

**Characteristics of School Districts  
Applying for Federal Funds  
under ESEA, 1974, Title Four, Part C**

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## Introduction

Since 1971 Illinois public schools have been beset with problems of declining enrollments, escalating costs, resistance to passage of referendums to authorize increases in the tax rate for the education and building fund, and generally higher expectations of state aid to local school districts than has been provided by the state legislature. It is obvious that many districts need to find other sources of support dollars.

Federal aid to elementary and secondary schools consists largely of formula grants which provide funds only to those school districts which meet the categorical requirements for receiving such federal aid. A federal program for innovative projects and centers does exist which is discretionary in nature and enables all school districts to submit applications for grant awards. This federal program for innovative projects, for which all public school districts are inherently eligible, is the Elementary and Secondary Act of 1974, Title Four, Part C, and was earlier known as Title Three.

The number of new grant awards each year and the amount of funds available for innovative projects is limited, but it does provide a possible source of additional funding for local school districts in Illinois and other states to meet desired educational objectives. Unlike many other grants, it does enable local school districts to establish innovative projects which they might otherwise be unable or unwilling to attempt with local funds or state aid.

## Related Literature

A limited number of studies have been done dealing with federal discretionary programs and school district characteristics. Only a very few studies have been conducted involving the characteristics of school districts receiving funding for innovative projects. Most of the few studies in this area included only Michigan school districts. None of the studies examined compared districts submitting and not submitting proposals for innovative funding over a number of years, or even a single year.

Marmor analyzed all ESEA Title Three projects in Michigan from 1967 through 1974, and examined the process for fiscal year (FY) 74 extensively. She reported that the Michigan Department of Education received seventy-four proposals for ESEA Title Three funds in 1974 from fifty-four local school districts, or roughly from 10 percent of the total number of eligible districts. Those fifty-four local school districts, as a group, had the following characteristics which supported Marmor's contention that proposals were not submitted by districts having the greatest needs:

1. Districts applying for money had greater local wealth (in terms of their tax base) than the average districts.

2. The compensatory education needs of districts which received Title Three funds were, on an average, far less severe than the majority of districts in the state.

3. More than four out of every ten proposals were from districts which had experience submitting a successful proposal to this particular source of funds.(1)

Marmor in comparing districts receiving ESEA Title Three funds from 1967 through 1974 with all Michigan school districts, concluded that a clear advantage was given to districts with fewer financial and compensatory needs. "In general, districts that receive Title Three funds are more capable of financially supporting the schools with local taxes than the majority of school districts in the state."(2)

Polhman examined federal funds received by school districts in Michigan in FY 66. He reported that twenty-four of Michigan's 533 districts, 4.51 percent, received ESEA Title Three funds in FY 1966. The mean amount received per district was \$6,368 and the median amount was \$3,150.(3) The mean amount received per pupil was from \$.14 to \$13.46.(4) The mean size of districts receiving Title Three funds was 3,941 pupils, a median size of 1,872 pupils, and a range of from 505 to 18,808 pupils. The mean current operating expenditure per pupil for districts receiving Title Three funds was \$409.32, with a median of \$384.96 and a range of from \$335.78 to \$528.87. District wealth based on state equalized valuation per resident for districts receiving Title Three funds had a mean of \$11,211, a median of \$10,112, and a range of from \$5,683 to \$24,175.

One-fourth of all districts receiving Title Three funds, six out of twenty-four, were located in the Detroit Metropolitan Statistical Area. Eleven of the districts receiving Title Three funds were located in southern counties outside of the Detroit metropolitan statistical area. The remaining seven districts receiving Title Three funds were located in counties in northern lower Michigan and in the upper peninsula. Most districts receiving Title Three funds were in small communities under 2,500 population.(5) Pohlman in summation noted that, "A majority of the districts which received ESEA Title Three funds were middle-sized low-expenditure districts. Small districts with enrollments under 500 did not receive either Title Two or Title Three funds."(6)

Letarte used a case study approach involving twelve federally funded educational programs, including ESEA Title Three, to compare twelve matched urban and rural districts in Michigan on the amount of aid to disadvantaged students received by such districts.

Letarte reported the following findings:

1. Federal funding per pupil input was different in every one of the federal acts studied. In eight of the twelve programs studied, urban districts averaged more money per disadvantaged child than did the

matched rural districts. In the four remaining districts, the rural districts averaged more money per disadvantaged child than did the matched urban districts.

2. Wide differences in participation occurred even though districts were matched on the basis of the percentage of disadvantaged children residing in the districts and per pupil state equalized valuation. Therefore, factors other than educational need were obvious determiners of the difference.

3. Funding in many federal legislative programs was not accessible to all districts on an equal basis and funds were not universally sought and/or approved. This was most pronounced in the in-depth, statewide analysis of the ESEA Title Three program. The only rural district that submitted an ESEA Title Three proposal employed a "federal projects coordinator to write proposals and stay abreast of federal funds available to the district."(7)

Nicolari studied the distribution pattern of ESEA Title Two and Title Three grants, plus NDEA Title Three and Title Five A grants, to sixty-nine Connecticut school districts during three school years; 1965-66, 1966-67, and 1967-68. The purpose of his study was to determine if the federal grants contributed to the equalization of financial resources among Connecticut school districts. Nicolari concluded that, "No significant relationship exists between the available financial resources of Connecticut school districts and the amount of selected federal aid received by those same districts."(8)

Zellner did a study involving diffusion of ESEA Title Three innovations. The purpose of his study was to examine the relationship of financial expenditure to the diffusion of ESEA Title Three innovations. The study included seventy-three ESEA Title Three projects in eight southeastern states and Arkansas which were funded initially in 1968 and continued for a full three-year period.

Zellner's study has provided some relevant findings regarding the education and experience characteristics of superintendents of school districts receiving ESEA Title Three grants. Twenty-four superintendents responded. The majority of superintendents in Zellner's study did not have a doctorate. The highest degree received by superintendents was sixteen with a Master of Science degree, one with an Educational Specialist degree, and seven with a Doctorate of Education degree. Superintendents of districts receiving grant awards reported having a large number of years of experience as superintendent of a local school district. Experience as superintendent ranged from five years to forty-three years. The average number of years of experience as a superintendent was 22.65 years and the mode was twenty-two years.(9)

Hearn did an extensive study dealing with continuation of innovative programs after ESEA Title Three funding ceased. The major purposes of his study were: (1) determining the number and extent of continuation of three-year Title Three projects following termination of

federal funding, and (2) determining which of selected characteristics might be associated with continuation of these projects. Hearn used a questionnaire containing thirty-nine items, which was mailed to 330 superintendents of districts across the nation which had completed three years of operation after being funded with ESEA Title Three funds in FY 1966.

Findings indicated that the type of community played a role in continuation of innovative programs after federal funding ceased. "Rural areas had fewer pupils going on to college, less income, had fewer of the most innovative programs, had tried fewer innovations, and were more conservative. Also, the superintendent was younger, had less education, and less experience as a superintendent."(10)

The education level of a community was also a factor in continuation of innovation programs once the grant funding no longer existed. "The higher the education level as a community, as determined by the percent of graduating classes going on to college, the greater the expansion of the project and the higher the rate of continuation."(11)

Income was another factor affecting continuation at the end of the three-year cycle. "In all categories of continuation, communities with higher incomes had a slightly greater percent of continuations. Income level was also associated with urban projects and 'most innovative' projects."(12)

Generally, Hearn concluded that school districts were more likely to continue their projects if they had a higher expenditure per child, were in urban areas, had a smaller school enrollment, served only one school district, had a higher percentage of high school graduates who went to college, had a superintendent hired from outside the system, had tried a number of innovations, and had a supportive and open-minded community.(13)

### Summary

This study initially analyzed the relationship of selected characteristics of 981 Illinois school districts to the submission or nonsubmission of proposals for initial funding of innovative projects from fiscal year (FY) 1974 through FY 1978 and ascertained if the awarding of grants by the Illinois state education agency was related to specific characteristics of districts. The selected characteristics included superintendent, community, school district, taxation-expenditure, and state-federal financial aid characteristics. Innovative projects considered were proposals submitted for funding from Title Three of the Elementary and Secondary Education Act of 1965 as amended and Title Four, Part C of the Elementary and Secondary Education Act of 1974.

The purpose of this study was to identify which selected characteristics were related to district submission and subsequent initial funding of innovative projects.

The first specific purpose of this study was to determine the number and percentage of districts by type and area location submitting proposals to the Illinois state education agency for funding. The five-year mean number of all types of districts submitting proposals was 57.2 districts. The five-year mean number of all types of districts funded was 11.4 districts. The five-year mean percentage of all types of funded districts of all submitting districts was 19.9 percent, as shown in Table 1.

This study included 429 elementary districts, 124 secondary districts, and 428 unit districts. Unit districts were the most numerous in submitting proposals during the five-year period. Table 2 shows that the five-year mean number of unit districts submitting proposals was 25.8 (5.8 percent). However, secondary districts had the highest percentage of districts submitting proposals for the five-year period (9.4 percent).

The state of Illinois has been divided into six roughly equivalent geographical areas by the Illinois state education agency. One-third of all Illinois school districts are located in Area 1. This area contains the northeastern counties, including the Chicago metropolitan area, but excluded proposals from the City of Chicago School District 299. Area 1 had the greatest number of districts and highest percentage of districts submitting proposals during the five-year period. The five-year mean number of districts and percentage in Area 1 submitting proposals was 27.8 districts (8.5 percent). School districts located in Area 3, the west central section of the state, had both the fewest number of districts and the lowest percentage of districts submitting proposals during the five-year period. The five-year mean number of districts and percentage in Area 3 submitting proposals was 4.4 districts (3.3 percent).

The second specific purpose of this study was to compare districts submitting and not submitting proposals on selected characteristics. A T-test was utilized to compare the mean of districts submitting and not submitting proposals on selected characteristics for each of the five years. The mean of the following selected characteristics was significantly higher for districts submitting proposals than for districts not submitting proposals in each of the five years: Superintendent Characteristic--salary of the superintendent; Community Characteristics--percent of population residing in urban areas, and percent twenty-five years old and over with some college; School District Characteristics--enrollment and percent of minority students; Taxation-Expenditure Characteristics--total tax rate per \$100 equalized assessed valuation; and State-Federal Financial Aid Characteristics--Title One Weighted Average Daily Attendance Concentrated (TWADAC).

The third specific purpose of this study was to determine the number and percentage of funded districts by type and area location. Elementary districts were both the most numerous type of funded districts and had the highest percentage of funded districts for the five-year period of any of the three types of districts. The five-year mean number of funded elementary districts was 4.6 districts, which was 23.2 percent of those submitting proposals.

Area 1, the northeastern counties including the Chicago metropolitan area but excluding the City of Chicago School District 299, had the largest number of funded districts. The five-year mean number of funded districts for Area 1 was 5.4 districts. Area 2 and Area 3, on the other hand, had the smallest mean number of funded districts, 8 districts. Area 5, the southwestern portion of the state, had the highest percentage of submitting districts funded for the five-year period. The five-year mean percentage of submitting districts funded in Area 5 was 28.1 percent. Area 2, the northwestern part of the state, had the lowest percentage of submitting districts funded. The five-year mean percentage of submitting districts funded in Area 2 was 13.8 percent.

The fourth specific purpose of this study was to compare funded and not funded districts on selected characteristics. A T-test was also used to compare the mean of districts funded and not funded on selected characteristics. No consistent significant difference, or even trend in difference, in the mean of any of the selected characteristics existed. Significant differences in mean were found only for five selected characteristics, and then only for one of the five years. Districts not funded had a significantly higher mean than funded districts on the following characteristics for the year noted:

#### Superintendent Characteristic

1. Years out-of-state experience in 1973-74.

#### District Characteristics

1. Percent minority students in 1975-76;
2. Number of students to professional staff in 1973-74;
3. Title One Weighted Average Daily Attendance Concentrated (TWADAC) in 1973-74;
4. Federal funds per pupil TWADAC in 1975-76.

To compensate for idiosyncracies which may arise from year-to-year comparisons, additional analysis was conducted with an overall purpose of determining what selected characteristics were most closely associated with district submission. This phase of the study included 978 districts, and a district was considered to be a submitting district if that district submitted a proposal at least once during the five-year period. All earlier selected characteristics, plus highest degree obtained by superintendent, were included. Type of district was controlled due to taxation and weighting factors which exist relative to elementary, secondary, or unit districts.

The first specific purpose of this phase of analysis was to determine the number and percentage of districts submitting a proposal at least once during the five-year period. One hundred and seventy-six

districts, which was 19 percent of the 978 districts, submitted a proposal at least once during the five-year period.

The second specific purpose of this phase of analysis was to determine the correlation between selected characteristics of districts and submission of a proposal at least once during a five-year period. Positive correlation coefficients of +.408 for Title One weighted average daily attendance concentrated, +.404 for enrollment, +.361 for salary of the superintendents, +.312 for percent urban, and +.252 for percent of minority students were reported.

The third specific purpose of this phase of analysis was to determine which of the selected characteristics, when considered simultaneously among groups of similar characteristics, were significantly associated with district submission of a proposal at least once during the five-year period. A multiple regression procedure was utilized to determine significance. The characteristics determined to be significantly associated with submission among groups of similar characteristics, controlling for district type, were the following:

#### Superintendent Characteristics

1. Salary;
2. Years in state.

#### Community Characteristics

1. Percent urban.
2. Percent twenty-five years old and over with some college;
3. Per capita income.

#### District Characteristics

1. Enrollment;
2. Percent minority students.

#### Taxation-expenditure Characteristics

1. Total tax rate per \$100 equalized assessed valuation;
2. Local taxes per Title One Weighted Average Daily Attendance Concentrated;
3. Operating expenditure per pupil in average daily attendance.

#### State-federal Financial Aid Characteristics

1. Title One Weighted Average Daily Attendance Concentrated;



2. Estimated total state aid per pupil TWADAC;
3. Estimated state aid from common school fund (Distributed) per pupil TWADAC.

All of the above characteristics were also found to be significant in each of the five years except years in state, one year; per capita income; three years; local taxes per Title One Weighted Average Daily Attendance, two years; operating expenditure per pupil in average daily attendance, four years; estimated total state aid per pupil TWADAC, two years; and estimated state aid from common school fund (distributed) per pupil TWADAC, two years.

The fourth specific purpose of this phase of analysis was to determine which of the selected characteristics, identified as significant within groups of similar characteristics, were most closely associated with district submission of a proposal at least once during the five-year period. Multiple regression was utilized to determine the significance of the selected characteristics. The characteristics determined to be most closely associated with submission of a proposal at least once during the five-year period were the following:

1. Enrollment;
2. Percent of minority students;
3. Percent twenty-five years old and over with some college;
4. Estimated total state aid per pupil TWADAC.

The results of this study indicate districts smaller in size (enrollment), or having fewer nonwhite students (percentage of minority students), or located in less educated communities (percentage twenty-five years old and over with some college), or receiving less total state assistance (estimated total state aid per pupil TWADAC) do not participate actively in seeking innovative project funding by submitting proposals.

Table 3 provides information relative to which of those earlier identified significant selected characteristics are most closely associated with submission of a proposal at least once during the five-year period.

Model 1 displays the simultaneous forced entry of Type a and Type b districts to control for type of district. The subsequent addition of enrollment, the first independent variable to be entered, in Model 2 results in an increase of .152 in the  $R^2$ , which is the largest increase in any of the models. Model 3 displays the addition of total tax rate per \$100 equalized assessed valuation, which results in an increase of .023 in the  $R^2$ . The adding of percent of minority students in Model 4 to the earlier variables causes a further increase in the  $R^2$  of .015. Model 5 adds the percent twenty-five years old and over with some college

to the preceding independent variables, and an .013 increase in  $R^2$  occurs. The subsequent addition of estimated total state aid per pupil TWADAC in Model 6 prompts further increase in the  $R^2$  of .013.

Total tax rate per \$100 equalized assessed valuation with the addition of subsequent variables became nonsignificant due to it being embedded in the later variables. Estimated total state aid per pupil TWADAC is a function of the total tax rate per \$100 equalized assessed valuation; thus the earlier characteristic was redundant.

### Conclusions

The following conclusions appear to be warranted, based on this study.

1. Federal funds for innovation distributed by the Illinois state education agency through a competitive process of proposal submissions has stimulated only a small percent of school districts to seek such funding.

2. Secondary districts are more likely to submit proposals for funding of innovative projects, but elementary districts are somewhat more likely to have their proposals funded.

3. The more significant characteristics differentiating between submitting and nonsubmitting districts were urban related. Specifically, submitting districts tended to have larger enrollments and a higher percentage of minority students.

4. The awarding of grants by the Illinois state education agency was not related to specific characteristics of districts. However, it must be clearly understood that this study examined the awarding of grants and not the amount of funding distributed by such grants to local school districts. Caution needs to be exercised in interpreting all data presented on funded districts due to the very small number of funded districts.

### Limitations

1. The unit of analysis used in this study was the district, not the district weighted by the number of pupils. Thus the conclusions are in terms of the characteristics of districts submitting or not submitting proposals, but no interpretations should be made in terms of the number of pupils served or not served by these grants.

2. The first limitation is further strengthened by the elimination of the City of Chicago from the study.

3. There are correlations between the independent variables in the regression analyses used, and these intercorrelations may affect the signs of the predicting variables.

4. No multiplicative or joint effects of independent variables were explored in this study.

### Recommendations

The following recommendations are made as a result of this study.

1. This study should be replicated when 1980 U.S. Census Bureau data become available, utilizing the years since fiscal year 1978, to determine if the same pattern continues to exist.

2. This study should be replicated in another state or states in order to determine if similar differences exist in other parts of this nation.

3. A study should be made to determine why districts with certain selected characteristics identified by this study do not submit proposals for funding of innovative projects to the Illinois state education agency.

4. A similar study should be conducted substituting adoptive/adaptive districts for submitting districts to determine if districts not submitting proposals for regular innovative funding are participating in the adoptive/adaptive phase of innovation.

5. A similar study should be conducted emphasizing the amount of funding per pupil received by districts.

6. A similar study should be conducted utilizing other groups of selected characteristics dealing with boards of education, principals, central staff, teachers, and student population characteristics, such as performance on the Illinois Inventory of Educational Progress, in order to learn what additional differences exist between districts submitting and not submitting proposals for innovative funds.

### Policy Implications

Findings of this study strongly suggest a need for the Illinois State Board of Education to consider making policy changes in Title Four, Part C in Illinois. An apparent need exists to stimulate more interest in innovation, thereby prompting an overall increase in the number of districts submitting proposals for possible funding of innovative projects. Increases in the number of districts submitting proposals would provide both a larger and more diversified pool of districts for possible funding, which would be more truly representative of school districts in

Illinois. A special emphasis on securing more participation of small rural districts by encouraging such districts to submit proposals is necessary.

Policy changes which might be considered by the Illinois State Board of Education to accomplish this goal include:

1. Increasing lobbying of the U.S. Congress, and the Illinois delegation in particular, for larger appropriations for Title Four, Part C could possibly provide both more and larger grant awards, thereby encouraging more districts to submit applications.

2. Establishing a Rural Education Section, similar to the existing Urban and Ethnic Education Section, would provide for increased and coordinated technical assistance to small rural districts, thus aiding such districts to compete for funding of innovative projects.

3. Reviewing the existing delivery system of technical assistance to districts and providing specialists at the state and regional levels to assist in proposal preparation, development, and writing could lead to submissions by districts which currently lack the technical expertise to submit proposals.

4. Structuring of the grant award distribution process by providing for the funding of a number of proposals by district enrollment categories would provide increased incentive for small rural districts, since they would then be competing more equally than at present.

5. Considering awarding at least some mini-grants for promising low-cost innovative projects might increase the number of districts submitting proposals, especially those districts interested in seeking only small amounts of seed money.

#### Notes and References

1. Susan Elaine Marmor. "The Distribution of Federal Funds through a Competitive Grant Process: ESEA Title Three in Michigan," Ph.D. dissertation, University of Michigan, 1975, p. 3.
2. Ibid., p. 5.
3. Neil Albert Pohlmann. "An Analysis of the Relationship between Selected Federal Funds Received in Fiscal 1966 by Michigan High School Districts and Selected School District Characteristics and Organizational Factors," Ed.D. dissertation, Wayne State University, 1968, p. 87.
4. Ibid., p. 75.
5. Ibid., pp. 91-92.

6. Ibid., p. 152.
7. Clyde Letarte. "A Comparative Study of Selected Federal Programs and the Funds Received by Urban and Rural School Districts," Ed.D. dissertation, Michigan State University, 1969, p. 163.
8. Richard Frank Nicolari. "Distribution Patterns of Federal Grants to Local School Districts in Connecticut," Ph.D. dissertation, University of Connecticut, 1960, p. 102.
9. Cordelle Wayne Zellner. "A Study of the Relationship of Financial Expenditure to the Diffusion of ESEA Title Three Innovations," Ed.D. dissertation, Memphis State University, 1971, pp. 65-66.
10. Norman Eugene Hearn. "Innovative Educational Programs: A Study of the Influence of Selected Variables Upon Their Continuation Following the Termination of Three-year ESEA Title Three Grants," Ph.D. dissertation, George Washington University, 1969, p. 213.
11. Ibid., p. 203.
12. Ibid.
13. Ibid., pp. 202-04.

## APPENDIX

### Tables

TABLE 1

NUMBER OF DISTRICTS SUBMITTING PROPOSALS, NUMBER  
OF DISTRICTS FUNDED, AND PERCENTAGE OF  
SUBMITTING DISTRICTS FUNDED BY YEAR

Year	Number Submitting	Number Funded	Percentage Funded
1973-74	60	7	11.7
1974-75	43	14	32.6
1975-76	66	13	19.7
1976-77	62	8	12.9
1977-78	55	15	27.3
Five-year Mean	57.2	11.4	19.9

TABLE 2

NUMBER AND PERCENTAGE OF DISTRICTS SUBMITTING  
PROPOSALS BY TYPE OF DISTRICT BY YEAR

Year	Elementary (N = 429)		Secondary (N = 124)		Unit (N = 428)	
1973-74	25	(5.8%)	10	(8.1%)	25	(5.8%)
1974-75	14	(3.3%)	6	(4.8%)	23	(5.4%)
1975-76	16	(3.7%)	15	(12.1%)	35	(8.2%)
1976-77	23	(5.4%)	19	(15.3%)	20	(4.7%)
1977-78	21	(4.9%)	8	(6.5%)	26	(6.1%)
Five-year Mean	19.8	(4.6%)	11.6	(9.4%)	25.8	(6.0%)

TABLE 3

BETA WEIGHTS AND F VALUES (OF SIGNIFICANT SELECTED CHARACTERISTICS)  
 BY ORDER OF ENTRY CONTROLLED FOR TYPE

Order of Entry	Independent Variables By Order of Entry						R <sup>2</sup> for Model	Increase in R <sup>2</sup>	
	Type a	Type b	Enroll.	Total Tax Rate Per \$100 Equal. Assessed Valuation	Percent of Minority Students	Percent 25 Years Old and Over with Some College			Estimated Total State Aid Per Pupil TWADAC
	(1)	(1)	(2)	(3)	(4)	(5)	(6)		
Model 1	Beta	-.052	.134					.026	.026
	F	(2.4)	(16.0) <sup>a</sup>						
Model 2	Beta	-.001	.121	.395				.178	.152
	F	(0.0)	(15.5) <sup>a</sup>	(181.2) <sup>a</sup>					
Model 3	Beta	.121	.238	.346	.211			.201	.023
	F	(9.8) <sup>a</sup>	(39.6) <sup>a</sup>	(128.7) <sup>a</sup>	(27.0) <sup>a</sup>				
Model 4	Beta	.089	.218	.314	.182	.131		.216	.015
	F	(5.2) <sup>a</sup>	(33.2) <sup>a</sup>	(101.8) <sup>a</sup>	(19.8) <sup>a</sup>	(18.9) <sup>a</sup>			
Model 5	Beta	-.005	.150	.284	.100	.154	.142	.229	.013
	F	(.0)	(13.5) <sup>a</sup>	(80.9) <sup>a</sup>	(4.88) <sup>a</sup>	(25.6) <sup>a</sup>	(17.1) <sup>a</sup>		
Model 6	Beta	-.076	.104	.296	.001	.153	.191	.240	.011
	F	(2.5)	(5.9) <sup>a</sup>	(87.8) <sup>a</sup>	(.0)	(25.6) <sup>a</sup>	(27.2) <sup>a</sup>	(13.5) <sup>a</sup>	

<sup>a</sup>p < .05