one Virginia project involving 500 students, the dropout rate of the target group fell to zero.<sup>43</sup>

2. A feasible means to facilitate community and parent control and involvement

Blaschke cited the support during the implementation phase of the first decentralized school districts in New York City. He noted that district saw the experiment as a leverage not only to countervail union pressures but also to involve community residents as paraprofessionals and teacher aids. He pointed out that in another site, minority parents threatened to withdraw their children from the project, arguing that inferior paraprofessionals were teaching the children and that segregated classes were being perpetuated. At another site he said that disciplinary problems were about to force discontinuance of the contractor's program, parents, members of the planning advisory board, formed voluntary parent committees which patrolled the school hallways to ensure that the project could be continued. Principals in the vast majority of the projects reported that a high level of parental support prevailed during the entire year even though a few parents withdrew their children from the program during the initial stages.<sup>44</sup>

3. A means to rationalize the collective bargaining process

Blaschke indicated that without doubt, performance contracting has provided a leverage for school administrators trying to initiate incentive or

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<sup>43</sup> Charles Blaschke, op. cit., pp. 52-53.

<sup>44</sup> Ibid., p. 52.

merit pay and differentiated staffing. He cited that one performance contract site's school board planned to initiate incentive programs for all students and teachers during the turnkey phase. In other sites, he said that school principals had attempted to initiate incentive contracts with their teachers in a manner similar to that in the performance contract school. He further noted that in at least one of the two projects sponsored by OEO, in which teacher associations extend into contracts with the school board, differentiated staffing will be implemented.<sup>45</sup>

4. An educationally effective, politically palatable means for racial integration

Biaschke has indicated that it may be too early to judge, but he felt that it does seem to be considered an aid to desegregation. His belief in this appears to have been received from the NAACP's recently passed resolution favoring performance contracting. Further, he indicated, that one performance contract in a Southern state was funded under the Emergency School Fund Act. He pointed out that the presence of performance contracting in Texarkana over the last two years not only soundly defeated freedom-of-choice advocates at school board election time, but also enabled integration to occur relatively smoothly in Texarkana, Arkansas while race riots occurred in the non-participating district across the street in Texas.

In several sites, he went on, where administrators looked upon performance contracting as a means to assist desegregation, court orders and decisions required the closing of schools or transferring of students.<sup>46</sup>

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<sup>45</sup> Ibid.

<sup>46</sup> Ibid.



5. A low-risk/low-cost means for experimentation

Because many of the firms were overly ambitious and optimistic in terms of grade-level guarantees, Blaschke pointed out, "the actual fee paid by the school system in many cases was small relative to the increase in student performance. One district, for example, paid a fee less than existing school costs for a doubling of the rate of learning. Schools also avoided risk: in most instances, the political heat resulting from the experimentation was not directed toward the school but to federal sponsoring agents or to the performance contracting firms. Similarly, in those instances where the contractors' results were not significant, the contractor again, rather than the school 'failed.' Early indications and analyses suggest that capital-intensive, rather than teacher-intensive programs will probably fare better in reducing long-run operating costs in these areas."<sup>47</sup>

6. A means to increase instruction efficiency in areas such as math and reading

Blaschke said that achievement results from scattered projects indicated that the average rates of achievement in math and reading for under-achieving students were doubled for a cost slightly more than existing cost per subject. Blaschke believes that if school administrators are willing to make hard-nosed decisions regarding the management of existing programs, and the use of contractors' programs through the turnkey concept..., it appears that math and reading can be taught efficiently and effectively under performance contracting.<sup>48</sup>

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<sup>47</sup> Ibid.

<sup>48</sup> Ibid.

Other Studies and Surveys

At the present time and to the knowledge of the investigator, there are two doctoral dissertations underway that both pertain to performance contracting.<sup>49</sup> Both, however, are local studies: one deals with the Stockton incentives program; the other, with the performance contracting project in the Grand Rapids School District. Undoubtedly there are others; however, the investigator cannot report anything beyond this. Outside of the present study, there is no other study of national significance dealing with performance contracting participants and related others in seventeen projects.

However, several national polls have been conducted to assess validity of performance contracting for education<sup>50</sup> and teacher opinions on performance contracting.<sup>51</sup>

The poll of school board members in 47 states was taken on the question: "Does the concept of performance contracting have validity for education?" Thirty-three and a third percent replied "yes, definitely," thirty-three and a third percent replied "yes, with reservations," and the remaining third responded "no, not at all." Thus 2 out of 3 favored the concept.<sup>52</sup>

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<sup>49</sup>Information concerning these dissertations was gained from a telephone interview with Mr. Blaschke and a telephone conversation with Mrs. Joan Webster of Grand Rapids, Michigan.

<sup>50</sup>\_\_\_\_\_. "Two Out of Three Boardmen Buy Performance Contracting," American School Board Journal, 158, November, 1970, pp. 35-36.

<sup>51</sup>\_\_\_\_\_. "Teacher Opinion Poll: Accountability, Vouchers, and Performance Contracting," Today's Education. Vol. 60, No. 9. National Education Association of the United States, Washington, D. C., December, 1971, p. 13.

<sup>52</sup>"Two Out of Three Boardmen Buy Performance Contracting," op. cit., pp. 35-36.

The National Education Association Research Division reported in a recent Teacher Opinion Poll that the nation's public school teachers as a whole are opposed to accountability payment, a voucher plan, or performance contracting. Forty-eight percent of the teachers opposed performance contracting. One performance contracting, opinions were more evenly divided with about  $1\frac{1}{4}$  as many opposed as in favor.

In this survey the following question was addressed to a nationwide sample of public school classroom teachers both elementary and secondary.

"Some school systems are contracting with private businesses which guarantee improvement in reading and other subjects by pupils in the school system (performance contracting). Do you favor or oppose this practice?"

Nearly one-half the respondents indicated some degree of opposition to performance contracting, but these were almost evenly divided between those who tended to oppose and those who strongly opposed the practice. A substantial proportion, about 3 teachers in 10 said they tended to favor it, but very few, less than 1 in 10, were strongly in favor.<sup>53</sup>

OPINION POLL OF PUBLIC SCHOOL TEACHERS

TABLE 3

STRONGLY FAVOR	7.5%
TEND TO FAVOR	30.5%
TEND TO OPPOSE	25.7%
STRONGLY OPPOSE	22.0%
NO OPINION	14.4%

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<sup>53</sup>"Teacher Opinion Poll...", op. cit., p. 13.

In follow-up of this question on performance contracting, another question asked: "Do you think local education associations should contract with school systems for this purpose?"

Many teachers, nearly two in five, did not have an opinion on this question, but among those who did, negative views were more prevalent than positive ones.

OPINION POLL OF PUBLIC SCHOOL TEACHERS  
TABLE 4

YES	24.0%
NO	38.4%
NO OPINION	37.6%

Finally, the analysis of responses to these questions on the basis of grade level taught, sex of respondent, size of school system, geographical region, and type of community did not reveal any consistent patterns of major differences in the distribution of opinions.<sup>54</sup>

#### A. Review of Performance Contracting And Other Developments

##### Performance Contracting Defined

The concept of performance contracting is based on the principle of payment for accomplishment; for the delivery of measurable results. As it has been applied thus far, it has been a device whereby the local school district contracts with private industry to deliver a certain educational objective, with payment scheduled on a sliding scale based on the actual

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<sup>54</sup>"Teacher Opinion Poll...", op. cit., p. 13.

results shown on tests before commencing the program and at the end of the period contracted.

Considered by many to be inapplicable to the pupil's total school experience, it has nevertheless gained favor in many areas in respect to increasing reading ability, and some other basic skills such as mathematics.

As explained by Lessinger:

If an educational manager promises that all children attending his school will be able to read 200 words per minute with 90 percent comprehension on their 12th birthday, as measured by a specific test, simply giving the test to all children on their 12th birthday will readily reveal if the promise has been fulfilled.<sup>55</sup>

Fees are based on the satisfactory completion of the contracted goal, with -- usually -- deduction of a portion of the per capita fee for each child whose performance is below the desired level, or no payment at all, depending on the degree of deficiency. Penalties may be assessed for extreme instances of failure, and the contract may provide for bonuses in the event of outstanding success.

First implemented during the 1969-1970 school year in Texarkana, each program thus far has been uniquely designed for the needs of a particular school system and based on the services which a private contractor is prepared to deliver on terms mutually agreed. The exception is a pilot study being undertaken by the Office of Economic Opportunity. Attempts are being made to arrive at standards of performance and of testing for results.

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<sup>55</sup> Leon M. Lessinger, former U. S. Associate Commissioner of Education, quoted by Harold V. Webb, "Performance Contracting: Is It the New Tool for the New Boardmanship?" American School Board Journal, 158 (November 1970), p. 28-29.

The Texarkana Experiment

The project in Texarkana was originally conceived as a dropout prevention program with the school district and the local model cities agency cooperating, with some initial funds from the Department of Housing and Urban Development, late in 1968, with Charles L. Blaschke, president of Education Turnkey Systems, Inc., assisting in its development.<sup>56</sup> A planning grant was received by the school district in March 1969 under Title VIII, Elementary and Secondary Education Act from the U. S. Office of Education. A consulting group, the Institute for Politics and Planning, aided in drawing up a request for proposal and bids were invited, based on the following guidelines:

1. The program must help up to 400 students in grades 7-12 achieve satisfactory skills in reading and mathematics.
2. All participants will start with grade level deficiencies of 2.0 or more (on the basis of the Iowa Test of Basic Skills) and minimum IQ of 75, as determined by the Lorge-Thorndike Test.
3. The contractor will be responsible for satisfactory progress of pupils present for at least 50 percent of the instruction offered, and will be paid solely for demonstrated learning achievement.
4. Substantial financial bonuses or penalties will depend on whether learning rates are slower or faster than the contract stipulation.
5. Outside agencies, including some trained by USOE, will serve as auditors of the project.<sup>57</sup>

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<sup>56</sup> Stanley Elam, "The Age of Accountability Dawns in Texarkana," Phi Delta Kappan, 51 (June, 1970), pp. 509-14.

<sup>57</sup> Dale Bratten, Caroline Gillir, and Robert E. Roush, "Performance Contracting: How It Works in Texarkana," School Management, 14, (August, 1970), pp. 8-10.

The winning bidder was Dorsett Education Systems, of Norman, Oklahoma, who guaranteed a gain of one grade level after 80 hours of instruction, at a cost of \$80 per pupil, with reimbursement on a sliding scale, with bonuses for faster performance.<sup>58</sup>

The Texarkana program was built around units known as Rapid Learning Centers with programmed instruction via a specially developed Dorsett machine. The typical daily session ran for a two-hour period and involved 15 students, one teacher and a paraprofessional. The centers, adjacent to junior and senior high schools were established in mobile 900-square foot classrooms, carpeted, soundproofed and air-conditioned. The pupils participated in other school and extra-curricular activities except for the 2-hour session in the RLC. All participants had been diagnosed as potential drop-outs; about 50% were black, although only 30% of the junior high school pupils in the school system were black.<sup>59</sup>

An elaborate system of trading stamps and bonuses was developed to furnish incentive for the pupils to cooperate and learn, instead of the traditional letter grades; a portable television set was the reward offered to the youngster making the greatest advance during the year.<sup>60</sup> The winner advanced

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<sup>58</sup> Ibid.

<sup>59</sup> Elam, op. cit.

<sup>60</sup> This motivational approach developed twenty years ago by educators and called contingency contracting (a student contracts to get a reward contingent upon successfully completing a task) begins with extrinsic educationally-related rewards for performing short tasks and soon moves to intrinsic motivation for lengthy tasks as he tastes his first success in school.

8.3 subject grade levels -- 5.1 in math, 3.2 in reading -- in just three months of instruction.<sup>61</sup>

Dorsett noted that students with I. Q. s of 75 do not come up to grade level as quickly as those with a 95 I. Q. and most of those taking part in the Texarkana project were closer to the 75 range.<sup>62</sup> Informal reports indicated belief that an average gain of two grade levels in reading and math had been achieved after 60 hours of instruction,<sup>63</sup> but considerable controversy has surrounded Dorsett's test results.

An evaluation report in March, 1970, was seriously flawed because of failure to match the control group properly with the treatment group.<sup>64</sup>

More serious have been the claims, and evidence, that to some extent the Dorsett program was guilty of "teaching to the test," anticipating the questions to be asked pupils when final testing was administered, although both Dorsett and co-designer Blaschke have maintained that little importance should be attached to this criticism. They noted that of 106 students taking the test in May -- and subjected to the "teaching to the test" -- some 40 had taken the tests, noncontaminated, in March and April. Of these 40, 21 did better in May but 19 actually did worse on the second test.<sup>65</sup>

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<sup>61</sup>Ibid. This was by no means typical, and there is no information available as to whether this newfound achievement was retained by the pupil.

<sup>62</sup>Jeanne L. Davis, "The Texarkana Project," Audiovisual Instruction, 15 (June, 1970), p. 97.

<sup>63</sup>Ibid.

<sup>64</sup>Elam, op. cit.

<sup>65</sup>"Performance Contracting: Clouds and Controversy Over Texarkana," Nation's Schools, 86 (October, 1970), pp. 85-88.



One of the prime objectives had been to lower the dropout rate. In this the project was successful; Texarkana Superintendent of Schools, Edward D. Trice, reported a decrease from about 20% to 2% in the rate of students dropping out of school, and attributed much of the decrease to the Dorsett performance contract. Trice also criticized the evaluators who, he claimed made no effort to separate gains made independently from those made by "teaching to the test" and his faith in the system led to his obtaining a federal grant of \$281,000 to continue the program during the 1970-71 school year.<sup>66</sup>

The program was not an unqualified success, however, even aside from the control and teaching weaknesses noted above. Varying rates of average increase were reported in tests administered at various stages of the program, and as many as 32% of the pupils had made no progress or even slipped backward up to three or four grade levels, even after 60 hours of instruction.<sup>67</sup>

Most of the teachers and administrators appeared to favor the program, and the community indicated its confidence when it reelected all members of the school board. Interestingly, too, vandalism in the cooperating schools was cut in half during the first year of the experiment.

#### Widespread Interest

The Texarkana experiment attracted considerable interest throughout the country, and drew many visitors to the Rapid Learning Centers

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<sup>66</sup> Ibid.

<sup>67</sup> Elam, op. cit.

in that city. A number of companies became interested in supplying education under performance contract, with some 40 companies preparing proposals by September of 1970, for approximately 170 school districts either involved or seriously interested, by that date, and several entire states preparing plans for performance contracting as early as August, 1970.

Virginia had, in fact, developed its plan by late March, 1970, for funding under ESEA Title I. Seven school districts, all rural except for Norfolk, were selected for pilot projects; all had low-achievement problems, and it was estimated that the initial projects would involve some 2,250 students in grades 1-9, who would be taught both mathematics and reading. The Virginia project was planned to involve at least two contracting companies, and perhaps more, in order to introduce an element of competition among suppliers.<sup>68</sup>

New Jersey has also accepted the basic concept that performance contracting is worth exploring, with 35 school districts seriously considering contracting, in 1970. Seven districts -- Atlantic City, Trenton, Newark, Hoboken, Plainfield, East Orange and Paterson -- had asked to be included in the OEO experimental projects.<sup>69</sup>

In Michigan, the Flint Board of Education was the first to sign up, for multimedia reading laboratories to serve an estimated 2,000 under-achievers, all 9th and 10th grade students identified as achieving two or

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<sup>68</sup> Ronald Schwartz, "Performance Contracts Catch On," Nation's Schools, 86 (August, 1970), pp. 31-33.

<sup>69</sup> Ibid.

more years below grade level. This project, unlike others, was planned to rely on expertise of teachers in the Flint school system who would be involved, after extensive in-service education, under Title I. Detroit also was developing plans to improve reading, mathematics and "achievement motivation" of 3700 students in grades 9-12, also under Title I, having been turned down for Title VIII funds.<sup>70</sup>

Dallas, San Diego, Jacksonville, Florida and Philadelphia, as well as a number of smaller communities across the country, were reportedly developing programs during the summer of 1970. Both the Office of Economic Opportunity and the Office of Education have been involved in the planning stages of various projects.

#### OEO \$6.5 Million Program

Approximately 170 districts had applied for OEO funds, from which 20 districts were eventually selected to participate in a year-long project involving some 28,000 students in both remedial reading and mathematics. According to Dr. John O. Wilson, assistant director of planning, research and evaluation at OEO, it was hoped that this multi-district project would help to validate results obtained in Texarkana, but at the same time he expressed concern that performance contracting would lead to "teaching to the test" on a wider scale. The OEO was to guard against that possibility by selecting three standardized tests, to be administered on a random basis. Furthermore, 75% of payment would be based on the test scores achieved on

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<sup>70</sup> Ibid.

on standardized tests, and the remaining 25% on performance on reading and mathematics tests (criterion reference tests).<sup>71</sup>

The 18 districts were divided into six groups, consisting of 3 districts each. Six contractors were selected to participate, and each was assigned to one group of three districts.<sup>72</sup> Some 27,000 students control and experimental in grades 1-3 and 7-9 were covered under the contracts. The remaining two districts were covered by contracts for programs utilizing a traditional educational framework, with local teacher groups operating under OEO incentive contracts. NEA affiliates in Mesa, Arizona and Stockton, California agreed to participate in the Office of Economic Opportunity nationwide experiment. In these two sites, teachers were to receive extra funds, earned on the basis of student performance, which could be used to reward students or teachers, or to purchase instruction materials.<sup>73</sup> Thus in Mesa, Arizona and Stockton, California the Classroom Teachers Association became the "contractor" rather than a profit-making company, and agreed to raise students in reading and math under this OEO nationwide experiment.<sup>74</sup> An additional 1200 students were involved in the two non-commercial projects, "to assess education incentive system only," according to OEO. In regard to performance contract projects, officials noted that the contracts would provide payments of \$110 per grade level increase in each of the skills taught, and that a 1.6 grade level increase

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<sup>71</sup> Ibid.

<sup>72</sup> Reed Martin and Peter Briggs, op. cit., p. 3.

<sup>73</sup> "Where It's Happening," op. cit., pp. 2-3.

<sup>74</sup> Reed Martin and Peter Briggs, op. cit., p. 3.

would be necessary for the company to begin to make a profit. Maximum payments would reach a ceiling of \$220 per child per subject, or the fee of 2.3 grade level increase. Disadvantaged students in the existing educational system were to progress at a rate of .4 to .5 grade level increases per year. Achievement in verbal skills has been noted graphically by Coleman. See Table 5.

The OEO projects were to have each student tested by the contractor at the beginning of the experiment, periodically throughout the school year, and six months after completion of the experiment. An estimated 500 separate criterion-referenced tests had to be developed; testing was to be handled by the Battelle Memorial Institute of Columbus, Ohio, under a two-year \$614,000 contract, and an elaborate procedure had also been devised for the administering of the standardized tests.

A considerable degree of variation was to be involved in the teaching systems utilized by the six commercial contractors, illustrated in Table 6.

Table 7 illustrates the seventeen districts participating in the OEO experiment, together with the contractors assigned.

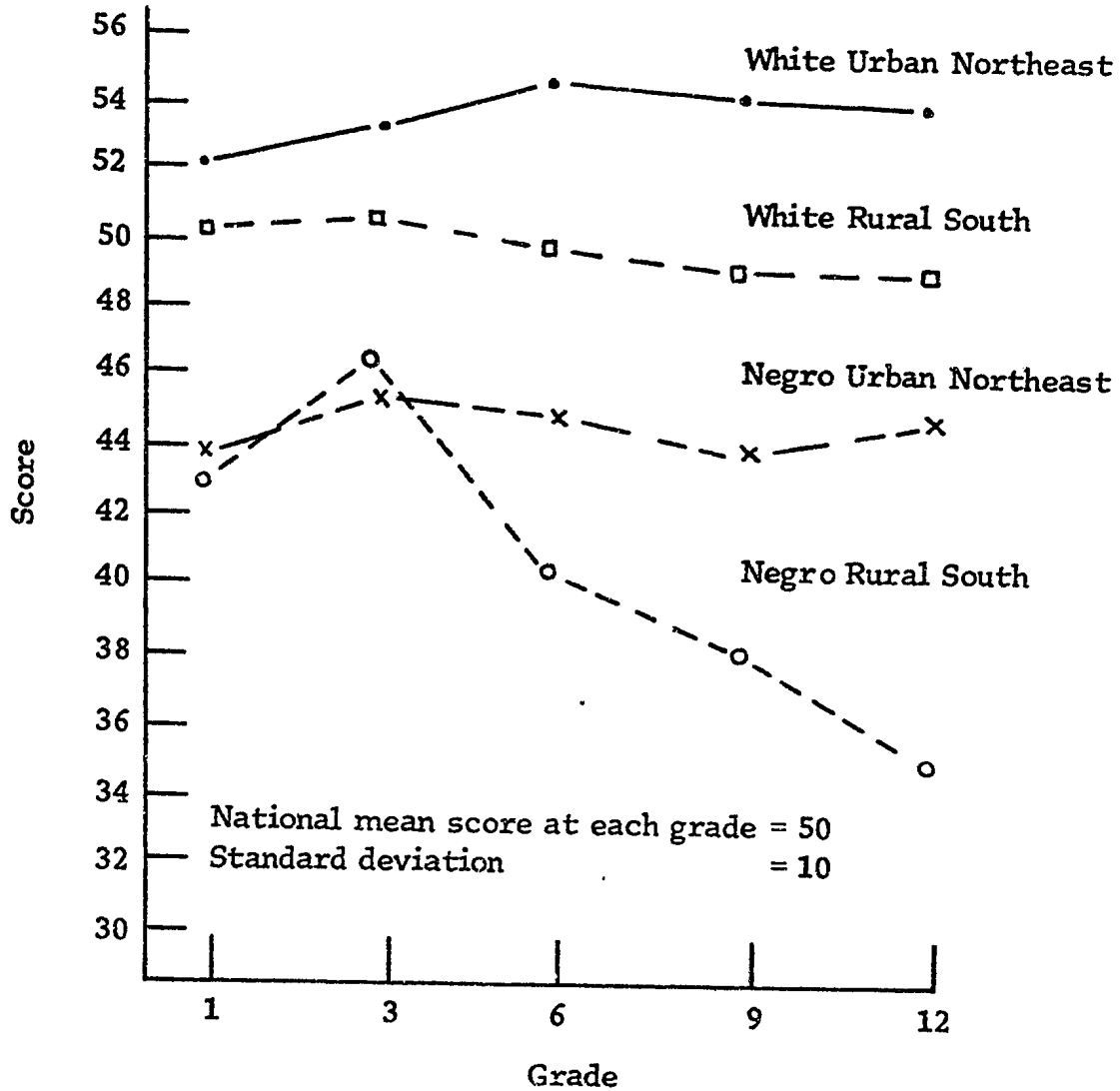
### Reactions

The concept of performance contracting met with a variety of reactions during its initial months, and the following polls from those whose work is in any way involved, are presented.

A poll of school board members in 47 states, from a scientifically representative sampling, was taken on the question: "Does the concept of

TABLE 5

PATTERNS OF ACHIEVEMENT IN VERBAL SKILLS  
AT VARIOUS GRADE LEVELS, BY RACE AND REGION



Source: James S. Coleman, "Equality of Educational Opportunity, Re-examined," Socio Economic Planning Sciences, Vol. 2 (April, 1969), numbers 2, 3, 4, Pergamon Press.

VARIABLE TEACHING SYSTEMS EMPLOYED  
BY SIX TECHNOLOGY COMPANIES

TABLE 6

Contractor	Incentives	Teaching Machines	Reorganized Texts Workbooks
Alpha Learning Systems	H	L	H
Singer/Graflex	H	M	M
Westinghouse Learning Corp.	M	M	H
Quality Educational Development	M	M	M
Learning Foundations	H	H	L
Plan Education Centers	L	L	L

H: Heavy utilization  
M: Medium utilization  
L: Light utilization

Source: "OEO's Performance Experiments Will Test Seven Instructional Approaches," Nation's Schools, Vol. 86 (Sept., 1970), p. 55.

PARTICIPANT SCHOOL DISTRICTS WITH  
CONCOMITANT CONTRACTORS

TABLE 7

Portland, Maine	Singer/Graflex Corp.
Rockland, Maine	Quality Education Development
Hartford, Conn.	Alpha Systems, Inc.
Philadelphia, Penna.	Westinghouse Learning Corp.
McNairy County, Tenn.	Plan Education Centers, Inc.
McComb, Miss.	Singer/Graflex Corp.
Duval County, Fla. (Jacksonville)	Learning Foundations, Inc.
Taft, Texas	Alpha Systems, Inc.
Hammond, Inc.	Learning Foundations, Inc.
Grand Rapids, Mich.	Alpha Systems, Inc.
Fresno, Calif.	Westinghouse Learning Corp.
*Stockton, Calif.	Classroom Teachers
*Mesa, Arizona	Classroom Teachers
Clarke County (Athens) Ga.	Plan Education Centers, Inc.
Las Vegas, Nevada	Westinghouse Learning Corp.
Wichita, Kansas	Plan Education Centers, Inc.
Anchorage, Alaska	Quality Education Development

Source: Ronald Schwartz, "Performance Contracts Catch On,"  
Nation's Schools, Vol. 86 (August, 1970), p. 33.

\*Added to this Table by the investigator.



performance contracting have validity for education?" Interestingly, 33-1/3 percent replied "Yes, definitely," 33-1/3 percent replied "Yes, with reservations," and the remaining third responded "No, not at all." Thus 2 out of 3 favored the concept. Among objections and reservations expressed was the fear that education might be made less humane and less child-centered "at the very time that education needs to address itself more singularly than ever to the human needs of the individual child."<sup>75</sup> Others were apprehensive of pressures being put on the children, or the failure to consider individual differences.

The reactions of school board members also reflected "an apparently widespread belief

... that teachers have turned, at least to some degree, from commitment to their own occupational interests."<sup>76</sup>

Education groups generally were skeptical, although the American Federation of Teachers was outspokenly in opposition and called for abolition of the concept, claiming it to be "an invasion of the responsibilities of teachers" and ground for strikes.<sup>77</sup> AFT President David Selden, claimed it to be just another fad.<sup>78</sup> The NEA took no formal position in 1970 but adopted a resolution believing the "expertise of professional educators is essential when school programs are evaluated," and recommended that local

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<sup>75</sup>"Two Out of Three Boardmen Buy Performance Contracting," op. cit., 35-36.

<sup>76</sup>Harold V. Webb, "Performance Contracting: Is It the New Tool for the New Boardmanship?" American School Board Journal, 158 (Nov., 1970), pp. 28-29.

<sup>77</sup>"How Education Groups View Contracting," Nation's Schools, 86 (Oct., 1970), pp. 86-87.

<sup>78</sup>Ibid.

and state education agencies resist school evaluations by non-professionals such as those being conducted under contract between government agencies and private profit-making firms.<sup>79</sup>

Dr. Forrest E. Conner, Executive Secretary of the American Association of School Administrators, observed that performance contracting is bound to cost the community more, and that undoubtedly there are specialized areas where it could be put to good use, but that he did not approve of the trends in performance contracting at present, observing:

Money given the contractors is in excess of what is given to the schools, on a per pupil basis. If money were given to the schools instead of private contractors, the schools could probably do the job just as well.<sup>80</sup>

Among the industries themselves, some of the firms indicated their preference for the traditional one-to-one relationship between suppliers and school systems, rather than the impersonality of competitive bidding. A need was noted for education testing companies to develop new and more accurate tests, and for a means of testing each individual student with some sort of new measuring instruments. It was also noted that short-term contracts would have the effect of discouraging industry from wanting to take part, that more effective operation can be carried out on a long-range basis. A spin-off from the concept is the fact that some publishers are now promoting their textbooks by promising "your money back" if the students fail

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<sup>79</sup> Ibid.

<sup>80</sup> Ibid.

to perform to agreed-upon academic standards.<sup>81</sup>

A vast network of legal ramifications has also been introduced, ranging from the question of whether the district has actual authority to enter into a contract, to such topics as properly drafted specifications in the request for proposal, staff expertise, and the delegation of responsibility to contractors, many aspects of which remain to be studied. One author has gone so far as to suggest that performance contracting program goals set by the program contractor may be illegal on the grounds that the school system may be abdicating its duty under the law.<sup>82</sup> The same fear is expressed in the NEA Guidelines on performance contracting,<sup>83</sup> and by the Texas court guidelines laid down for experiments in that state.<sup>84</sup> Legal aspects of a statement put out by the NEA executive committee in December, 1970, also remain to be investigated. Although the membership of NEA had not taken a formal position at its convention, the executive committee has dictated a list of "musts" including such vague statements that contracts "... must not violate the established legal rights of teacher," and others which appear to reflect more concern for their status or their jobs, rather than considering the benefits to be gained by the performance contract system.<sup>85</sup> This concludes a review of the literature.

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<sup>81</sup> Ronald Schwartz, "Performance Contracting: Industry's Reaction," Nation's Schools, 86 (Sept., 1970), pp. 53-55.

<sup>82</sup> Reed Martin, "Performance Contracting: Making It Legal," Nation's Schools, 87 (Jan., 1971), p. 62.

<sup>83</sup> . "NEA Policy on Performance Contracting," Educational Digest, (April, 1971), p. 4.

<sup>84</sup> Reed Martin, op. cit., p. 64.

<sup>85</sup> Reed, Martin, op. cit., pp. 62-64.

Summary

The literature was reviewed to provide a background on performance contracting and to show not only practical but also theoretical considerations for its applicability to the field of education.

It was indicated that the development of the performance contracting assumptions grew out of the many personal involvements of performance contracting advocates. However, such assumptions were not to be construed as necessarily accurate or valid nor inaccurate or invalid. These judgments were, therefore, left to the selected school district personnel and related others to be considered.

Other references to studies and surveys showed that research is scant but that research is continuing, i. e. , doctoral studies are underway in various parts of the country. Governmental agencies, the Rand Corporation, and Batelle are also generating similar research in this area.

The basic review of the literature concluded with an account of OEO funded projects for 1970-71 and other projects. Finally, only after a careful study of the literature was it determined that such a study would be both meaningful and valuable. Paucity of such research in the literature indicated that such a study should be encouraged.

Next in Chapter III, Procedures For The Study, the treatment of the data will be described and discussed.

CHAPTER III  
PROCEDURES FOR THE STUDY

Introduction

The purpose of this chapter is to present the selection of the school districts, school district personnel and related others, selection and development of the test instrument, collection of the data, and a presentation of the design for the treatment of the data.

Selection of the School Districts

It was the original intention of the investigator to include the twenty 1970-71 performance contracting projects funded by the Office of Economic Opportunity. However, after initial inquiries and letters to twenty superintendents, three districts were unable to respond to the study. As a result, only seventeen school districts, including sixty-nine elementary and secondary schools became part of the study.

Selection of the Groups

Since there were hundreds of school personnel involved in the performance contract projects, it was decided to include, only after careful evaluation, a sample population of 374 school district personnel and related others.<sup>1</sup> It was reasoned that their actual participation and immediacy to

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<sup>1</sup>Board solicitors were excluded from the study because of total non-responsibility.

the project would more than qualify them in responding to the specific hypotheses and add immeasurably to reasonably reliable assessments of the hypotheses and value of the findings. The personnel were then broken down into two groups, i. e. , selected school district personnel and related others.<sup>2</sup>

#### Selection of the Instrument

Since no instrument for inferring attitude toward performance contracting hypotheses, appropriate to this type investigative situation, was available, the Confidential Survey of Selected Personnel and Related Others' Responses to Six Performance Contracting Hypotheses was developed after pre-testing and several revisions.

The survey consisted of three parts: Part I, Background, contained eight items pertaining to position, age, school, length of service, education, professional affiliation, reason for selection, and reason for non-selection. Part II, The Main Survey, contained the six hypotheses to which the respondents reacted to a set of scores - one through six - indicating a single general disagreeableness to agreeableness range. Part II then was based primarily on an adapted Likert scale. The returns, after coding and key-punching, were then analyzed by an IBM-360-91 computer. Part III then concluded the survey. Respondents, who wished to offer written remarks, could do so either in Part II in the margin or in this section. This concluded the survey. See Appendix.

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<sup>2</sup> Donald Pricer, Official of Education Turnkey Systems in a personal interview on March 16, 1972, presented a breakdown of personnel into the two groups.

The philosophical and theoretical background of the scale was suggested by readings of Barker,<sup>3</sup> Duverger,<sup>4</sup> Riley,<sup>5</sup> Coombs,<sup>6</sup> Guttman,<sup>7</sup> and Likert.<sup>8</sup>

Thus only after a careful review of the literature, and the area under study was it determined that the assumptions of the survey, Part II, established from actual practice of performance contractors, Blaschke, et alia, would hopefully best meet the criteria of ease of answering, moderate objectivity, and greater degree of respondency.

#### Collection of the Data

The respondent population included selected school district personnel and related others from seventeen school districts. The data gathering took place during the months of November, December, January, February and March of 1971 and 1972. Surveys were then sent to 255 selected school district personnel and 119 related others. Since the returns were running less

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<sup>3</sup> Donald G. Barker, "Development of a Scale of Attitudes Toward School Guidance," The Personnel and Guidance Journal, Vol. XLIV, No. 10, (Washington, D. C. : American Personnel and Guidance Assoc. , Inc. , June, 1966), pp. 1077-1083.

<sup>4</sup> Maurice Duverger, Introduction to the Social Sciences with Special Reference to Methods, (New York: Frederick A. Prager, 1964).

<sup>5</sup> M. W. Riley, Sociological Studies in Scale Analysis, Brunswick, 1954.

<sup>6</sup> C. H. Coombs, "A Theory of Psychological Scaling," Engineering Research Bulletin No. 34 (Ann Arbor: Michigan University, 1952).

<sup>7</sup> L. Guttman, "The Cornell Technique for Scale and Intensity Analysis," Educational Psychological Measurement, 1947, No. 7, pp. 247-279.

<sup>8</sup> R. Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, No. 140. (New York: Columbia University, 1932).

than thirty-six percent by the end of January, a follow-up letter was sent to non-respondents in early February. This second recall improved the response rate considerably. However, a sample of non-respondents had to be telephoned in March because their participation was crucial to this study. The calls were successful.

Since the subject matter of the study was highly controversial, it was agreed, before the study, that a sixty percent return was about all that could be expected. As the percentage of returns in Chapter IX indicate, the overall percentages for each group were well above the sixty percent, and the individual group returns are considerably higher.

#### Treatment of the Data

In keeping with the purposes of the study, as outlined in Chapter I, it was determined that the overall procedure would begin with a median value analysis by position,<sup>9</sup> followed by an adapted Likert Frequency Graph on each hypothesis by total population to indicate inter-quartile ranges and modal tendencies. The purpose of the Likert Frequency Graph treatment is to show yet another approach to the analysis of the data. However, adapted Likert Frequency Graphs were not used to describe modal or inter-quartile profiles of other variables which were treated as described below. Adapted Likert graphs appear in Chapter IV under the appropriate hypotheses.

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<sup>9</sup> See codes questionnaire in the Appendix for actual group represented by these numbers.



In subsequent median value analyses, Tables were constructed by age, school, length of service, education, region,<sup>10</sup> and concluded with a median construct by group.

It was reasoned that the tables of median values would achieve two objectives:

1. Show the median values that denote strongly disagree to strongly agree tendencies.
2. Clearly identify the median values that denote convergence-divergence beliefs.<sup>11</sup>

On the other hand, the Likert Frequency Graphs help to identify two important statistical characteristics:

1. Modal or Bimodal characteristics.
2. Interquartile ranges that show that fifty percent of the data fell between the first and third quartiles.

Significant standard of deviation analysis concluded the treatment of the data. In this regard the computer arranged each group into a contingency table of agree or disagree with each hypothesis. The expected frequencies in each cell were calculated as the product of the sums at the end of that row and column divided by the total number. The ratio of the

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<sup>10</sup>The seventeen school districts were collapsed into nine geographical regions, i. e., (1) Northeast (2) South (3) South Central (4) South East, (5) Mid West (6) Great Lakes (7) South West (8) North West and (9) West Coast.

<sup>11</sup>Since the average medians for each group are ordered, the further apart any two medians are, the more they diverge to disagreement relative to each other; the closer any two median values are, the more they converge to agreement relative to each other.

expected frequencies  $f_e(\text{disagree}) / f_e(\text{agree})$  in any two vertical cells is indicated then as a constant as the following example shows:<sup>12</sup>

a	b	a + b
c	d	c + d
a+c   b+d		N

$$\frac{a}{c} = \frac{\frac{(a+b)(a+c)}{N}}{\frac{(c+d)(a+c)}{N}} = \frac{a+b}{c+d}$$

The actual ratios of frequencies in a column of 2 vertical cells varied about this constant ratio in a normal distribution. The standard deviation of the actual ratios from this mean value were calculated by the formula<sup>13</sup>

$$\sigma_x = \sqrt{\frac{\sum (X - M_x)^2}{N}} = \sqrt{\frac{\sum X^2}{N}}$$

Two standard deviations from the constant mean value include 95% of the values. Therefore, any ratio further from the mean than two standard deviations is at the  $p = .05$  level of significance.

### Summary

Procedures for the study were pointed out in this chapter. The instrument used was discussed and its development indicated. The process of respondent population was identified, reviewed, and presented.

The presentation of the treatment of the data was noted. It should be stressed that the statistical analyses did not attempt to cover the total

<sup>12</sup> Blalock, op. cit., pp. 215-216.

<sup>13</sup> C. H. Richardson, Statistical Analysis, (New York: Harcourt, Brace & Co., 1944), p. 125.

data by only one form of analysis but rather by several approaches. Thus the Likert Frequency Graphs show only a total population response by position to each hypothesis by mode and interquartile range; whereas, the standard deviation analysis is designed to treat groups only by age, school, and region. Since there was no significance expressed in groups by length of service and education, they were not indicated in Table 17.

The presentation and the analyses of the data will be developed in Chapter IV.

## CHAPTER IV

### PRESENTATION AND ANALYSES OF THE DATA

#### Introduction

The collected data from the returned surveys were coded, keypunched, and analyzed. The analyses of that data are presented in this chapter. Included are percentage of completed returns, personal data results, analyses of data to indicate median values, interquartile ranges, convergence-divergence, graphic analyses, and  $P = .05$  degree of significance, computed by the standard deviation.

#### Percentage of Completed Returns

There were 374 surveys mailed out in November and December 1971. By the end of January, 139 returns were received. The remaining 108 surveys were returned during February and March 1972. Out of 374 mailed out, there were 247 returns which were usable, cited in Table 8 and Table 9, pages 64, 65. The percentages of completed returns were 65% for selected school district personnel and 68% for related others.

#### Personal Background Data

Out of a respondent population of 247, the following information was given in these variables:\*

Age - all respondents ranged from twenty to sixty and over with a median age of 39.6

\*variable classification of respondents by position, age, school, education, region, and length of service.

TABLE 8

SELECTED SCHOOL DISTRICT PERSONNEL

Position	Eligible Participants	Actual Respondents	Percent Participation
TEACHERS (Elementary)	34	26	76.4
TEACHERS (Secondary)	32	20	62.5
PRINCIPALS (Elementary)	40	27	67.5
PRINCIPALS (Secondary)	29	22	75.8
PROJECT DIRECTORS	20	16	80.0
PROJECT ANALYSTS	17	9	52.9
DIRECTORS OF ELEMENTARY EDUCATION	15	11	73.2
DIRECTORS OF SECONDARY EDUCATION	15	10	66.6
DIRECTORS OF RESEARCH	13	11	84.5
LOCAL TEACHER ASSOCIATION PRESIDENTS	17	11	64.6
TEACHER AIDES	23	3	13.0
TOTALS	255	166	65.0

TABLE 9  
PERCENTAGE OF RETURNS OF RELATED OTHERS

Position	Eligible Participants	Actual Respondents	Percent Participation
READING SPECIALISTS	15	11	73.2
MATH SPECIALISTS	13	9	69.2
HUMAN RELATION SPECIALISTS	10	9	90.0
SUPERINTENDENTS	17	12	70.5
LOCAL TEACHER ASSOCIATION NEGOTIATORS	15	10	66.6
SCHOOL BOARD PRESIDENTS	17	11	64.6
BUSINESS MANAGERS	16	11	68.7
SCHOOL BOARD NEGOTIATORS	16	8	50.0
TOTALS	119	81	68.0

School - the breakdown of respondents indicated that 24.1% were elementary, 21.7% secondary, 40.1% district, 7.5% general participants and 6.6% non-professional participants.

Length of Service - all respondents ranged from one year to thirty and over with a median service of 7.4 years' experience within the district.

Education - all respondents ranged from high school graduate to a doctorate either of philosophy or education. The median level of academic achievement was B. A. plus eleven. There were half of the total respondents below this level and half above.

Professional Affiliation - 95% of teachers and specialists belonged to local teacher associations, state or national organizations, and other specialized affiliations; 2% belonged to the American Federation of teachers. Somewhat less than 3% registered no affiliation.

Ninety-nine percent of school administrators belonged to at least one professional organization or more. About 1% indicated no affiliation.

Non-school district personnel; such as school board negotiators and school board presidents registered a 98% affiliation; 2% indicated none.

#### Analysis of Positional Responses to the Six Hypotheses by Median and Mode

The data were first analyzed by computer to determine the median and modal responses by all position groups to the six hypotheses. For this analysis the median averages were numerically arranged from high to low on a vertical scale to determine scalar cutoffs and the extent of the relationships that exist between attitude patterns of selected personnel and related others. Table 10 indicates the median and modal averages.

It was determined that these statistical measurements could identify several kinds of information needed for this study such as clearly determined

respondent attitudes as well as convergent and divergent attitudes between respondents.

Among the seventeen groups of Table 10, groups whose average median value indicates overall disagreement with the six hypotheses include four of the related other groups, consisting of teacher negotiators, board negotiators, mathematics specialists and reading specialists as well as two of the selected groups, consisting of directors of elementary education and teacher association presidents. All other selected personnel and related other groups, however, regard the six hypotheses as questionable\* and, therefore, have a convergence of attitudes.

The average median analyses to the six hypotheses indicated in Table 10 show that all respondents on the average regard hypotheses 1, 3, and 6 as questionable that performance contracting can accomplish these impacts; whereas, they disagree with hypotheses 2, 4 and 5.

Table 10 data indicate that the overall feeling, however, by respondent position is questionable about the impacts that performance contracting can achieve upon education. The fact that eleven groups shared similar questionable attitudes and six groups shared disagreement attitudes shows that more differences occur between such groups rather than within such groups.

\* questionable active consideration of a hypothesis from several viewpoints but not leading to an agree or disagree attitude because of lack of sufficient or applicable information.



TABLE 10  
POSITION RESPONSES TO HYPOTHESIS  
BY MEDIAN AND MODE

Group* (N)*1	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>	Averages	
5	9	3.25 4.00	3.95 4.00	3.18 4.00	2.83 3.00	3.25 3.00	3.83 4.00	3.32 3.5 Q*
15	11	3.17 4	3.17 3	2.83 3	2.25 1	2.50 2	3.75 3	3.02 2.60 Q
12	12	3.00 4	3.00 4	2.00 1	2.40 3	2.50 4	3.80 4	2.92 3.3 Q
17	11	3.12 4	1.83 2	1.75 1	2.83 3	3.25 4	3.88 4	2.79 3.0 Q
1	3	2.00 3.25	3.25 3.12	3.50 2.17	2.25 2.58	2.50 1.88	3.50 2.83	2.78 Q
8	9	4.00 3.57	4.00 2.47	3.00 3.40	3.00 2.52	2.00 2.50	3.00 3.15	2.73 3.2 Q
2	46	4.00 2.50	3.00 2.17	4.00 2.83	3.00 1.33	1.00 3.30	4.00 3.30	2.72 3.2 Q
9	11	3.00 3.00	3.00 2.60	4.00 2.67	1.00 2.00	4.00 1.67	4.00 3.30	2.64 3.2 Q
11	10	4.0 3.07	3.0 2.45	3 2.62	2 1.96	2 2.04	4 3.10	2.64 2.54
6	49	4.00 3.11	3.00 2.67	3.00 2.40	1.00 1.33	1.00 2.33	3.00 3.14	2.5 Q 2.51
7	16	4.00 3.00	3.00 2.67	3.00 1.50	1.00 2.25	3.00 1.33	4.00 3.00	3.0 Q 2.34
13	10	4 2.67	3 1.60	1 1.50	3 2.33	2 2.50	3 3.50	2.7 D* 2.29
16	8	3 2.17	2 2.25	1 2.33	3 2.12	4 1.50	4 2.75	2.8 D 2.12
4	9	3.00 2.67	4.00 1.25	2.00 .92	3.00 1.75	1.00 1.50	3.00 3.12	2.7 D 1.98
14	11	3 2.12	1 2.33	1 2.17	1 2.25	1 1.88	1 2.50	1.7 D 1.97
3	11	2.00 1.70	3.00 1.83	3.00 2.12	2.00 2.25	2.00 1.17	4.00 2.64	2.7 D 1.96
10	11	2.0 2.856	2.0 2.419	3.0 2.563	2.0 2.25	1.0 2.28	3.0 3.213	2.2 D 2.64
Md. Mo.	Md. Mo.	4 4	3 3	3 3	3 3	1 1	4 4	3.16 D

\*Q = Questionable                      \*D = Disagree  
Md. = Median                              Mo. = Mode

\* See Appendix for number code as used in survey.  
\*1 Number of Participants

Finally, as was alluded to in Chapter III, Table 10 is arranged to show convergence and/or divergence of attitudes by groups. Since the average medians for each group are ordered, the further apart any two medians are, the more they diverge to disagreement relative to each other; the closer any two median values are, the more they converge to agreement relative to each other.

Analyses of the Data to Define Modal Responses  
to the Six Hypotheses of Total Respondent  
Population by Position

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Hypothesis 1

In Figure 4, the Likert Frequency Graph clearly shows a mode of a sizable group tending to agree with the statement that performance contracting can be a means for humanizing the classroom for both teacher and student. This tendency to agree is equally divided between selected personnel and related others. Teachers, principals, project directors, project analysts, and directors of secondary education compose the first group; human relations specialists, superintendents, teacher association negotiators, school board presidents, and business managers comprise the second group.

Two other groups, math specialists and school board negotiators, related others; directors of research and local teacher association presidents, selected personnel, regard this hypothesis as questionable. The median response for all groups to hypothesis 1, however, is questionable.

Hypothesis 2

In Figure 5, the Likert Frequency Graph clearly identifies the mode as questionable regarding performance contracting's being a means to facilitate

Figure 4

LIKERT FREQUENCY GRAPH HYPOTHESIS 1  
(N = 247) By Position

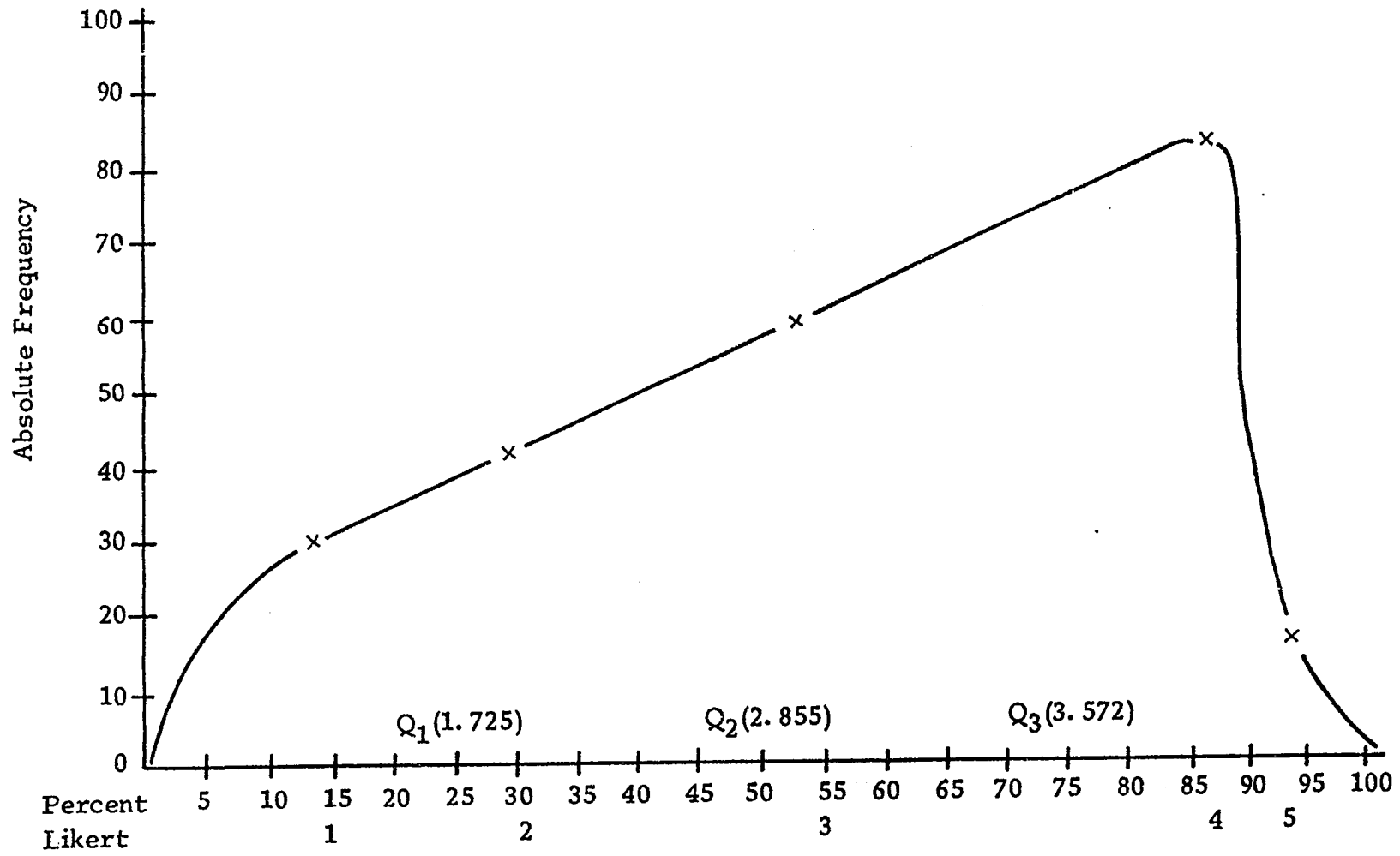
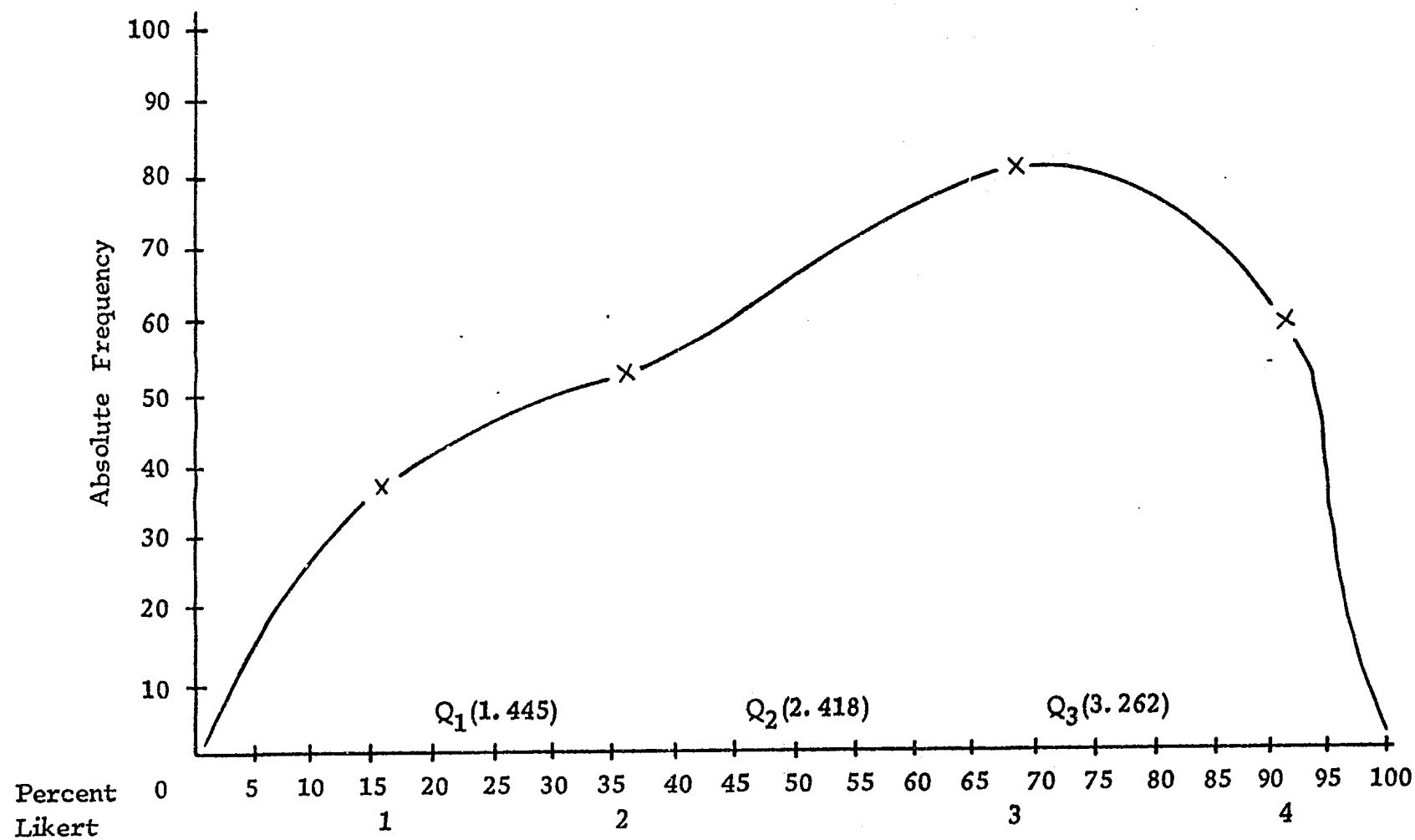


Figure 5

LIKERT FREQUENCY GRAPH HYPOTHESIS 2  
(N = 247) By Position



community and parental control and involvement in the schools. Five selected personnel groups consisting of teachers, principals, project analysts, directors of research and directors of secondary education viewed this hypothesis as questionable; whereas, only two related groups, reading specialists and school board presidents concurred.

The median response for all groups, however, is a tendency to disagree with this hypothesis.

### Hypothesis 3

Figure 6 of this Likert Frequency Graph describes a bimodal distribution. The first mode indicates strong disagreement with the statement that performance contracting can be a means to rationalize the collective bargaining process. The groups of this mode are the five related others groups, consisting of mathematics specialists, superintendents, teacher association negotiators, school board negotiators, and business managers. The selected personnel group is local teacher association presidents.

The second mode occurring at the upper end of the questionable interval includes all of the other groups except directors of research, and teachers who tend to agree with hypothesis 3.

The median value of all responses toward hypothesis 3 is at the questionable level on the Likert scale.

### Hypothesis 4

In Figure 7, the Likert Frequency Graph of hypothesis 4 also shows a bimodal distribution. The selected group of teachers and project analysts comprise the questionable mode to the statement of hypothesis 4 that

Figure 6

LIKERT FREQUENCY GRAPH HYPOTHESIS 3  
(N = 247) By Position

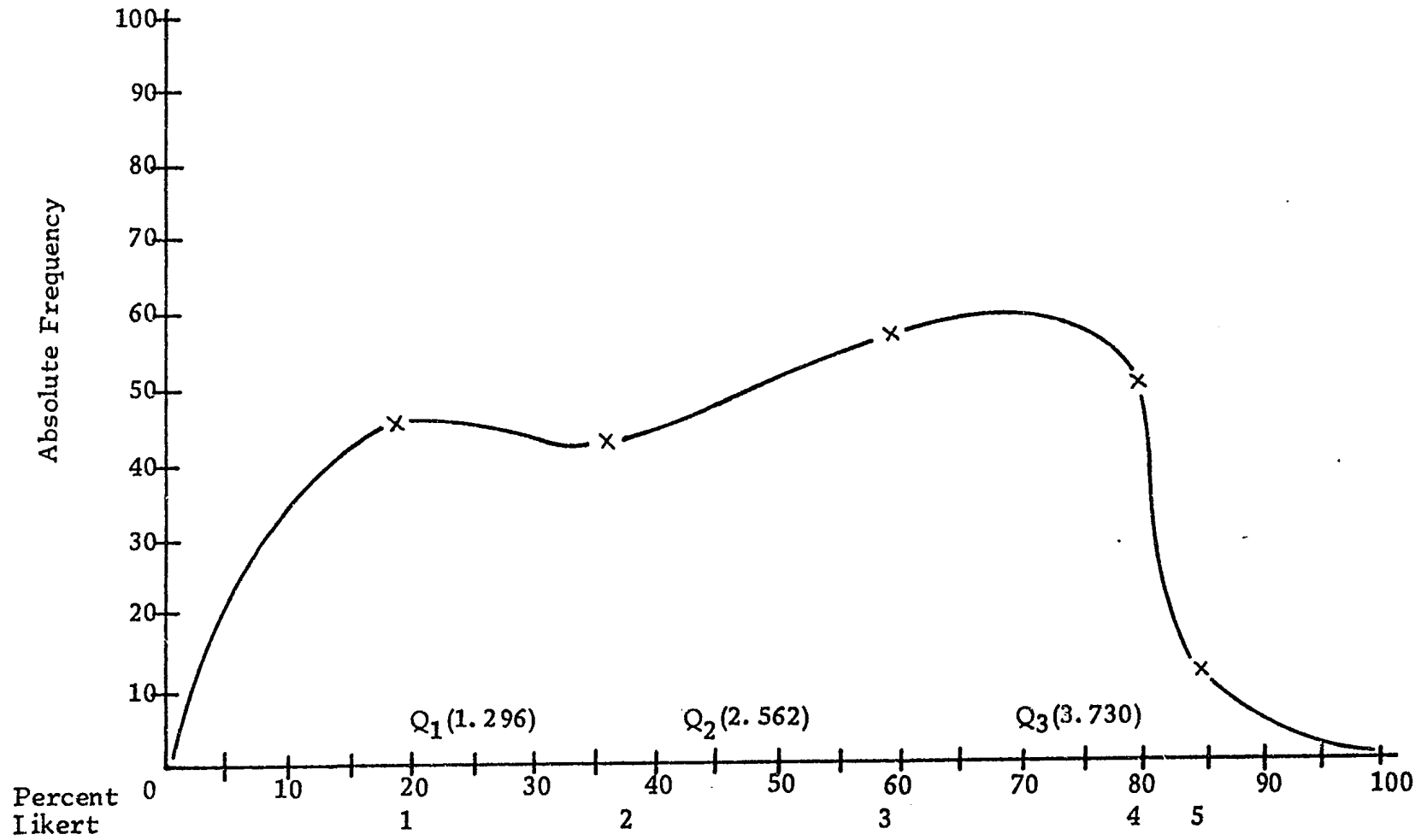


Figure 7.

LIKERT FREQUENCY GRAPH HYPOTHESIS 4  
(N = 247) By Position

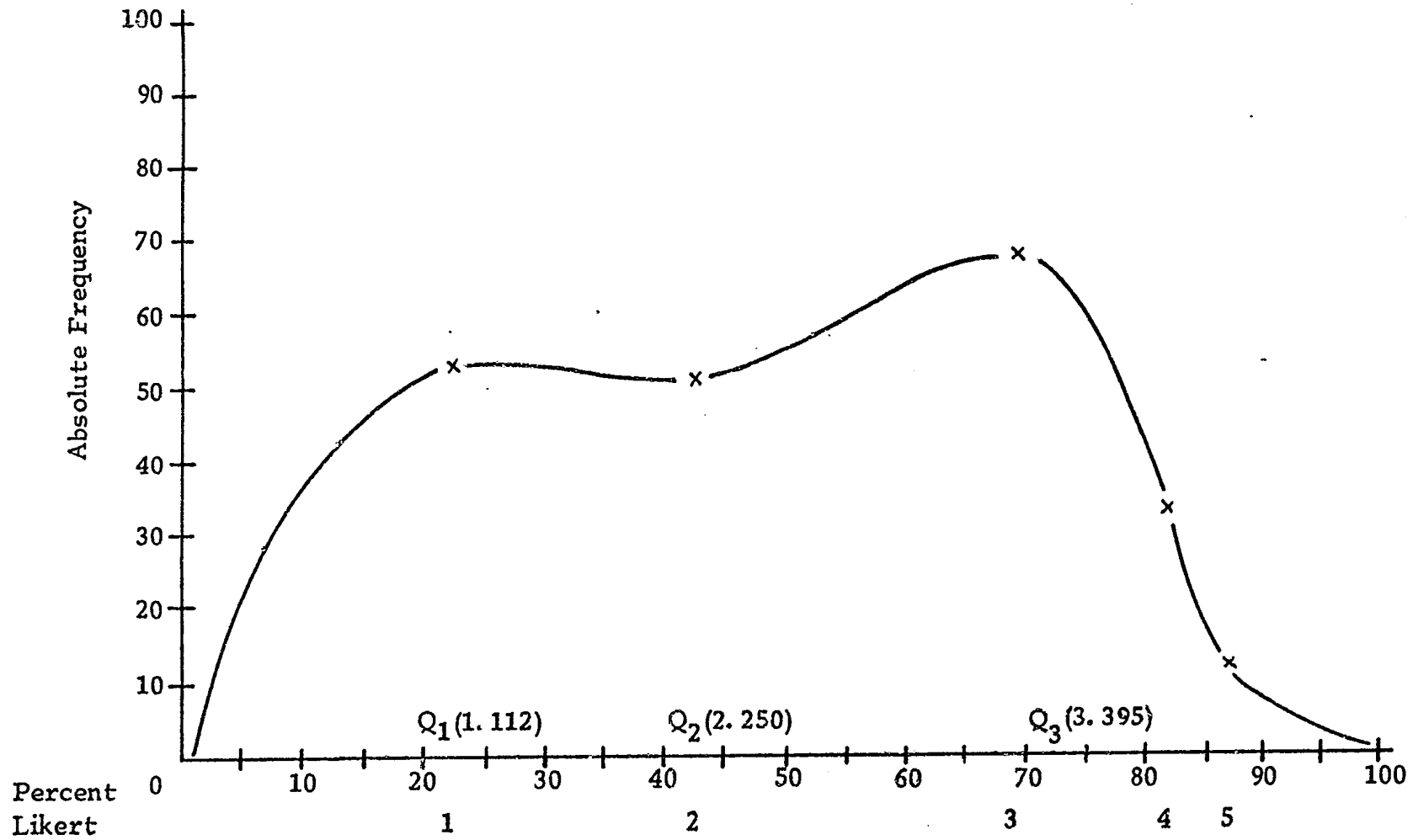
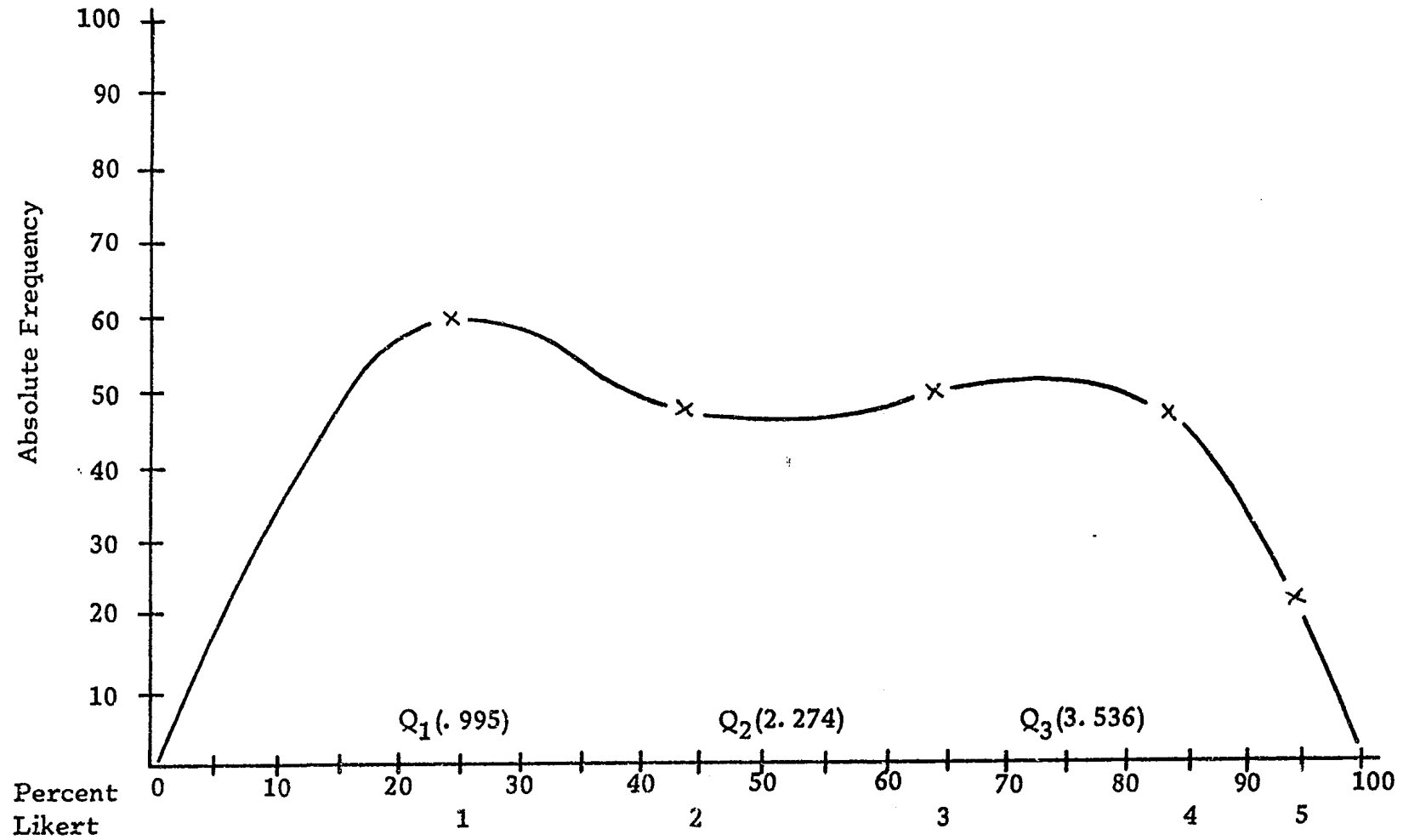


Figure 8

LIKERT FREQUENCY GRAPH HYPOTHESIS 5  
(N = 247) By Position





performance contracting is an educationally effective, politically palatable means for racial integration. Related others' groups, consisting of mathematics specialists, human relations specialists, superintendents, teacher association negotiators, school board negotiators, and business managers are also included in this mode of responses that were questionable toward hypothesis 4.

Two related others' groups of local teacher association presidents and school board presidents, however, make up the strongly disagree mode.

The median value shows an overall tendency to disagree with this hypothesis.

#### Hypothesis 5

This Likert Frequency Graph in Figure 8 again indicates a bimodal distribution. The selected personnel groups, making up the first mode, consist of teachers, principals, project analysts, directors of elementary education, directors of secondary education, and local teacher association presidents. The former group has a tend to disagree response, while the latter group however, strongly disagrees with the hypothesis that performance contracting can be a low-risk/low-cost means for experimentation.

At the second mode, related others' groups, consisting of human relations specialists, superintendents, school board negotiators, and business managers find the statement questionable as do the selected personnel group of project directors and directors of research.

Median value for hypothesis 5 is in the tend to disagree interval.

Hypothesis 6

In Figure 9 the Likert frequency graph for hypothesis 6 indicates a mode occurring at the third quartile showing a sizable group tending to agree with hypothesis 6 that performance contracting can be a means to increase instructional efficiency in areas such as math and reading. This one mode contains the following: four selected personnel groups, consisting of teachers, project directors, directors of research, and directors of secondary education; and five related others' groups, consisting of reading specialists, human relations specialists, superintendents, school board negotiators, and business managers.

A small mode at the lower end of the Likert scale indicates a splinter group strongly disagreeing with hypothesis 6. This selected personnel group consists of presidents of local teacher associations.

The remaining six school district personnel and related others' groups indicate a questionable attitude toward hypothesis 6.

The median value for hypothesis 6, however, indicates an overall questionable attitude.

Median Analyses by Age, School, Length of Service,  
Education, and Region

Medians by Age

All age groups have a questionable attitude toward hypotheses 1, 2, 3, 4 and 6. However, all groups converge and disagree about hypothesis 5 as cited in Table 11. Age groups 20 through 59 converge, while the over 60 diverges considerably to the other end of the questionable interval.

Figure 9

LIKERT FREQUENCY GRAPH HYPOTHESIS 6  
(N = 247) By Position

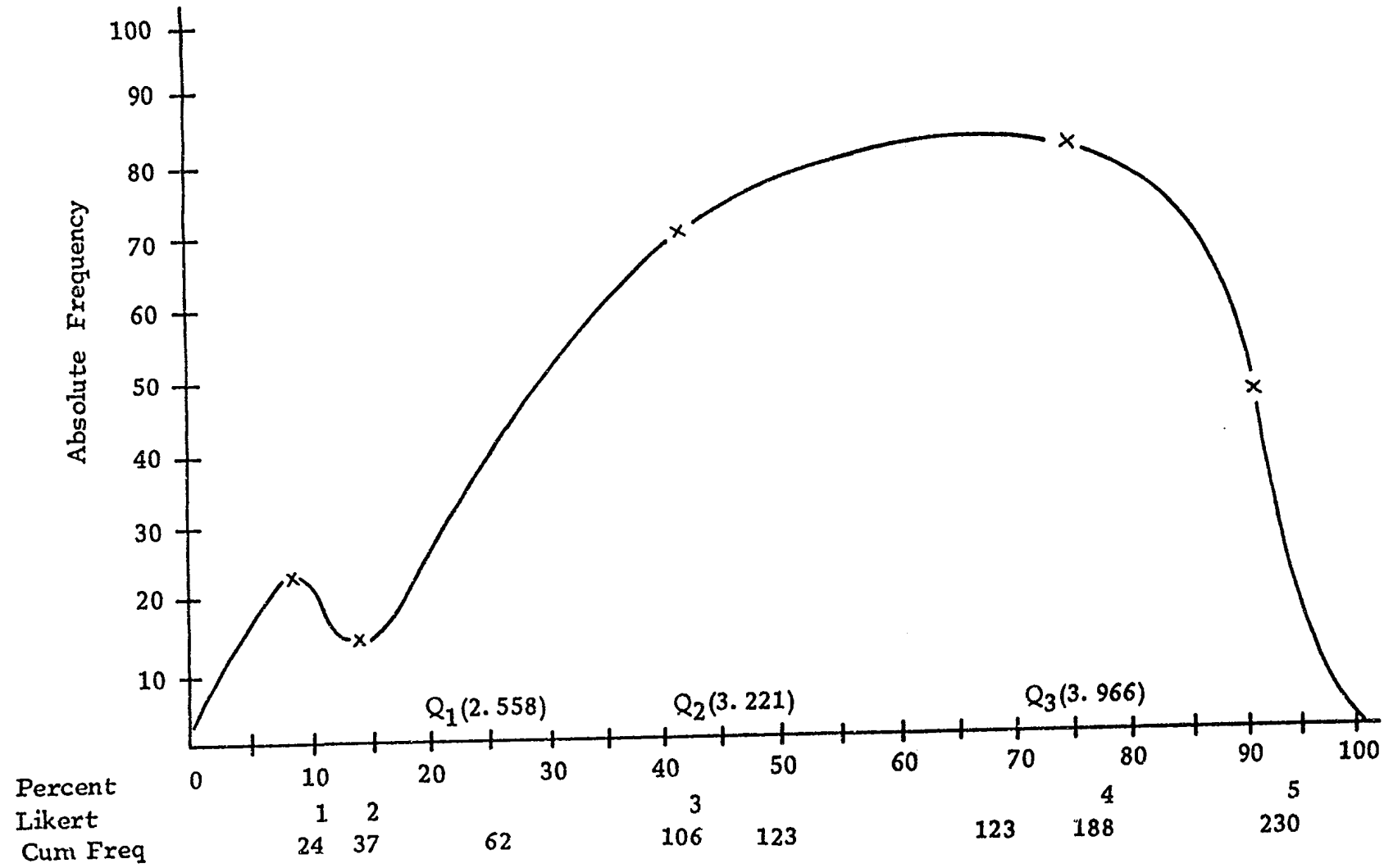


TABLE 11

AGE RESPONSE TO HYPOTHESES BY MEDIAN

	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>	Average	
1	3.00	2.50	2.67	2.40	2.33	3.57	2.74	Q*
2	2.73	2.22	2.70	2.13	2.73	3.00	2.50	Q
3	2.84	2.50	2.33	2.13	2.32	3.31	2.57	Q
4	2.82	2.36	2.61	2.25	2.14	3.25	2.56	Q
5	3.31	3.13	3.50	5.10	2.38	3.12	3.48	Diverges
Avg.	3.00	2.54	2.76	2.79	2.29	3.22	2.76	Q

\*Q = Questionable

D = Disagree

Medians by School

All school groups take a questionable position, on the average, in regard to hypothesis 1 and 6. However, all school groups disagree, on the average, with hypotheses 2, 3, 4 and 5 as cited in Table 12. All groups converge to a questionable attitude except group four that disagrees.

TABLE 12

SCHOOL RESPONSE TO HYPOTHESES BY MEDIAN

	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>	Average	
1	3.05	2.54	3.18	2.23	2.20	3.00	2.70	Q
2	3.00	2.33	2.57	2.31	2.00	3.26	2.58	Q
3	2.69	2.40	2.33	2.32	2.56	3.32	2.59	Q
4	3.07	2.13	1.50	1.90	1.90	3.10	2.28	D*
5	2.50	2.56	2.50	2.10	2.50	3.10	2.58	Q
Avg.	2.86	2.40	2.41	2.19	2.23	3.14	2.54	Q

Q = Questionable

\*D = Disagree

Medians by Length of Service

Table 13 shows that all groups, on the average, have questionable attitudes toward hypotheses 1, 3 and 6 but disagree to hypotheses 2, 4 and 5. All groups converge to a questionable median average except that groups 2 and 4 tend to disagree as an overall average to these hypotheses.

TABLE 13

LENGTH OF SERVICE RESPONSE TO HYPOTHESES  
BY MEDIAN

	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>	Average	
1	3.21	2.60	2.78	2.54	2.80	3.52	2.91	Q
2	2.46	2.34	2.54	2.15	2.21	3.03	2.46	D
3	3.03	2.42	2.37	2.35	2.50	3.45	2.68	Q
4	2.70	2.32	2.50	2.07	1.89	2.94	2.40	D
5	2.81	2.50	2.64	2.36	1.81	2.94	2.50	Q
6	3.33	2.75	3.75	1.00	2.45	3.50	2.80	Q
Avg.	<u>3.84</u>	<u>2.40</u>	<u>2.68</u>	<u>1.90</u>	<u>2.20</u>	<u>3.14</u>	2.53	Q

Q = Questionable

D = Disagree

Medians by Education

In Table 14 all education groups regard hypotheses 1, 2, 3, 4 and 5 as questionable on the average. Groups 5 and 6 tend to disagree with hypotheses 2,3 and 4 with group 5 also tending to disagree with hypothesis 5.

On the average, groups 1 and 2 tend to agree; whereas, groups 3, 4, 5 and 6 regard the hypotheses as questionable. Thus the former groups converges to agreement while the latter diverge from them to a questionable attitude on the hypotheses.

TABLE 14  
 RESPONSE BY EDUCATION TO HYPOTHESES  
 BY MEDIAN

	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>		
1	3.75	2.75	3.50	3.88	3.38	3.62	3.62	A*
2	3.00	3.50	4.00	3.50	3.50	4.50	3.53	A
3	3.60	2.93	3.50	3.25	2.38	4.08	3.30	Q
4	2.63	2.37	2.75	2.28	2.50	2.97	2.58	Q
5	2.76	2.41	2.43	2.10	2.09	3.09	2.48	D
6	2.73	2.00	2.28	2.23	2.57	3.39	2.54	Q
Avg.	3.00	2.78	3.04	2.95	2.74	3.55	3.02	Q

\*A = Agree                      D = Disagree      Q = Questionable

Medians by Region

The seventeen districts were combined into nine regions which are analyzed in Table 15.

Regional responses were questionable toward hypotheses 1, 3 and 6 but tended to disagree with hypotheses 2, 4 and 5.

On the average, then, regions 1, 3, 5, 6, 7 and 8 regarded the hypotheses as questionable, but regions 2, 4 and 9 disagreed with all six hypotheses. On the other hand, region 5 tends to agree with hypothesis 6. Region 2 on hypothesis 2, is a borderline case between agree and questionable. Thus regions 1, 3, 5, 6, 7 and 8 converged to a median in the questionable range; whereas, regions 2, 4 and 9 diverged to a median in the disagreeable range.

TABLE 15  
 RESPONSE TO HYPOTHESES BY REGION  
 AS TO MEDIANS

Region	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>	Average	
7	3.15	2.55	3.00	2.38	2.44	3.37	2.80	Q
6	3.14	2.64	2.12	3.07	2.30	3.41	2.78	Q
3	2.83	2.71	3.29	2.40	2.00	3.14	2.72	Q
5	3.36	2.33	2.33	2.11	2.25	3.54	2.66	Q
8	2.50	2.40	1.67	1.67	2.67	2.83	2.62	Q
1	2.77	2.64	2.53	2.79	2.17	2.79	2.60	Q
9	2.50	2.00	2.22	1.56	2.57	3.10	2.32	D
2	2.50	1.50	3.00	2.00	1.00	3.50	2.28	D
4	1.83	2.10	2.50	1.67	2.14	2.82	2.18	D
Avg.	2.74	2.33	2.52	2.18	2.20	3.18	2.52	D

Q = Questionable

D = Disagree

Medians by All Groups

Table 16 identifies the medians by group. Individual groups responded questionable toward all six hypotheses with statistical analysis by computer showing hypothesis 6 to receive the most favorable response in the questionable range.

There is overall disagreement with hypotheses 2, 4, and 5. Hypothesis 4 has the lowest average.

The overall response is questionable in the direction of tending to disagree. Thus, all groups converge in the questionable median.

TABLE 16

GROUP RESPONSE TO HYPOTHESES BY MEDIANS

	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	H <sub>5</sub>	H <sub>6</sub>	Group Resp.	Avg.
Education	3.00	2.78	3.04	2.95	2.74	3.55	3.02	
Age	3.00	2.54	2.76	2.79	2.29D	3.22	2.76	
Position	2.86	2.42D*	2.56	2.25D	2.28D	3.21	2.64	
School	2.86	2.40D	2.41D	2.19D	2.23D	3.14	2.54	
Service	2.84	2.40D	2.68	1.90D	2.20D	3.14	2.53	
Region	2.74	2.33D	2.52	2.18D	2.20D	3.18	2.52	
Average	2.88	2.48D	2.66	2.42D	2.32D	3.24	2.60	

\*D with above numbers indicates tend to disagree; otherwise responses are questionable.

Deviations Exceeding Two Standard Deviations by Age, School, and Regional Groups

Analysis by the Standard Deviations

Results summarized in Table 17 show that ages 40 through 59 are in significant agreement with hypothesis 6. School group 4 is in significant disagreement with all but the first hypothesis. Also, school group 5 significantly disagrees with hypothesis 1.

Region 9 significantly disagrees with hypothesis 1. Regions 2 and 5 significantly disagree with hypothesis 2. Region 2 significantly disagrees with hypothesis 4. Regions 5, 8 and 9 significantly disagree with hypothesis 5; and region 9 significantly disagrees with hypothesis 6.

There were no significant feeling expressed in the length of service and education groups as measured by two standard deviations from the mean.



Treatment of this data was discussed in Chapter III.

TABLE 17

DEVIATIONS EXCEEDING TWO  
STANDARD DEVIATIONS

Age Groups	1, 2, 5	3	4					
		6A*	6A					
School Groups	1, 2, 3	4				5		
		2D**	3D	4D	5D	6D	1D	
Region Groups	1, 3, 4, 6, 7	2		5		8	9	
		2D	4D	2D	5D	5D	1D, 5D, 6D	

\* A = Agree

\*\*D = Disagree

Summary of Analysis of Data

The analysis sought to determine respondent attitudes regarding performance contracting's six hypotheses, to measure respondent convergent and divergent attitudes and to determine significant differences between school district personnel and related others. This analysis was accomplished in the following manner:

1. The median and modal values were tabulated and clearly showed respondent attitudes toward each hypothesis by position.

It was statistically inferred that the overall attitude about the six hypotheses is questionable. It is clear that 75.7% of the respondents held questionable attitudes as against 24.3% of those who held tend to disagree attitudes.

It is clear from a tally of Table 10 that six selected groups of school personnel find performance contracting hypotheses questionable, and three selected groups disagree on the average with the six hypotheses. Eight selected groups, however, were evenly divided, on the average, between questionable and disagree regarding the six hypotheses.

The median average for all groups was 2.64. Eleven groups converged within a median range from 2.51 to 3.32. Six groups diverged within a median range from 1.95 to 2.34. It became clear that a trend was developing.

2. An analysis of each hypothesis was then done by use of a Likert graphic figure to identify both quartile respondent dispersions and modal responsency peaks. These graphs described both quartile and modal points by position.

Figure 4 clearly showed that for hypothesis 1 the mode at 4 contained more respondents than the other mode for tending to agree. For hypothesis 2, Figure 5, the mode at 3.26 contained more respondents than the other, indicating a questionable attitude toward hypothesis 2. Figure 6, however, described a bimodal distribution of 1.30 at the one mode, showing strong disagreement and at the other, 3.73, showing a tendency to agree with hypothesis 3. Figure 7 also described bimodal characteristics that showed the larger group at 3 as questionable toward hypothesis 4. The second smaller mode at 1.0 was equally divided between two groups and showed a strong tendency for groups in that mode to disagree. In Figure 8 a bimodal distribution was evident. The first mode located at one, for example, the larger group, strongly disagreed. But at the smaller mode 3.5, the respondents were questionable toward hypothesis 5. In the final Figure 9, a sizable group at mode 3.97, about 75% of all respondents, tended to agree with hypothesis 6.

As a result of these data, the trend, however, still continues toward questionable.

3. A median analysis was done by age, school, length of service, education, and region. The following are the findings:

Each age group held an attitude in the questionable range toward the six hypotheses on the average. However, all age groups tended to disagree with hypothesis 5 on the average.

By school, all groups took on the average a questionable stance about hypotheses 1 and 6 but tended to disagree with hypotheses 2, 3, 4 and 5.

By length of service, all groups on the average held questionable attitudes about hypotheses 1, 3, and 6 and tended to disagree about hypotheses 2, 4 and 5.

By education, all groups on the average responded to all hypotheses as questionable.

By region, two thirds of the groups held on the average questionable attitudes about the hypotheses.

By all groups the overall response was questionable to all hypotheses in the direction of tending to disagree.

The trend is significantly in the questionable scale.

4. Convergence-divergence attitudes by position and other variables were then determined. These are the findings:

In assessing convergent-divergent attitudes by position, eleven groups converged on the questionable scale, and six groups diverged on the tend to disagree scale.

Total group responses by education, age, position, school, length of service, and region to all six hypotheses then converged in the questionable median.

The overall trend continues to be very significantly questionable and convergent toward hypotheses 1, 3 and 6.

5. Analyses of age, school, and regional groups by the standard deviation concluded the treatment of the data and resulted in these findings:
  - a. Older groups, ages 40 through 59, significantly agreed with hypothesis 6.
  - b. Local teacher association negotiators and local teacher association presidents significantly disagreed with the second, third, fourth, fifth and, sixth hypotheses.

- c. School board presidents and school board negotiators significantly disagreed with the first hypothesis.
- d. The West Coast significantly disagreed with hypotheses 1, 5 and 6.
- e. The South and the Midwest significantly disagreed with hypothesis 2.
- f. The South significantly disagreed with hypothesis 4.
- g. The Midwest, the Northwest, and the West Coast significantly disagreed with hypothesis 5.
- h. There were no significant differences expressed by length of service and by education.

It can be concluded from the data that on the average, questionable and convergent attitudes toward all the hypotheses constitute significant findings.

Further, significant differences have been substantiated by statistical treatment and show that more regions significantly disagreed than any other group and that more groups disagreed than agreed.

The breakdown of significant agreement-disagreement, indicated that two groups, by age, agreed with hypothesis 6; whereas, the West Coast and local teacher association negotiators and presidents significantly disagreed with it.

By region then, the West Coast disagreed significantly toward three hypotheses, the South disagreed significantly toward two, the Midwest disagreed significantly toward two; and the Northwest disagreed significantly toward one hypothesis. One group, non-professional participants, such as board presidents and board negotiators, registered a significant disagreement

toward only hypothesis 1.

There was equal distribution of significant disagreement, then, by region and by school toward hypotheses 1, 2, 4, 5 and 6 with significant disagreement toward hypothesis 3 by the school group composed of local teacher association presidents and teacher association negotiators. General participants, however, disagreed significantly to more hypotheses than any other group. More groups significantly disagreed with hypothesis 5 than with any other hypothesis.

These conclude the findings.

Chapter V includes the summary and conclusions of the study.

## CHAPTER V

### SUMMARY AND CONCLUSIONS OF THE STUDY

#### Summary

The literature was reviewed and a number of school officials and others corresponded with or interviewed by telephone to achieve a better grasp of the area to be studied.

The basic premise indicated by developers of performance contracting is that it could provide the opportunity to demonstrate new learning systems and act as a catalyst in education to generate leverage for school officials to make change.

Thus, from a number of performance contracting projects that received national exposure, with some measure of success and failure,<sup>1</sup> it was felt by proponents that performance contracting could achieve certain identifiable outcomes. Such outcomes or impacts were then identified and translated into basic assumptions that eventually became the source and substance of Part II of this investigator's instrument as the six hypotheses.

It was rationalized that the use of these hypotheses would have validity and applicability for this study. Their construction and development stemmed from actual performance contracting practice and theoretical framework.

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<sup>1</sup> \_\_\_\_\_ . An Experiment in Performance Contracting Summary of Preliminary Results, Office of Economic Opportunity, Pamphlet 3400-5, Office of Planning, Research, and Evaluation, Washington, D. C. , Feb. 1, 1972, pp. 31-32.

These six hypotheses were then tested by selected school district personnel and related others according to certain variables like education, age, position, school, length of service and region.

Two hundred and fifty-five school district personnel and one hundred nineteen related others were surveyed in seventeen OEO funded performance contracting projects for the year 1970-71. Sixty-nine elementary and secondary schools were included in the study. All participants were sent the developed Confidential Survey of Selected School District Personnel and Related Others Regarding Six Performance Contracting Hypotheses. This developed survey was felt to be most suitable for analyzing the performance contracting background experience of the participating population because of ease of self-administration, attitudinal assessments, and motivation for responsiveness.

The purpose of the study, then, was to determine respondent attitudes, to measure convergence and divergence of attitudes, and to validate the hypothesis regarding the performance contracting hypotheses that significant differences exist both within and between selected school district personnel and related others.

All collected data were subsequently analyzed by an IBM-360-91 computer at the Princeton University Computer Center. Likert frequency distributions were graphed showing medians, modes, and quartiles as measures of convergence-divergence of attitudinal responses. Data at the  $p = .05$  level of significance was measured by more than two standard deviations of contingency table ratios from the expected mean value. Such statistical

treatment identified significant agreement and significant disagreement of data as some of the results of the study.

This concludes the summary of the study.

A statistical treatment of the data resulted in the following findings:

1. Seventy-five and seven tenths percent of the respondents held questionable attitudes regarding the six hypotheses as against twenty-four and three tenths percent who held tend to disagree attitudes.
2. Six groups of selected school district personnel found performance contracting's hypotheses questionable, and three selected groups disagreed with all six hypotheses, on the average. Eight groups of related others on the average however, were evenly divided between questionable and tend to disagree attitudes regarding the six hypotheses.
3. Each age group held an attitude in the questionable range toward the six hypotheses on the average. However, all age groups tended to disagree with hypothesis five on the average.
4. All school groups on the average took a questionable position about hypotheses one and six but tended to disagree with hypotheses two, three, four, and five.
5. By length of service all groups on the average held questionable attitudes about hypotheses one and six and tended to disagree about hypotheses two, three, four, and five.
6. By education all groups on the average regarded to hypotheses one, five and six as questionable and tended to disagree with hypotheses two, three, and four.
7. By region, two thirds of the groups held on the average questionable attitudes about the hypotheses.
8. Convergence and divergence of attitudes by all variables to all the hypotheses converged in the questionable median.
9. Older groups, ages forty through fifty-nine significantly agreed with hypothesis six.



10. Local teacher association negotiators and presidents significantly disagreed with the second, third, fourth, fifth and sixth hypotheses.
11. School board presidents and school board negotiators significantly disagreed with hypothesis one.
12. The West Coast region significantly disagreed with hypotheses one, five and six.
13. The South region significantly disagreed with hypothesis four.
14. The South and Midwest regions significantly disagreed with hypothesis two.
15. The Midwest, the Northwest, and the West Coast regions significantly disagreed with hypothesis five.
16. There were no significant differences expressed by length of service and by education groups.

From these findings conclusions were drawn.

#### Conclusions

1. Length of service in the same school district and educational background do not influence the attitudes of respondents toward performance contracting.
2. Age, school, and region do influence the attitudes of respondents toward performance contracting.
3. Region influenced attitudes toward performance contracting more than any other classification variable.
4. School board presidents and school board negotiators do not feel that performance contracting is a means to humanize the classroom.
5. Older respondents feel that performance contracting is a means to increase the instructional efficiency in such areas as mathematics and reading. ,

6. Local teacher association presidents and local teacher negotiators disagreed with performance contracting to a greater degree than any other group.
7. Groups by position feel that performance contracting has a questionable impact upon education.
8. Respondents agree to some impacts of performance contracting upon education but are split into two groups of opinions about other impacts.
9. The percentage of groups of selected school district personnel's feeling that performance contracting has a questionable impact upon education is larger than the percentage of groups of related other personnel.
10. Local teacher association presidents and negotiators, the Midwest, the Northwest, and the West Coast disagree that performance contracting is a low-risk/low-cost means for experimentation.

APPENDIX

MERCHANTVILLE HIGH SCHOOL  
Merchantville, New Jersey

Jerome D. Cianfrini  
Principal

November 1971

Dear Superintendent:

As part of my doctoral study being conducted at Walden University under the direction of Dr. Mary C. Rogers and Dr. Daniel Woodside, my dissertation committee, I am doing an attitudinal study of selected school district personnel and related others involved either in a direct or indirect way in the most recent O. E. O. Performance Contracting Project in your school district for the year 1970-71. The investigation will also include the other nineteen projects in other parts of the country.

To complete my study, I would need to know the names, titles, and addresses of the actual participants as well as related others. Also helpful to the study would be the basis or criteria for their selection, i. e., how were they selected? The list of names should also include school board president, school board negotiator, board solicitor, teacher aides, teachers, human relations, math, and reading specialists, project analyst, teacher association president, teacher association negotiator, directors of elementary and secondary education, principals, director of research, and business manager.

Without your help, my investigation would be incomplete and might endanger the completion as well as the success of such a timely investigation. However, I would be willing to share the results which would be of great interest to you and your staff. Results will be made available to your office after March 1, 1972.

Needless to say, your help is indispensable if my study is to have any real value. Could I have this information by the end of this month?

Sincerely,

Jerome D. Cianfrini

MERCHANTVILLE HIGH SCHOOL  
Merchantville, New Jersey

Jerome D. Cianfrini  
Principal

December 1971

Dear

As part of my doctoral study being conducted at Walden University under the direction of Dr. Mary C. Rodgers and Dr. Daniel Woodside, my dissertation committee, I am doing an attitudinal study of selected school district personnel and related others involved either in a direct or indirect way in the most recent O. E. O. Performance Contracting Project in your school district for the year 1970-71. The investigation will also include the other nineteen projects in other parts of the country.

Since your role was certainly not unimportant in your school district, I have selected you to complete the enclosed survey which is a significant part of my research. Other participants in your school district will also be asked to complete this survey as well. You should be assured that your responses will be held in strictest confidence.

The survey consists of three parts:

- Part I - Personal Background
- Part II - The Survey Statements
- Part III - Comments

Once the returns have been recorded and tabulated, all returns shall be destroyed, but results shall be made personally available to you after March 1, 1972. Simply indicate your desire to have results forwarded.

For the results to be significant, it is critical that there be a wide and representative response. A stamped, self-addressed envelope is enclosed for your convenience. A prompt reply will be appreciated.

Needless to say, your help is indispensable if my study is to be successful.

Thank you for your help and interest in education.

Sincerely,

Jerome D. Cianfrini  
Principal

MERCHANTVILLE HIGH SCHOOL  
Merchantville, New Jersey

Jerome D. Cianfrini  
Principal

February 1972

Dear Sir:

Several weeks ago, I sent you a letter and a survey form in regard to a doctoral study that I am doing. May I honestly convey to you that I need your help if I am to complete the final phase of my doctorate.

I know it is an inconvenience, but could you just take a few minutes to complete the survey and pop it into the mail box?

Again your help is appreciated.

Sincerely,

Jerome D. Cianfrini  
Principal

**CONFIDENTIAL SURVEY**

**Of**

**Selected Personnel and Related Others'  
Attitudinal Responses to Six  
Performance Contracting  
Hypotheses**

PART I - BACKGROUND

Please provide the following information:

A. Your Position: (check one)

1. \_\_\_ teacher's aide
2. \_\_\_ teacher
3. \_\_\_ reading specialist
4. \_\_\_ math specialist
5. \_\_\_ human relations specialist
6. \_\_\_ principal
7. \_\_\_ project director
8. \_\_\_ project analyst
9. \_\_\_ director of research
10. \_\_\_ director of elementary education
11. \_\_\_ director of secondary education
12. \_\_\_ superintendent
13. \_\_\_ teacher association negotiator
14. \_\_\_ president, local teacher association
15. \_\_\_ school board president
16. \_\_\_ school board negotiator
17. \_\_\_ business manager
18. \_\_\_ board solicitor
19. \_\_\_ other (please write in)

B. Age: (check one)

1. \_\_\_ 20-29
2. \_\_\_ 30-39
3. \_\_\_ 40-49
4. \_\_\_ 50-59
5. \_\_\_ Over 60

C. School: (check one)

1. \_\_\_ elementary
2. \_\_\_ secondary
3. \_\_\_ district
4. \_\_\_ general participants
5. \_\_\_ non-professional participants

D. Length of Service in School District: (check one)

1. \_\_\_ 1-4 years
2. \_\_\_ 5-9 years
3. \_\_\_ 10-14 years
4. \_\_\_ 15-19 years
5. \_\_\_ 20-29 years
6. \_\_\_ Over 30

E. Education: (check one)

1. \_\_\_ high school graduate
2. \_\_\_ college student
3. \_\_\_ college graduate
4. \_\_\_ B. A.
5. \_\_\_ M. A.
6. \_\_\_ Ph. D. /Ed. D.

F. Professional Affiliation: (check one)

1. \_\_\_ A. F. T.
2. \_\_\_ Local Teacher Association
3. \_\_\_ N/E. A.
4. \_\_\_ NASSP
5. \_\_\_ AASA
6. \_\_\_ CSSO
7. NSBA
8. \_\_\_ Other (please write in)



G. Reason(s) for your selection and/or interest in the performance contract project: (check one or several)

1. \_\_\_ knowledge of subject
2. \_\_\_ special knowledge about learning disabilities
3. \_\_\_ advanced degree status
4. \_\_\_ knowledge of electronic hardware and software
5. \_\_\_ willingness to participate in the project
6. \_\_\_ All of these
7. \_\_\_ Other (please write in)

H. Reason(s) why you were not selected for the project: (check one or several)

1. \_\_\_ might contaminate results
2. \_\_\_ was not qualified
3. \_\_\_ only certified school district personnel could be involved
4. \_\_\_ the educational technology company wants its own personnel
5. \_\_\_ Other (please write in)

## PART II - THE SIX HYPOTHESES: The Main Survey

Directions: Please indicate by checking the appropriate space the response which best describes your judgment as indicated by the particular statement. Add any comments you would like to make, either in the margin or in Part III, Comments.

In a recent article published in *Our Nation's Schools*, the proponents of performance contracting made six assumptions that performance contracting could be:

1. A means to humanize the classroom for both the teacher and the student
  - A. \_\_\_ strongly disagree
  - B. \_\_\_ tend to disagree
  - C. \_\_\_ questionable
  - D. \_\_\_ tend to agree
  - E. \_\_\_ strongly agree
  - F. \_\_\_ am not qualified to respond

2. A feasible means to facilitate community and parent control and involvement
- A. \_\_\_\_\_ strongly disagree
  - B. \_\_\_\_\_ tend to disagree
  - C. \_\_\_\_\_ questionable
  - D. \_\_\_\_\_ tend to agree
  - E. \_\_\_\_\_ strongly agree
  - F. \_\_\_\_\_ am not qualified to respond
3. A means to rationalize the collective bargaining process
- A. \_\_\_\_\_ strongly disagree
  - B. \_\_\_\_\_ tend to disagree
  - C. \_\_\_\_\_ questionable
  - D. \_\_\_\_\_ tend to agree
  - E. \_\_\_\_\_ strongly agree
  - F. \_\_\_\_\_ am not qualified to respond
4. An educationally effective, politically palatable means for racial integration
- A. \_\_\_\_\_ strongly disagree
  - B. \_\_\_\_\_ tend to disagree
  - C. \_\_\_\_\_ questionable
  - D. \_\_\_\_\_ tend to agree
  - E. \_\_\_\_\_ strongly agree
  - F. \_\_\_\_\_ am not qualified to respond
5. A low-risk/low cost means for experimentation
- A. \_\_\_\_\_ strongly disagree
  - B. \_\_\_\_\_ tend to disagree
  - C. \_\_\_\_\_ questionable
  - D. \_\_\_\_\_ tend to agree
  - E. \_\_\_\_\_ strongly agree
  - F. \_\_\_\_\_ am not qualified to respond
6. A means to increase instructional efficiency in areas such as math and reading
- A. \_\_\_\_\_ strongly disagree
  - B. \_\_\_\_\_ tend to disagree
  - C. \_\_\_\_\_ questionable
  - D. \_\_\_\_\_ tend to agree
  - E. \_\_\_\_\_ strongly agree
  - F. \_\_\_\_\_ am not qualified to respond

PART III - COMMENTS

Thank you for your assistance

Jerome D. Cianfrini, Principal  
Merchantville High School  
130 S. Centre Street  
Merchantville, New Jersey 08109

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