

**THE EFFECTS OF FACT-FINDING AND
FINAL-OFFER ISSUE-BY-ISSUE COMPULSORY
INTEREST ARBITRATION ON TEACHERS' WAGES,
FRINGE BENEFITS, AND LANGUAGE PROVISIONS:
A COMPARATIVE ANALYSIS OF NEW JERSEY AND
CONNECTICUT, 1980-86**

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ABSTRACT

This comparative study focused on bargaining outcomes achieved by teachers in jurisdictions mandating final-offer issue-by-issue compulsory interest arbitration and fact-finding as a means of resolving collective bargaining disputes in Connecticut and New Jersey, respectively. The sample under study included fifty randomly selected K-12 school districts. Data were collected by means of contract analysis and survey and included salaries, fringe benefits, and language provisions. The research advances understanding of bargaining outcomes for teachers in fact-finding and interest arbitration states and should have implications for school boards, teacher unions, and state legislatures searching for alternatives to strikes in public sector teacher bargaining.

It is generally recognized that one of the obstacles to effective collective bargaining in the public sector is the difficulty that exists in finalizing negotiations. The problem is exacerbated by the inadequacy of the incentives for making concessions. It is clear that pressure to settle in private sector bargaining is substantially

greater than in the public sector because the economic consequences of a strike or lockout lurk in the background. Unlike private sector employees, those employees who come under the umbrella of public sector bargaining laws are not, generally speaking, granted a right to strike. Critics of public sector bargaining maintain that without the strike and the lockout, motivation to reach agreement is minimal.

Public sector collective bargaining is not regulated by federal legislation, but rather by statutes that vary from state to state. Each state employs a variety of procedures for finalizing negotiations in public sector bargaining. Each of these dispute resolution procedures involves a variety of agencies that operate within their own historical and institutional framework. Moreover, each terminal procedure has its own distinct design and each design establishes varying degrees of pressure on the parties to settle. It has been said that public sector dispute resolution procedures, nationwide, constitute a pattern that could perhaps be best described as a patchwork quilt.

It is the variation in dispute resolution procedures, the contrast in applying settlement pressure, the patchwork quilt, if you will, which served as the basis of this study. By comparing bargaining outcomes under two distinct dispute resolution procedures the researcher has attempted to determine under which design teachers, as public sector employees, have made greater gains in their terms and conditions of employment.

Terms and conditions of employment for teachers are determined in large measure through the collective negotiations process. Concessions, or lack of them, at the bargaining table determine bargaining outcomes, which then affect the teachers' terms and conditions of employment. It is believed that the key element in the process leading to these bargaining outcomes is the procedure used to resolve bargaining impasses [1]. It follows from theory that in the area of public sector teacher bargaining the key element to bargaining outcomes will be the state legislated dispute resolution procedure. Thus, it is submitted that the mere presence of a particular dispute resolution structure will affect all teacher bargaining outcomes within that state, even those bargaining outcomes gained without reaching impasse.

The present research compared wages, fringe benefits, and language provisions for teachers in the two states of New Jersey and Connecticut during the years 1980-86. Each of these jurisdictions relied on a different form of dispute resolution for the settlement of teacher-board of education bargaining impasses. Moreover, each procedure applied varying degrees of pressure on the parties to settle. Dispute resolution procedures under study were:

1. Fact-finding, in which a *recommendation* for settlement is submitted to the parties by a neutral third party; and
2. Compulsory final-offer issue-by-issue interest arbitration, which *compels* a final and binding decision to be rendered by the neutral third party.

CONCEPTUAL FRAMEWORK

Fact-Finding

One of the original premises underlying fact-finding was that by making public the recommendations of the neutral, sufficient pressure would be brought to bear on the parties to accept the recommendations or to use them for a negotiated settlement [1]. Another theory of fact-finding holds that the prospect of settlement may be enhanced by clarifying positions through the issuance of recommendations [2].

McKelvey, in assessing the early use of fact-finding, however, expressed the fear that as parties became more accustomed to bargaining under fact-finding, the process would become less effective [3]. At the same time Arnold Zack [4] advanced the view that fact-finding offers the risk of "perpetually extending procedures" so that good faith bargaining occurs only at the last stages if at all [4]. Yaffe and Goldblatt's study of public employment disputes in New York State under fact-finding yielded evidence of employee frustration and led the researchers to conclude [5, p. 6]: ". . . perhaps the major deficiency in the process is that [fact-finding] reports can be rejected, particularly by employers, with impunity."

Gatewood's analysis of data on teacher negotiations in Wisconsin bears out these early concerns for fact-finding's effectiveness [6]. Gatewood found an increasing tendency on the part of teachers in Wisconsin to reject the fact-finder's report. Moreover, when teachers recognized that fact-finding lacked the finality to influence intransigent employers, they began to bypass the process completely.

In Michigan, Wolkinson and Stieber observed a similar pattern developing among public safety employees [7]. Public sector unions in that state had bypassed fact-finding in ninety-two of the 144 strikes that had occurred between 1971 and 1974. This evidence of fact-finding's ineffectiveness to bring about finality in Michigan led the researchers to conclude that the process had not "operated as an effective deterrent to strikes . . ." [7, p. 245].

More recently, Ianole's study of teacher-board impasses in New Jersey produced evidence that parties, negotiating under that state's fact-finding statute, lacked the motivation to settle their contract talks bilaterally [8]. There were sixty-four instances of illegal teachers' strikes in New Jersey during the 1980-86 school years [9], a statistic that appears to support Ianole's conclusion with respect to New Jersey's teacher-school board bargaining relationships.

There seems to be a growing concern among those in the field of labor relations that fact-finding, as it is presently used in the public sector, is not producing the intended results. Kochan attributes fact-finding's ineffectiveness to several factors [1]:

1. Its inability to consistently avoid strikes;
2. Its low rate of settlement; and

3. Its impotence in encouraging parties to accept the neutral's recommendations as a basis for settlement.

Compulsory Interest Arbitration

With an eye toward bringing a type of finality into the public sector bargaining process, many state legislatures have come to embrace some form of compulsory interest arbitration as an alternative to fact-finding. The use of this arbitration process has, in general, been restricted to disputes involving the protective services, i.e., police and fire fighters. Compulsory interest arbitration statutes that include teachers exist in only seven of the fifty states in the United States, namely Connecticut, Iowa, Maine, Minnesota, Rhode Island, Nebraska, and Wisconsin.

Proponents of compulsory interest arbitration believe that the process tends to diminish the chances of one-sided economic and political strength and, thus, brings the parties to the negotiation process as relative equals [10]. Some suggest that compulsory interest arbitration produces a "strike-like" result in that it [11]:

1. Gives a powerful impetus to the negotiatory processes of concession and compromise;
2. Creates a sense of urgency; and
3. Imposes a direct cost of disagreement on the parties.

The implication is that compulsory arbitration, like the strike, provides a kind of benchmark which may be helpful in arriving at a particular solution in negotiations. The actual strike need not occur for the "particular solution" function to be served. The expected cost, i.e., the perception by the parties of a strike, will serve as a standard against which each party may weigh the expected cost of any given concession. This gives each party an equal opportunity to determine the least favorable terms that will be acceptable to it [12].

Olson points out that in the public sector, the expected cost of disagreeing depends on the cost and probability of an illegal strike [13]. Similarly, the cost of disagreeing can depend upon the extent to which one party can either impose its demands on the opponent or force a modification in the opponent's position by using or threatening to use the dispute settlement procedure designed to replace the strike.

Comparative Studies

Comparative before and after studies of public safety wage outcomes under fact-finding and compulsory interest arbitration indicate an increase in both minimum and maximum salaries for those employees bargaining under newly instituted arbitration statutes [14, 15]. In addition, interstate studies have indicated that salary increases in arbitration states exceeded the average rate of salary increases in nonarbitration states [13, 16, 17]. Similarly, studies of nonwage

outcomes indicate a positive result for those public employees negotiating in an arbitration environment [18].

Rationale

Compulsory interest arbitration provides for the type of finality and equality necessary for effective collective bargaining. It affords the parties a technique that can be used to foster accommodation in the negotiation process [11]. In such an environment, it is anticipated that the power of the union will increase. The union advantage is achieved by increasing the employer's cost of disagreeing. The implication is that compulsory interest arbitration enables the union to force the employer into making concessions not likely to be made under fact-finding. It follows from theory that over time, as negotiating and arbitrated settlements become interdependent [19], collective bargaining outcomes should favor those public sector employees negotiating in a compulsory interest arbitration state rather than those public sector employees who negotiate in a fact-finding environment.

The reliance upon compulsory interest arbitration in the settlement of teacher-board of education collective bargaining disputes means that the "business of teaching" can continue. Labor peace is maintained. Unfortunately, little is known as to how teachers' terms and conditions of employment are affected by this procedure. Extensive comparative research on bargaining outcomes for police and fire fighters in arbitration and nonarbitration states exists in the literature. Similar comparative research on bargaining outcomes for teachers is lacking. Thus, it was felt that an in-depth comparative analysis of fact-finding with what Kochan terms "its realistic alternative, i.e., another type of impasse procedure" was called for at this time [20, p. 6].

METHODS

Source of Data

The study was accomplished by means of contract analysis and survey research. The format used by Zabriskie [21] in her comparison of teacher bargaining outcomes in Pennsylvania and New Jersey was incorporated into this study. Similar questions were posed. In addition, select provisions listed in the New Jersey Education Association's Sample Contract [22] as well as Kochan and Wheeler's Model for Analysis of Bargaining Outcomes [20] were incorporated into the set of questions prepared for this study. Along with salary and fringe benefit analyses, the research included a comparative analysis of language provisions that speak to union power. The analysis was organized under the following three headings:

- I. Comparison of teacher salaries and salary increases
 - A. B.A. Step 5
 - B. M.A. Step 10
 - C. M.A. +30 Maximum Step
- II. Comparison of teacher fringe benefits
 - A. Longevity payments
 - B. Accumulated sick day reimbursement
 - C. Tuition reimbursement
 - D. Class coverage payment
 - E. Travel allowance
 - F. Personal business days without reason stated
 - G. Family illness days
- III. Comparison of language benefit provisions
 - A. Teacher preparation time
 - B. Outside experience credit
 - C. Sabbatical leave
 - D. Binding grievance arbitration
 - E. Agency fee

The Samples

The research involved a longitudinal *ex post facto* study of wage and fringe benefits in fifty randomly selected K-12 school districts in the states of Connecticut ($N = 25$) and New Jersey ($N = 25$). Contractual wage, fringe benefits and language outcomes for teachers were analyzed in the sample districts for the six-year period 1980-81 to 1985-86. The states of Connecticut and New Jersey were deemed comparable for the purposes of this study because they are substantially similar, except with regard to the dispute resolution procedure used by teachers within each state. Proximity to New York City, population of metropolitan cities and median personal per capita income were measured and found to be comparable [23].

Sampling Procedure

A stratified random sample of K-12 school districts in each of the two states was selected for inclusion in the study. It was assumed that the school districts chosen for the sample were independent of one another and, more importantly, were drawn from a population with equal or similar characteristics.

Initially, all K-12 school districts in each state were identified and then divided into strata based on their respective student enrollments. Tables 1 and 2 indicate the population and sample districts for each stratum in each state. Next, the New Jersey and Connecticut sample districts were compared using four variables. Table 3 illustrates the mean and standard deviation for each state on each of these variables.

Table 1. Comparison of Population and Sample Groups in New Jersey

Group	School Enrollment	Population	Sample
I	3000 and below	108	14
II	3000 to 5999	53	7
III	6000 and above	29	4
Total		190	25
Ratio	13.1%		

Table 2. Comparison of Population and Sample Groups in Connecticut

Group	School Enrollment	Population	Sample
I	3000 and below	57	12
II	3000 to 5999	35	8
III	6000 and above	24	5
Total		116	25
Ratio	21.5%		

Data Collection

Teacher contracts for the years 1980-86 were collected for each of the fifty school districts in the total sample. A worksheet for uniform data collection was constructed and filled out for each district. In all, more than 140 contracts were read, coded and analyzed. On average, each of the fifty districts had negotiated three separate contracts for the period under study. The necessary data were entered into computer coding forms, keypunched, tabulated and analyzed by computer.

Data Analysis

When statistical tests were needed in response to research questions a significance level of .05 was used. New Jersey and Connecticut were compared on

Table 3. Comparison of New Jersey and Connecticut Sample Districts on Selected Variables Using the Mean (\bar{x}) and Standard Deviation (SD)

Variable	Sample I (NJ)		Sample II (CT)	
	\bar{x}	SD	\bar{x}	SD
District Student Enrollment	3889.0	5667.7	4173.6	3600.1
District per capita Income	\$ 9243.88	3282.81	8804.24	2380.64
District Median Housing Value	\$64528.00	27639.00	68900.00	22163.00
District Median Age	33.8	4.3	32.4	2.6

each of the contract variables for every year under study. One of two types of inferential statistics was used: independent sample t -tests in the case of interval-scale variables and cross-tabulation tables with chi-square statistics in the case of categorical data. Changes over time in each state were also assessed using one of two procedures. In the case of interval-scale data, correlated t -tests were used to determine whether the average change between the first observation (1980-81) and the last observation (1985-86) was a significant one. To measure the significance of change on the categorical variables over time, the McNemar test was applied. The McNemar test compares the number of districts that changed from "Yes" to "No" on a given benefit to the number of districts that changed from "No" to "Yes." The McNemar test thus enables one to make a probability statement regarding the significance of change in one direction or the other [24].

Two-way analyses of variance (ANOVA) were performed on the salary variables and the other interval-scale variables to determine whether there were any significant interactions between state and year. The analyses also provided tests for the main effects of each of the two factors, state and time.

Salary Data

The salary data for the present study indicate that at all salary levels under study teachers in New Jersey received higher salaries than did teachers in Connecticut during the years 1980-86. Over the six-year period, B.A. Step 5 mean salaries increased from \$13,788 to \$19,050 in New Jersey and from \$12,272 to \$17,526 in Connecticut (Table 4, Figure 1). M.A. Step 10 mean salaries rose from \$17,678 to \$24,469 in New Jersey and from \$16,160 to \$22,953 in Connecticut over the same period (Table 5, Figure 2). M.A. +30 maximum step mean salaries increased from \$24,443 to \$35,343 in New Jersey and from \$20,965 to \$30,494 in Connecticut during the years under study (Table 6, Figure 3). No significant differences occurred between the states in percentage increases.

Table 4. The Mean (\bar{x}), Standard Deviation (SD), and Test Statistic (t) of B.A. Step 5 Salaries in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				t
	New Jersey ($N = 25$)		Connecticut ($N = 25$)		
	\bar{x}	SD	\bar{x}	SD	
1980-81	\$13,788.2	912.6	\$12,272.4	1,119.4	5.25***
1981-82	14,589.0	1,066.8	13,137.9	1,320.9	4.27***
1982-83	15,486.2	1,023.8	14,022.3	1,421.7	4.18***
1983-84	16,386.6	1,226.7	15,086.0	1,612.9	3.21***
1984-85	17,357.4	1,395.1	16,211.8	1,885.8	2.44*
1985-86	19,050.2	1,748.2	17,526.0	2,207.8	2.71**
Correlated sample t -test comparing 1980-81 to 1985-86	14.07***		15.77***		

* $p < .05$
 ** $p < .01$
 *** $p < .001$

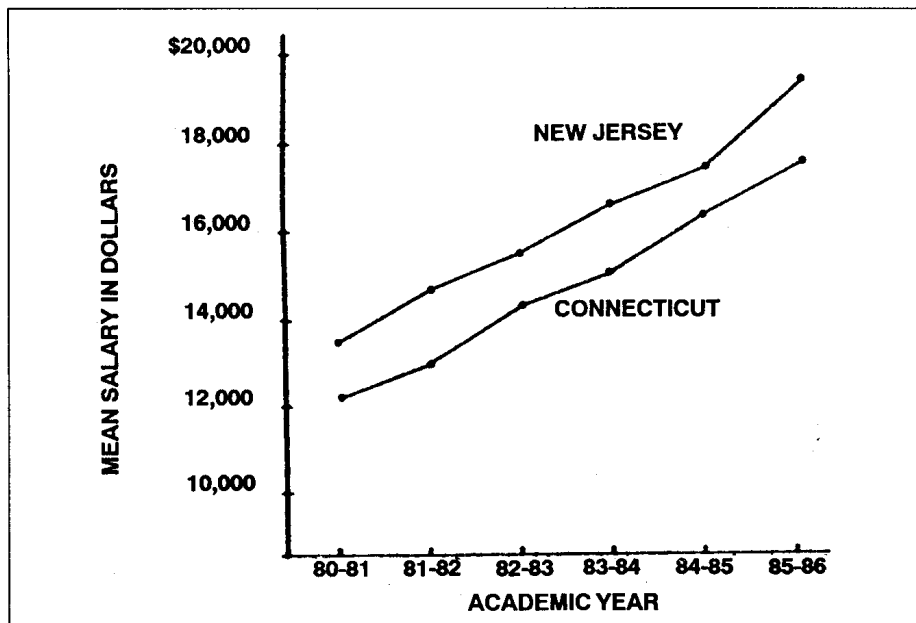


Figure 1. B.A. step 5 salaries in New Jersey and Connecticut, 1980-81 to 1985-86.

Table 5. The Mean (\bar{x}), Standard Deviation (SD), and Test Statistic (t) of M.A. Step 10 Salaries in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				t
	New Jersey ($N = 25$)		Connecticut ($N = 25$)		
	\bar{x}	SD	\bar{x}	SD	
1980-81	\$17,678.0	1,123.0	\$16,160.0	1,589.9	3.90***
1981-82	18,706.0	1,258.2	17,125.6	1,837.8	3.55***
1982-83	19,794.4	1,391.4	18,387.7	1,966.5	2.92**
1983-84	21,025.4	1,753.3	19,746.1	2,160.3	2.30*
1984-85	22,240.5	1,928.7	21,285.6	2,565.3	1.49
1985-86	24,469.0	2,679.6	22,953.0	2,942.7	1.90
Correlated sample t -test comparing 1980-81 to 1985-86	13.90***		16.87***		

* $p < .05$

** $p < .01$

*** $p < .001$

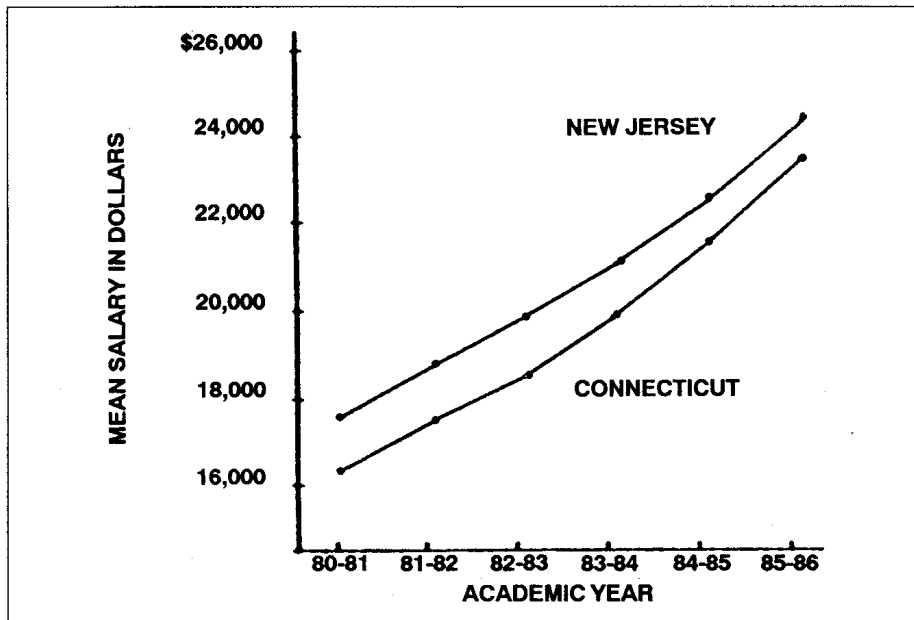


Figure 2. M.A. step 10 salaries in New Jersey and Connecticut, 1980-81 to 1985-86.

Table 6. The Mean (\bar{x}), Standard Deviation (*SD*), and Test Statistic (*t*) of M.A. +30 Maximum Step in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				<i>t</i>
	New Jersey (<i>N</i> = 25)		Connecticut (<i>N</i> = 25)		
	\bar{x}	<i>SD</i>	\bar{x}	<i>SD</i>	
1980-81	\$24,442.5	2,740.0	\$20,965.0	1,524.4	5.55***
1981-82	26,346.1	2,991.3	22,418.6	1,709.1	5.70***
1982-83	28,403.1	3,420.2	24,474.9	1,686.6	5.15***
1983-84	30,367.7	3,819.7	26,236.0	1,926.4	4.83***
1984-85	32,576.7	3,823.5	28,150.8	2,110.2	5.07***
1985-86	35,343.4	3,199.0	30,493.5	2,185.8	6.26***
Correlated sample t-test comparing 1980-81 to 1985-86	33.27***		30.06***		

*** $p < .001$

New Jersey mean salaries were significantly higher every year of the six-year period at both the B.A. Step 5 and the M.A. +30 maximum step. New Jersey mean salaries were also higher at the M.A. Step 10 level over the period under study, but were significantly higher on that level during the four-year period 1980-81 to 1983-84.

At both the B.A. step 5 and M.A. Step 10 levels, the pattern of year to year mean salary increases was similar for both states. There was a significant difference between the states on the pattern of year to year mean salary increases at the M.A. +30 level, however. At this salary level, a widening of the gap between the states appeared during the last year of the study. The data suggest that New Jersey salaries were significantly higher during the last year under study. In both Connecticut and New Jersey, mean salary increases over the six-year period were significant.

Fringe Benefits

The fringe benefit provisions incorporated into the analysis included longevity (Table 7), accumulated sick day reimbursement (Table 8), tuition reimbursement (Table 9), class coverage payment (Table 10), travel reimbursement (Table 11), personal business days without stated reason (Table 12), and family illness days (Table 13). The data indicate that on the four variables – longevity, tuition reimbursement, personal business days without stated reason, and

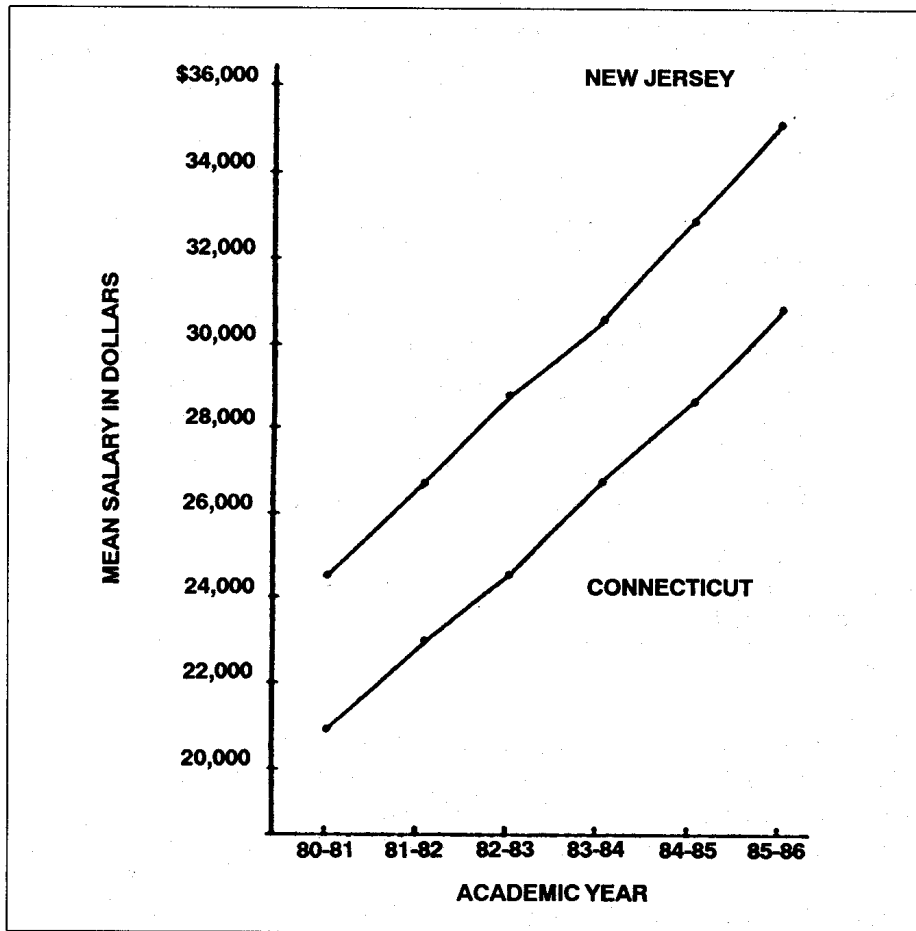


Figure 3. M.A. +30 maximum salaries in New Jersey and Connecticut, 1980-81 to 1985-86.

family illness days, there were no significant differences between the two samples in any year and further, there were no significant increases over time. Significant differences, either between the states or over time, were indicated on the three remaining variables, i.e., sick day reimbursement, class coverage, and travel allowance.

The increase over time in New Jersey with respect to the changes that took place on the sick day reimbursement variable was significant. New Jersey districts negotiating sick day reimbursement provisions into their contracts increased from eight (32.0%) to twenty (80.0%) over the years 1980-86. This change of twelve districts was significant ($p < .001$) and indicated a likelihood for New Jersey teacher contracts to contain a sick day reimbursement provision at the end of the period under study.

Table 7. Number of Districts Having Contract Longevity Provisions in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	16	64.0	14	56.0	0.08
1981-82	17	68.0	14	56.0	0.40
1982-83	17	68.0	17	68.0	0.00
1983-84	18	72.0	17	68.0	0.00
1984-85	18	72.0	17	68.0	0.00
1985-86	18	72.0	17	68.0	0.00
Increase in number of districts with such provisions, 1980-81 to 1985-86	2		3		

Note: No significant differences between states; no significant increase over six years in either state.

Table 8. Number of Districts Having Contract Sick Day Reimbursement Provisions in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	8	32.0	12	48.0	0.75
1981-82	10	40.0	12	48.0	0.08
1982-83	16	64.0	12	48.0	0.73
1983-84	18	72.0	14	56.0	0.78
1984-85	19	76.0	15	60.0	0.83
1985-86	20	80.0	15	60.0	1.52
Increase in number of districts with such provisions, 1980-81 to 1985-86	12***		3		

*** $p < .001$

Table 9. Number of Districts Having Contract Provisions for Tuition Reimbursement in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	12	48.0	9	56.0	0.32
1981-82	13	52.0	9	36.0	0.73
1982-83	14	56.0	9	36.0	1.29
1983-84	14	56.0	10	40.0	0.72
1984-85	14	56.0	11	44.0	0.32
1985-86	16	64.0	11	44.0	1.29
Increase in number of districts with such provisions, 1980-81 to 1985-86	4		2		

Note: No significant differences between states; no significant increase over six years in either state.

Table 10. Number of Districts Having Contract Provisions for Class Coverage in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	9	36.0	2	8.0	4.20*
1981-82	10	40.0	4	16.0	2.48
1982-83	10	40.0	4	16.0	2.48
1983-84	10	40.0	4	16.0	2.48
1984-85	11	44.0	4	16.0	3.42
1985-86	13	52.0	4	16.0	5.70*
Increase in number of districts with such provisions, 1980-81 to 1985-86	4		2		

* $p < .05$

Table 11. The Mean (\bar{x}), Standard Deviation (SD), and Test Statistic (t) of Travel Reimbursement Allowance in New Jersey and Connecticut Contracts, 1980-81 to 1985-86 (cents per mile)

Year	State				t
	New Jersey ($N = 25$)		Connecticut ($N = 25$)		
	\bar{x}	SD	\bar{x}	SD	
1980-81	11.4	8.9	8.2	9.6	1.21
1981-82	12.1	9.3	9.2	9.8	1.08
1982-83	13.3	9.5	9.2	9.9	1.50
1983-84	13.8	9.9	9.7	10.5	1.41
1984-85	14.1	10.2	9.8	10.6	1.48
1985-86	14.6	10.6	9.8	10.6	1.61
Correlated sample t -test comparing 1980-81 to 1985-86	2.82**		1.49		

** $p < .01$

Table 12. The Mean (\bar{x}), Standard Deviation (SD), and Test Statistic (t) of Personal Business Days Allowed in Contracts in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				t
	New Jersey ($N = 25$)		Connecticut ($N = 25$)		
	\bar{x}	SD	\bar{x}	SD	
1980-81	2.6	1.2	2.5	1.4	0.32
1981-82	2.6	1.2	2.5	1.4	0.32
1982-83	2.6	1.2	2.5	1.4	0.32
1983-84	2.6	1.2	2.5	1.4	0.21
1984-85	2.6	1.2	2.5	1.4	0.21
1985-86	2.8	1.1	2.5	1.4	0.65
Correlated sample t -test comparing, 1980-81 to 1985-86	0.72		0.00		

Note: No significant difference between states; no significant increase over six years in either state.

Table 13. The Mean (\bar{x}), Standard Deviation (SD), and Test Statistic (t) of Family Illness Days Allowed in Contracts in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				t
	New Jersey ($N = 25$)		Connecticut ($N = 25$)		
	\bar{x}	SD	\bar{x}	SD	
1980-81	1.1	1.9	1.3	2.1	0.28
1981-82	1.1	1.9	1.3	2.1	0.28
1982-83	1.1	1.9	1.4	2.4	0.46
1983-84	1.2	2.0	1.4	2.4	0.26
1984-85	1.2	2.0	1.4	2.4	0.26
1985-86	1.2	2.0	1.4	2.4	0.26
Correlated sample t-test comparing 1980-81 to 1985-86	1.00		1.00		

Note: No significant difference between states; no significant increase over six years in either state.

New Jersey had a significantly greater number of districts with negotiated class coverage provisions in their contracts during the first year of the study, 1980-81. Over the six-year period, New Jersey increased from nine (36.0%) to thirteen (52.0%) and Connecticut districts from two (8.0%) to four (16.0%). For the last year under study, 1985-86, these differences between the states on the class coverage provision were again significant. Increases over time in both New Jersey and Connecticut were not significant on this variable.

The increase over time in New Jersey for travel reimbursement was significant. The mean travel allowance in cents increased in New Jersey from 11.4 cents per mile in 1980-81 to 14.6 cents per mile in 1985-86. In Connecticut, the increase was from 8.2 cents per mile to 9.8 cents per mile over the same six-year period. The mean difference each year between Connecticut and New Jersey for travel allowance was not significant.

Language Provisions

The language provisions analyzed in this study included teacher preparation time (Table 14), credit for outside experience (Table 15), sabbatical leave (Table 16), final and binding grievance arbitration (Table 17), and agency fee (Table 18). Over the period under study significant increases occurred in Connecticut in the number of districts having provisions for preparation time, grievance arbitration,

Table 14. Number of Districts with Contract Provisions for Preparation Time in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	20	80.0	17	68.0	0.42
1981-82	20	80.0	20	80.0	0.00
1982-83	20	80.0	20	80.0	0.00
1983-84	20	80.0	22	88.0	0.15
1984-85	20	80.0	22	88.0	0.15
1985-86	20	80.0	22	88.0	0.15
Increase in number of districts with such provisions, 1980-81 to 1985-86	0		5*		

* $p < .05$

Table 15. Number of Districts with Contract Provisions for Credit for Outside Experience in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	14	56.0	17	68.0	0.34
1981-82	14	56.0	17	68.0	0.34
1982-83	15	60.0	18	72.0	0.36
1983-84	15	60.0	18	72.0	0.36
1984-85	15	60.0	19	76.0	0.83
1985-86	15	60.0	19	76.0	0.83
Increase in number of districts with such provisions, 1980-81 to 1985-86	1		2		

Note: No significant differences between states; no significant increase over six years in either state.

Table 16. Number of Districts Having Contract Provisions for Sabbatical Leave in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	21	84.0	24	96.0	0.88
1981-82	21	84.0	24	96.0	0.88
1982-83	21	84.0	24	96.0	0.88
1983-84	22	88.0	25	100.0	1.41
1984-85	22	88.0	25	100.0	1.41
1985-86	22	88.0	25	100.0	1.41
Increase in number of districts with such provisions, 1980-81 to 1985-86	1		1		

Note: No significant differences between states; no significant increase over six years in either state.

Table 17. Number of Districts Having Contract Provisions for Grievance Arbitration in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	18	72.0	17	68.0	0.00
1981-82	19	76.0	19	76.0	0.00
1982-83	19	76.0	21	84.0	0.12
1983-84	19	76.0	23	92.0	1.34
1984-85	19	76.0	24	96.0	2.66
1985-86	19	76.0	25	100.0	4.73*
Increase in number of districts with such provisions, 1980-81 to 1985-86	1		8**		

* $p < .05$

** $p < .01$

Table 18. Number of Districts with Contract Provisions for Agency Fee in New Jersey and Connecticut, 1980-81 to 1985-86

Year	State				χ^2
	New Jersey (N = 25)		Connecticut (N = 25)		
	N	%	N	%	
1980-81	5	20.0	5	20.0	0.00
1981-82	11	44.0	7	28.0	0.78
1982-83	12	48.0	11	44.0	0.00
1983-84	14	56.0	14	56.0	0.00
1984-85	15	60.0	15	60.0	0.00
1985-86	15	60.0	17	68.0	0.09
Increase in number of districts with such provisions, 1980-81 to 1985-86	10***		12***		

*** $p < .001$

and agency fee. Over the same period, a significant increase occurred in New Jersey only on the agency fee provision.

DISCUSSION

Delaney [25], Olson [13] and Connolly [17] found greater gains in both wage and nonwage contract provisions for public sector employees bargaining in arbitration states. This theory that employees bargaining in a compulsory interest arbitration environment attain greater power, which, in turn, produces greater gains at the bargaining table, is not borne out by the results of this investigation. Rather, the present findings would indicate that teachers who rely on compulsory interest arbitration for the resolution of collective bargaining impasses tend to fare no better than do teachers who rely on fact-finding as a means of settling collective bargaining disputes.

Salary data for this analysis indicate that teachers in New Jersey are paid higher wages at each of the three salary levels under study. Additionally, teachers in New Jersey realized significantly greater gains in benefits that allocated monetary reimbursement: class coverage payment, sick day reimbursement, and travel allowance. Teachers in Connecticut surpassed New Jersey teachers on only two language provisions, i.e., teacher preparation periods and final and binding grievance arbitration. On the other hand, New Jersey and Connecticut contracts under study had a equally significant increased in agency fee provisions.

While Connecticut teachers are able to rely on statutory means to bring about settlement pressure, it is apparent that this pressure is not sufficient to produce bargaining gains greater than those realized by teachers in New Jersey. Compulsory interest arbitration can change the balance of power, but cannot create power. The arbitration process, used in an educational setting, tends to be a conservative one.

It might be said that one reason for compulsory interest arbitration's conservative bent rests with the arbitrators themselves. There is good reason to suppose that interest arbitrators, who traditionally handle emergency service as well as educational disputes, are steeped in a tradition of placing the public's monetary interest before that of the employees. Far too little is known of the reasoning that arbitrators apply to monetary questions in Connecticut, however, to draw definite conclusions on this assumption. Given the significant increase in the number of Connecticut sample districts incorporating final and binding grievance arbitration provisions into their contracts, it seems reasonable to infer that at least those language issues of concern to arbitrators eventually find their way into Connecticut teacher contracts.

It may be the case that teachers in Connecticut demand less than teachers in New Jersey and that the level of demand in local bargaining is based on the strength of the statewide teacher organization. Comparing representation percentages of sample districts in this study, one may conclude that New Jersey teachers have a more unified statewide organization. Greater unification and larger membership can assist in union power statewide. Such strength may lend support to higher teacher demands on the local level, enabling teachers in New Jersey to make greater contract gains than do their counterparts in Connecticut. Before this assumption can be accepted as fact, however, it is important to know how each statewide teacher organization is perceived by boards of education, local governing bodies, and legislatures as well as the taxpayers in each state.

Consideration must be given to the impact of the unique time requirements included in each of the states' public sector labor laws. The New Jersey law, unlike the Connecticut statute, does not mandate a collective bargaining cut-off date for teacher bargaining. It is possible that this design works to the advantage of New Jersey teachers. The absence of legal time requirements for collective bargaining closure may give local New Jersey teacher groups a greater period of time in which to apply political pressure. This additional time may enable New Jersey teachers to gather greater support for their associations' collective bargaining demands through the use of job action or community appeal, or both. Further research that incorporates microlevel studies of impasse experience at the actual level of the bargaining relationship would shed light on this assumption.

The argument could be made that, given today's economy, fact-finding and compulsory interest arbitration can produce only similar effects upon collective bargaining outcomes in the public sector. In this computer age, the going wage for any occupational group quickly becomes public knowledge. Deviations from these averages are unlikely to be demanded or won. Moreover, with public sector

unions now representing a larger percentage of the labor movement than ever before [26], their increased importance could lead to increased demands for more governmental intervention into issues that in the past have been discussed solely at the bargaining table.

This article marginally advances understanding of bargaining outcomes for teachers in fact-finding and interest arbitration states. Since this is a singular study, it is obvious that more research is needed. However, the results of this study should have implications for those teacher unions and state legislatures searching for an alternative to strikes in public sector teacher bargaining. Analysis of the law, rather than empirical evidence submitted here, would indicate that compulsory interest arbitration helps to bring about finality in teacher-board of education contract disputes. This fact works to answer the public's need for labor peace. Nonetheless, the accompanying loss of power that results may give teacher unions reasons to pause and, in so doing, reevaluate their positions with respect to this form of dispute resolution

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* * *

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