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ABSTRACT

This research bulletin details a number of topics centered around the general area of education. A short discussion of reported research findings is given for the following topics: teacher attitudes toward teaching, free time for teachers, teacher lunch periods, the evaluation of school personnel, special subject teachers in elementary education, teaching in community and junior colleges, the world problem of illiteracy, teacher absence on religious holidays, and teacher aides as help for classroom teachers. Tables of data are included with each discussion. (JB)

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WOULD YOU TEACH AGAIN?

WHAT CHARACTERISTICS distinguish those teachers who, given the chance to start over, would again enter the teaching profession from those who would not?

Every five years the NEA Research Division conducts a national survey of teachers to determine various status characteristics. The data from the 1971 survey were further analyzed by whether one would teach again as the dependent variable and a group of 47 independent variables. The technique used for analysis was the Automatic Interaction Detector (AID) which produced clusters of individuals with similar feelings about whether they would teach again if they were re-making the choice. This technique is particularly useful because the most significant or most powerful variables appear first in the analysis. With 47 it is obvious that many are likely to be of little or no importance as indicators. The AID procedure is a branching technique in which a group is subdivided into two smaller groups; then even further subdivision can occur if the established criterion is met. In this description the total analysis will not be shown, rather some of the more interesting and significant results will be presented.

The independent variables, among others, included size of system, region, community, professional preparation, experience, teaching assign-

ment, plus many personal items such as age, sex, family, and beliefs.

Among the interesting factors which appear to affect whether a teacher is likely to view teaching as a desirable occupation is degree of altruism. As would be expected, it is an important factor—those being more altruistic are more likely to consider a teaching career favorably. Also, it would be expected that level of education should affect desire to reconsider teaching as a career. However, master's degree holders were less likely to consider teaching favorably than were those with lower or higher levels of educational attainment. The reason master's degree holders are slightly less likely to look upon teaching favorably would be a question for speculation.

Another interesting clustering involved summer employment. Those with summer employment in the school systems were more enthusiastic about teaching than were teachers employed outside the school system. A further AID split occurred within the group employed outside the school during the summer—those living within the school system boundaries looked more favorably on teaching than those living outside the district.

Elementary and middle-grade teachers looked more favorably on teaching than did secondary teachers. Also, those whose original rea-

son for entering teaching included no economic reasons were more likely to consider teaching favorably than were those with some economic motivation for teaching.

Finally those teaching upper middle-class pupils or pupils of mixed socioeconomic groups were more favorably disposed to teaching than those teaching lower socioeconomic pupils.

It appears from this brief report of an analysis of characteristics af-

fecting teachers' interest in considering teaching as a profession, that some definite factors seem to affect the teachers' view of the occupation. Some of these characteristics are not usually considered when predetermined variables are used. Also, the data suggest that further analyses of this type may hold some promise for predictability of potential teacher satisfaction in pre-employment preservice days.

FREE TIME FOR TEACHERS?

DO SCHOOL SYSTEMS allow teachers an unassigned period of at least 15 minutes each school day, other than lunch, when they are not required to be with their classes? Do they schedule a duty-free lunch period every day for teachers, and if so, how long is that period and who supervises the pupils during lunch?

The NEA Research Division found answers to these questions in 1971 by surveying a nationwide sample of public school systems enrolling 300 or more pupils.

Unassigned Periods Other Than Lunch

Table I shows the percentages of large, medium, and small size school systems that provide an unassigned period of at least 15 minutes each day when elementary and secondary teachers are not required to be with their classes. About 7 systems in 10 (70.4 percent) indicated that their elementary teachers have an unassigned period each day, but more than 9 systems in 10 (92.0 percent at junior high and

1-SCHOOL SYSTEMS PROVIDING UNASSIGNED PERIODS OF AT LEAST 15 MINUTES, OTHER THAN LUNCH, FOR TEACHERS

School level	Percent of systems by enrollment groupings							
	Total systems		Large systems (25,000 or more)		Medium systems (3,000- 24,999)		Small systems (300- 2,999)	
	1966	1971	1966	1971	1966	1971	1966	1971
Elementary	36.1	70.4	13.3	49.0	26.5	55.3	39.2	76.3
Junior high	68.1	92.0	78.7	89.0	71.8	94.6	66.8	91.0
Senior high	74.7	94.9	90.0	91.5	78.6	95.6	73.3	94.7

2-LUNCH PERIOD PROVISIONS FOR TEACHERS, 1970-71

System provision	Percent of systems by enrollment groupings							
	Total system		Large systems (25,000 or more)		Medium systems (3,000- 24,999)		Small systems (300- 2,999)	
	Elemen- tary	Secun- dary	Elemen- tary	Secun- dary	Elemen- tary	Secun- dary	Elemen- tary	Secun- dary
Duty-free lunch period every day ...	57.4	71.5	69.0	82.8	67.7	78.0	44.1	68.7
Lunch period duty on a rotating basis	29.1	23.0	15.5	14.1	17.5	16.2	27.6	25.9
Supervise pupils during lunch period every day ...	13.5	5.5	15.5	3.1	14.8	5.8	28.3	5.5

94.9 percent at senior high) reported scheduling an unassigned period each day for their secondary teachers.

Although there was little difference among the enrollment groupings of the school systems (large, medium, and small) in the percentages of systems that provide unassigned periods for secondary teachers, a larger percentage of the small systems (300 to 2,999 enrollment) reported such provisions for their elementary teachers.

Because the same question concerning unassigned periods was included in a similar survey in 1966, it is possible to state that a larger proportion of the total systems reporting provided unassigned time for both their elementary and secondary teachers in 1971 than in 1966. (See Table 1.)

Duty-Free Lunch Periods

Table 2 provides a comparison of duty-free lunch period provisions for teachers as reported by large, medium, and small size school systems. Of all the reporting systems, more than 7 in 10 (71.5 percent) provide duty-free lunch periods for

secondary teachers, whereas, fewer than 6 in 10 (57.4 percent) provide the same freedom for elementary teachers. Concomitantly, a greater percentage of the systems expected elementary teachers (13.5 percent) than expected secondary teachers (5.5 percent) to supervise pupils during lunch every day.

More of the small systems than of the medium and large size systems expect elementary teachers to supervise pupils during lunch (28.3 percent compared with 14.8 percent and 15.5 percent). Consequently, fewer of the small systems provide duty-free lunch time for elementary teachers (44.1 percent compared with 67.7 percent and 69.0 percent).

Length of Lunch Periods

For those systems that provide duty-free lunch periods for teachers every day, the median length of time was 30 minutes for both elementary and secondary teachers. No system reported a lunch period of less than 15 minutes.

In comparing lengths of lunch periods for elementary and sec-

dary teachers, note that a greater percentage of the systems reported 46 or more minutes for lunch for elementary teachers (19.7 percent as compared with 12.2 percent), and a greater percentage indicated 31 to 45 minutes for secondary teachers (27.5 percent as compared with 19.9 percent).

	Percent of systems reporting	
	Elementary	Secondary
15 minutes or less . . .	0.2	0.8
16-30 minutes	60.2	59.5
31-45 minutes	19.9	27.5
46 minutes or more . . .	19.7	12.2

	Number of minutes	
	Elementary	Secondary
Mean	37	35
Median	30	30
Low	15	15
High	83	90

Supervision of Pupils During Lunch

When duty-free lunch time is provided for all teachers in the system, noon duty aides or teacher aides were most frequently reported as supervisors of pupils dur-

ing lunch. This service was made available about twice as often for the elementary teachers (78.1 percent) as for secondary teachers (38.1 percent). However, secondary schools make more use of clerical and other school personnel than do the elementary schools.

Supervision by:	Percent of systems reporting	
	Elementary	Secondary
Noon duty aides or teacher aides	78.1	38.1
Clerical or other school personnel	11.3	20.4
Pupil monitors . . .	3.6	5.4
None, pupils go home	4.2	2.3
Other	15.5	43.0

Provisions, other than the first four listed in the table above, were commonly reported for the elementary schools (15.5 percent) and for the secondary schools (43.0 percent). The predominant provision listed under "other" for secondary schools was the use of teachers to supervise pupils during one of several lunch periods either before or after the teachers had their lunch.

TEACHER LUNCH PERIODS: AN ITEM OF NEGOTIATION

THE NEA Research Division analyzed 1970-71 negotiation agreements from 170 school systems with 12,000 or more pupils enrolled and found that 74.7 percent (127) contained negotiated provisions applying to lunch periods for elementary-school teachers and 71.8 percent (122) contained provi-

sions relating to lunch periods for secondary-school teachers.

Lunch Periods for Elementary Teachers

Of the 127 agreements containing provisions on lunch periods for elementary-school teachers, the largest percentage, 38.6, specified a

lunch period of 30 minutes; a much smaller percentage, 15.7, a lunch period of 60 minutes or more:

	Percent of provisions
Less than 30 minutes	3.1
30 minutes	38.6
31-44 minutes	3.1
45 minutes	8.7
46-59 minutes	6.3
60 minutes or more	15.7
Same as pupils' lunch period	6.3
Duration of period not specified ...	18.1

Nearly three-fourths of the provisions specified that the teacher's lunch period was to be duty-free, and about one-fourth that it was to be duty-free but with modifications or limitations. For example, teachers will be required to supervise pupils during the lunch period in case of emergency.

	Percent of provisions
Duty-free lunch period	73.2
Duty-free lunch period except in case of emergency	13.4
Teachers may choose paid lunch duty	4.7
Supervision of pupils during lunch period rotates among teachers	3.1
Teachers supervise pupils during part of lunch period	2.4
Lunch duty may be substituted for other duty outside the classroom	0.8
Not specified	2.4

Few agreements stated how the school system was to provide a supervised lunch period for pupils while giving the teachers a duty-free lunch period. Only nine of the 127 agreements specified the employment of teacher aides for this purpose; the remainder were silent on this point.

Lunch Periods for Secondary Teachers

Of the 122 agreements containing provisions for secondary-school teachers, the largest group, 4 in 10, specified a 30-minute period; and 2 in 10, a lunch period equal to the students' lunch period:

	Percent of provisions
Less than 30 minutes	4.9
30 minutes	40.2
31-44 minutes	6.6
45 minutes	4.9
46-59 minutes	1.6
60 minutes or more	2.5
Same as students' lunch period	11.5
Same as length of teaching period .	6.6
Duration of period not specified ...	21.3

About 8 provisions in 10 specified that the teacher's lunch period was to be duty-free. Apart from the small percentage (2.5) that did not specify a duty-free lunch period, the remainder attached various modifications or limitations:

	Percent of provisions
Duty-free lunch period	81.1
Duty-free lunch period except in case of emergency	9.0
Teachers may choose paid lunch duty	4.2
Teachers supervise students during part of lunch period	1.6
Lunch duty may be substituted for other duty outside the classroom	1.6
Not specified	2.5

As in the case of elementary-school teachers, few agreements stated how the school systems were to provide for supervision of the students during their lunch period. Only seven of the 122 specified the employment of teacher aides, and the remainder were silent.

Examples of Provisions

Following are several examples of agreement provisions on teachers' lunch periods. They are not to be regarded as exemplary.

21-6. LUNCH PERIOD - HIGH SCHOOL: All teachers in the high schools shall have a duty free lunch period of at least forty-five (45) minutes, except in instances where temporary scheduling (e.g. assembly days) may lessen the time for both pupils and teachers.

21-7.1 LUNCH PERIOD - ELEMENTARY SCHOOL: All teachers in the elementary schools shall have a duty free lunch period of at least sixty (60) minutes, except for court duty which shall not exceed ten (10) minutes at the end of the lunch hour and shall be scheduled on a rotating basis.—*Jersey City, New Jersey*

All teachers shall be given a duty free uninterrupted lunch period of at least thirty (30) minutes.—*Little Rock, Arkansas*

All teachers shall be entitled to a duty-free uninterrupted lunch period of at least sixty (60) minutes. Lay supervisors shall be provided to supervise the lunch hour. Teachers may elect noon supervision at the rate paid the lay person.—*Bay City, Michigan*

The lunch period of teachers of grades one through six shall be sixty minutes provided that during the lunch period teachers may be utilized for supervision during inclement weather or other uncontrollable circumstances and according to the routine duty schedule. In making the duty schedule, the principal should consult with the faculty. Teacher aides may be utilized for playground supervision. The duty free lunch period shall be no less than thirty (30) consecutive minutes.

Secondary teachers will receive a minimum of thirty (30) consecutive duty-free minutes for a lunch period.

Teachers shall be permitted to leave the building during their lunch period; and will advise the office of their absence during this period.—*Boulder Valley, Colorado*

NEW APPROACHES IN THE EVALUATION OF SCHOOL PERSONNEL

AMERICAN EDUCATION has always been accountable to the public, at least in theory, because in most school systems the board of education is elected and the public must approve an increase in taxes to provide additional operating funds for schools. Recently some groups of the public have been demanding greater accountability. There have been increased calls for more tangible evidence than the superintendent's annual report that the public is getting its money's worth. In this context the public

concern for evaluation of administrators and teachers has been prominent in recent months.

Within the teaching profession, there have been developments which affect the ways in which teachers and administrators are evaluated. Despite pressure to weaken tenure laws in a number of states, actions of courts and state legislatures have for the most part made it more difficult to dismiss or demote a teacher. The dismissal process requires detailed documentation of causes for dismissal as well

as systematic efforts to help the teacher achieve satisfactory performance.

Some other influences which have caused serious reconsideration of personnel evaluation procedures are the financial crisis in the schools, the oversupply of teachers for jobs available, the displacement of many black teachers and administrators in the South, the results of the first National Assessment of Education, increased public relations efforts by school systems, and the national attention focused on education as a result of federally funded education programs.

What Changes Are Needed?

All of these factors, and many more, have caused school systems to search for approaches to personnel evaluation which might remove objectionable aspects of traditional personnel evaluation systems, which have often been informal, irregular, and unproductive.

An examination of teacher evaluation systems by the NEA Research Division in 1963 and surveys of teacher and administrator evaluation procedures by the Educational Research Service in 1968 and again in 1971 reveals that the usual approach in teacher evaluation is for the principal to periodically (although not necessarily regularly) fill out a checklist-type form on which he indicates the degree to which a teacher possesses the characteristics and skills listed on the form. Sometimes, particularly in the case of tenure teachers, the evaluation is not preceded by classroom observations and is not followed by a conference between the

principal and teacher to discuss the evaluation and how the teacher might improve. The assumption seems to be that improved performance is an automatic result of the accumulation of age, experience, and professional growth credits. In such systems formal evaluations of administrators and supervisors are the exception rather than the rule.

Such perfunctory procedures have obvious weaknesses—they are one-sided and subjective; they have little value as documentation in dismissal hearings; they do not provide for any participation by the teacher; they provide no real help for the teacher needing improvement; and they assess the teacher rather than the teaching act.

What Has Been Tried?

Some of these weaknesses are mitigated in school systems which have a regular schedule of evaluation based on classroom observations and self-evaluation, and a post-evaluation conference between the evaluator and evaluatee. Difficult to administer, and therefore used less frequently, are classroom observation systems, such as those based on classroom interaction analysis. They are aimed at defining the teaching act more precisely. Peer evaluations have been introduced in a few systems in an attempt to lessen the one-sidedness of evaluations, but most teachers are reluctant to be placed in the position of evaluating their colleagues for the record.

What Are Some New Approaches?

The 1971 ERS surveys of administrator and teacher evaluation pro-

cedures document some new approaches which are being tried in the hope of finding answers to the objections to traditional evaluation systems. The new methods are for the most part only experiments and are limited to only a few school systems.

Using multiple evaluators—As a solution to the “one-sided” aspect of evaluations, the opinions of other individuals and groups within and outside the schools can be used as input for the evaluations of teachers and administrators. An individual can be assessed by a committee of superiors, peers, subordinates, students, and parents. Or evaluations can be solicited from any or all of these groups and these evaluations given consideration in arriving at a final evaluation of a teacher, administrator, or even a noncertificated employee.

Possible solutions to the subjectivity problem are also in the experimental stage. The simplest in concept, but not in practice, is consensus evaluations—the consensus of an evaluation committee, or a consensus between the evaluator and evaluatee on the rating the evaluatee will receive. In some systems a consensus between the evaluator and evaluatee is not attempted—each of their ratings appear on the same evaluation form.

Using performance objectives—Perhaps the most revolutionary change in evaluation procedures in school systems has been the introduction of assessment according to performance objectives mutually or individually decided upon by the evaluatee and his evaluator(s). In its most sophisticated form, this meth-

od of evaluation is also a management tool for assessing the progress of the entire school system; this is called “management-by-objectives.” Management-by-objectives involves the setting of long- and short-range goals on several levels—for the school system (determined by the superintendent, his assistants, and the board), for the school building (determined by the principal, assistant principals, and teacher representatives), for the department or grade level, and for the individual classroom. Goals on each level are directly related to the goals of the next highest level. They are stated in terms of achievable and measurable objectives, time limits are set, steps to be taken in achieving each objective are outlined, and measures for assessing the degree of achievement are established. The last element, of course, is the most difficult aspect of this system of evaluation, particularly when the objective is qualitative rather than quantitative. For example, it is easy to set measures for an objective such as, “I will reduce the number of days I am tardy.” It is much more difficult to define measures for an objective like, “I will make my classes more interesting to the pupil who consistently underachieves.” It is also more difficult to set quantitative and easily measured objectives for some positions than for others.

Many variations of the management-by-objectives approach are possible. Goals for each level may be unrelated to goals on other levels, or goals may be set on only one level—the individual goals of the person being evaluated. Also, the

steps toward goal achievement and the objective measures of achievement may not be precisely defined, so that evaluation is based on a subjective or consensus judgment regarding degree of goal attainment. The evaluation of goal attainment may be done by a single evaluator, by the evaluator and the evaluatee, or may include the opinions of one or more individuals or groups—peers, parents, students.

Using multiple bases for evaluation—Even though the management-by-objectives approach provides a very effective means of helping the deficient employee improve his performance, objections might be raised that this method of evaluation provides few data on the teaching act or little that can be used to document nonrenewal of contract, demotion, or dismissal. One answer to these objections is a procedure which combines evaluation according to a list of predetermined characteristics of the effective teacher (or administrator or janitor) and evaluation according to performance objectives. These two parts of an evaluation may not be performed at the same time, nor every year, nor by the same evaluator. For instance, an employee might be evaluated according to performance characteristics every year and performance objectives every other year. Or, the primary evaluator would be responsible for assessment of the evaluatee's goal achievement, and peers, students, and/or parents would supply the ratings on performance characteristics.

Using in-basket data—Another procedure which can produce credi-

ble evidence of a teacher's satisfactory or unsatisfactory performance is to establish an in-basket plan. A file is maintained for each individual to be evaluated. Into it supervisors place notations of incidents and facts, good and bad, which might affect the individual's evaluation. This file might contain, for instance, summaries of classroom observations, statements of supervisory help given, transcripts of courses taken, records of awards received, letters recording documented complaints by parents, notes on participation in committee work, and details of any other situation which the evaluator believes should be considered. This data-gathering technique should not be confused with what is called the "critical incidents" method of evaluation, in which the entire evaluation of an individual is based on rating each characteristic on an evaluation form by documenting with detailed information observed incidents which evidence good or poor qualities of the evaluatee.

Using student performance—Yet another approach which serves to document a teacher's performance, as well as to answer demands that teacher evaluation be based on the achievement of his students, is to couch one or more of the performance objectives in terms of student achievement, much the same as behavioral objectives are used to assess student performance or as a student contracts with his teacher to accomplish a given amount of work for such and such a grade. For instance, a mathematics teacher's goal might be that at the end of the third grading period, 80 percent of

his students will be achieving at grade level on a standardized mathematics test. The degree to which this teacher achieves his goal is based on the percentage of his students who are achieving at grade level at the end of the grading period. Although this procedure is really no different from setting any other type of objective, it is more controversial and only one school system in the 1971 ERS survey reported using this system—in an experimental program, on an optional basis.

Where Do We Go From Here?

Although none of these approaches singly, nor any or all of them in combination, may solve all of the weaknesses in personnel evaluations, they do offer many possibilities for improved methods of personnel evaluation in education, opportunities for broader involve-

ment in assessing schools and making the schools more accountable and avenues for further improvements in what will probably be a difficult and complicated process—objective evaluation of teachers and school administrators.

This article is based on data collected in surveys of the 1971-72 administrator and teacher evaluation procedures in school systems with 25,000 or more pupils. The surveys were conducted by the Educational Research Service, which is sponsored jointly by the NEA Research Division and the American Association of School Administrators. Summary data and specific examples of procedures and forms in school systems are reported in the following ERS publications:

Evaluating Administrative/Supervisory Performance. ERS Circular No. 6, 1971. 60 p. \$3. Stock No. 219-21504.

Evaluating Teaching Performance. ERS Circular No. 2, 1972. 60 p. \$3. Stock No. 219-21510.

SPECIAL-SUBJECT TEACHERS IN THE ELEMENTARY SCHOOL

FOR WHAT SUBJECTS are special-subject teachers provided in the elementary school? Do special-subject teachers regularly teach pupils, act as consultants, or both?

These questions were included in a survey sent by the NEA Research Division in May 1971 to a sample of public school systems enrolling 300 or more pupils. Table 1 shows the percents of large, medium, and small systems that provided special-subject teachers in the elementary school during the 1970-71 school year; nationwide estimates are also given.

During the 1970-71 school year more than half of those school systems enrolling 300 or more pupils provided special-subject teachers in the elementary school for at least one of the following subjects: art, music, physical education, and library usage. The subject most widely reported to have special teachers was music (83.9 percent); next was physical education (74.1 percent). For the total systems, the subject least frequently reported to have special-subject teachers was foreign languages (15.1 percent) although 35.4 percent of large systems

1--USE OF SPECIAL-SUBJECT TEACHERS IN THE ELEMENTARY SCHOOL, 1970-71

Subjects for special-subject teachers and type of teaching	Percent of school systems by enrollment groupings			
	Estimated total, systems enrolling 300 or more pupils	Large systems (25,000 or more)	Medium systems (3,000-24,999)	Small systems (300-2,999)
Art				
Regularly teach	48.3	38.3	56.5	45.7
Act as consultants	3.6	24.0	5.6	2.5
Regularly teach and act as consultants	3.9	15.0	5.9	2.9
Foreign language				
Regularly teach	12.4	18.0	16.7	10.7
Act as consultants	2.1	12.6	1.5	2.1
Regularly teach and act as consultants	0.6	4.8	0.7	0.4
Home economics				
Regularly teach	15.4	13.8	13.8	16.0
Act as consultants	1.6	6.0	...	2.1
Regularly teach and act as consultants	0.9	1.8	...	1.2
Industrial arts				
Regularly teach	16.7	13.2	15.2	17.3
Act as consultants	1.6	8.4	1.1	1.6
Regularly teach and act as consultants	0.6	2.4	...	0.8
Library				
Regularly teach	42.4	42.5	48.3	40.3
Act as consultants	6.2	11.4	9.3	4.9
Regularly teach and act as consultants	3.6	9.6	4.1	3.3
Mathematics				
Regularly teach	18.3	13.8	14.5	19.8
Act as consultants	3.4	25.7	7.1	1.6
Regularly teach and act as consultants	0.6	3.6	1.1	0.4
Music				
Regularly teach	78.7	57.5	77.0	79.8
Act as consultants	1.1	14.4	3.3	...
Regularly teach and act as consultants	4.1	19.2	8.9	2.1
Physical education				
Regularly teach	68.3	54.5	65.4	69.5
Act as consultants	2.7	13.8	3.7	2.1
Regularly teach and act as consultants	3.1	15.0	6.3	1.6
Science				
Regularly teach	17.8	15.0	16.0	18.5
Act as consultants	4.1	25.1	7.4	2.5
Regularly teach and act as consultants	0.8	3.6	0.7	0.8
Total systems	11,718	167	269	243

(25,000 or more enrollment) have special-subject teachers in this area.

Music was the subject most frequently reported to have special-subject teachers not only for all reporting systems as a group, but also in each enrollment grouping (large, medium, and small systems). Home economics was the subject for which special-subject teachers were least frequently provided in large systems (21.6 percent) and medium systems (13.8 percent); the least frequently reported subject for small systems was foreign languages (13.2 percent).

With few exceptions, notably science and mathematics in large systems, the pattern among the total systems and in all enrollment groupings is that special-subject teachers are provided to instruct pupils on a regular basis. More than 1 large system in 5 provides special-subject teachers to act as consultants in art, science, and mathematics; note, however, that in the case of art the predominate method is to

provide special-subject teachers to regularly teach pupils.

Pupils who attend school in a large system are more likely than their counterparts in a medium or small system to be taught by a special-subject teacher. For the nine subject areas shown in Table 1, the general pattern is that the proportion of school systems providing special-subject teachers decreases as school system enrollment decreases.

Because the same questions were included in a similar questionnaire sent in January 1966, it is possible to compare the data on the basis of nationwide estimates. Table 2 provides this comparison. Proportionately more of the total systems provided special-subject teachers for art, physical education, library usage, and industrial arts in 1971 than in 1966. Note that these changes are paralleled by an increase of school systems which provided special-subject teachers who regularly teach pupils in each of the aforementioned subjects.

2-SPECIAL-SUBJECT TEACHERS IN THE ELEMENTARY SCHOOL, NATIONWIDE ESTIMATES FOR SCHOOL SYSTEMS WITH 300 OR MORE PUPIL ENROLLMENT, 1966 AND 1971

Subject for which special-subject teachers are provided	Percent of systems by type of teaching by specialist						Total systems with special subject teachers	
	Regularly teach		Act as consultants		Regularly teach and also act as consultants		1966	1971
	1966	1971	1966	1971	1966	1971		
Art	40.2	48.3	6.6	3.6	3.9	3.9	50.7	55.8
Foreign language	15.0	12.4	1.4	2.1	0.4	0.6	16.8	15.1
Home economics	13.5	15.4	0.7	1.6	...	0.9	14.1	17.9
Industrial arts	11.4	16.7	0.9	1.6	...	0.6	12.3	18.9
Library	33.6	42.4	7.6	6.2	1.4	3.6	42.6	52.2
Mathematics	16.6	18.3	2.6	3.4	0.3	0.6	19.4	22.3
Music	74.0	78.7	4.9	1.1	5.4	4.1	84.3	83.9
Physical education	48.4	68.3	5.5	2.7	3.7	3.1	57.6	74.1
Science	18.0	17.8	1.9	4.1	0.6	0.8	20.5	22.7

FREE-FORM EDUCATION

"MINI-COURSES," an approach to free-form education, are being used by some schools as one solution to the demand for a "relevant" curriculum. They offer students a chance to select and plan short-duration explorations into areas which may complement but are outside the traditional curriculum. Other schools, not going outside the traditional curriculum, offer students a choice of units or topics within the regular required school courses. Some schools do both.

The NEA Research Division asked two questions about free-form education of a nationwide sample of public schools in its Survey of Programs and Practices of Public School Systems in 1970-71:

Do schools in your system offer "free-form" or "mini-courses" outside the regu-

lar curriculum and not for credit when pupils pursue topics of their own interest?

Do schools in your system offer elective units within regular required school courses where pupils are allowed to select from a variety of units or topics?

About 1 system in 4 that responded has schools that offer mini-courses. Nearly 1 in 5 offers mini-courses at the high-school level, about 1 in 10 at the middle or junior high-school level, and about 1 in 25 at the elementary.

More of the large (25,000 or more pupils) than medium (3,000-24,999 pupils) size systems and more medium than small (under 3,000 pupils) size systems have schools that offer mini-courses. However, the high schools are more likely to offer mini-courses than are the other school levels irrespective of the size of the system.

Mini-courses offered	Enrollment			
	All systems (Percent)	25,000 or more (Percent)	3,000-24,999 (Percent)	Under 3,000 (Percent)
In no schools	77.5	59.3	67.3	81.5
In high schools	18.4	33.5	26.4	15.2
In junior high schools	7.1	15.6	12.6	4.9
In middle schools	3.9	5.4	5.6	3.3
In elementary schools	4.1	10.8	5.9	3.3

A greater percentage of the systems that responded have schools that offer elective units within the regular school courses than offer mini-courses. About 2 out of 3

(compared with 1 out of 5) offer elective units at the high-school level and more than 1 out of 3 (compared to 1 out of 5) offers them at the middle or junior high-school

levels. There appears to be little or no difference at the elementary level.

As is the case with mini-courses, more large than medium size systems and more medium than small size systems have schools that offer

elective units within the regular courses with the high schools more likely to offer the elective units regardless of system size. The junior high schools appear to offer elective units more often than the middle or elementary schools.

Elective units offered within regular courses	Enrollment			
	All systems (Percent)	25,000 or more (Percent)	3,000-24,999 (Percent)	Under 3,000 (Percent)
In no schools.....	28.9	14.4	21.9	31.7
In high schools.....	66.9	83.8	73.6	64.2
In junior high schools.....	29.9	53.9	43.1	24.7
In middle schools.....	6.3	16.8	9.7	4.9
In elementary schools.....	4.1	15.6	3.3	4.1

Whether it is scheduling problems, averseness to curriculum change, or effectiveness of the procedure that has contributed to the

difference, it appears that more schools provide elective units in the regular courses than provide mini-courses.

TEACHING A TYPICAL COURSE IN COMMUNITY AND JUNIOR COLLEGES

A VIEW OF THE TEACHING objectives and characteristics of instruction in community-junior colleges was obtained through responses to a questionnaire the NEA Research Division sent to a sampling of faculty in these institutions in spring 1970. The following information was requested about the first class the faculty member meets each week during the spring term: academic level of the majority of the students enrolled, major objective in treatment of content, number of students enrolled in the section, and teaching procedure used most of the time.

The sample was large enough to provide accurate summaries for faculty grouped by the institutional characteristics of enrollment size, geographic region, and control; and by the faculty characteristics of major discipline groups, age, and teaching experience in higher education. The sample was not sufficiently large to provide accurate cross-reference information about these characteristics; for example, characteristics of faculty and teaching within each discipline grouping for institutions enrolling 8,000 or more students. The summary is offered as a beginning point for studies directed to

causes and outcomes of the probable differences in the characteristics of faculty and of teaching in the various disciplines.

Column 2 of Table 1 shows that a majority of teaching faculty in 2-year colleges taught a course section comprised largely of undergraduates rather than students in technical-occupational programs; their major objectives and treatment of content were either "practice, application, or content enrichment" or "introduction to area"; their predominant teaching procedure was lecture-discussion; and the mean size of their classes was 30 students. However, the majority pattern was not typical of faculty in various teaching fields.

Faculty teaching the humanities share with faculty in other academic disciplines a high proportion of undergraduate students. However, the major objective in treatment of content was "practice, application, or content enrichment" for more than 2 in 5 of faculty in this field compared with slightly above 1 in 4 in the two other major academic areas. Responses of faculty teaching in the other two major academic subdivisions (natural sciences and mathematics, and social studies) were different from faculty in the humanities with the largest numbers reporting "introduction to area" as a major objective in treatment of course content and third-largest numbers, involving almost one-fourth of faculty reporting an objective of "survey of area." The use of lecture alone or lecture-laboratory was reported more frequently by faculty in the natural sciences and mathematics than by

faculty in other academic disciplines. The mean class size in the social sciences was larger than in the other teaching discipline groupings.

Faculty teaching the academic-related vocational fields (agriculture, architecture, business and commerce, engineering, and home economics) were less likely than faculty in the academic disciplines to describe their students as predominantly undergraduates (about two-thirds versus about nine-tenths). The majority of faculty in the technological fields (business and commerce, data processing, health services, engineering, and mechanics) reported the academic level of their students to be other than the undergraduate academic area. The majority of faculty in both the academic-related vocational fields and the technological fields reported "practice, application, or content enrichment" as a major objective in treatment of course content, and compared with faculty in academic fields, fewer reported "survey of area" to be a major objective in treatment of course content. While the majority of faculty teaching the academic-vocational courses reported using "lecture-discussion" as the predominant teaching procedure, this was reported by less than half of the faculty who teach the technological classes, with about one-sixth each reporting the use of "lecture-laboratory" or "other or combinations of these teaching procedures." The mean and median class sizes of the course sections being taught in the academic-related vocational areas and in the technological areas were

1—CHARACTERISTICS OF FIRST CLASS THAT FACULTY IN COMMUNITY AND JUNIOR COLLEGES MET EACH WEEK, SPRING TERM 1970

Characteristic	Total teaching faculty		Faculty by principal teaching field										
	Number	Percent	Humanities	Natural sciences, mathematics	Social sciences	Academic-related		Technological					
						vocational	vocational						
Academic level of majority of students													
Undergraduate	1,131	79.6	94.1%	89.9%	90.9%	66.3%	28.7%						
Graduate	6	0.4	0.3	0.9	0.6	...	...				
Vocational-technical, adult	275	19.4	4.9	9.3	7.9	33.7	69.7						
Other	8	0.6	0.8	...	0.6	...	1.5						
Major treatment of content													
Introduction to area	426	30.1	28.4	36.9	36.5	27.7	13.3						
Practice, application, or content enrichment	567	40.0	43.5	25.7	28.6	52.4	64.8						
Study in depth	133	9.4	5.4	13.0	4.3	14.7	14.3						
Survey of area	216	15.2	13.8	22.4	24.3	3.1	2.6						
Other or combinations	75	5.3	8.9	2.1	6.4	2.1	5.1						
Predominant teaching procedure													
Lecture	158	11.1	6.2	22.4	9.4	6.4	8.7						
Lecture-discussion	894	63.0	63.0	63.6	66.9	72.9	46.4						
Discussion	68	4.8	12.2	0.9	3.6	1.1	3.1						
Supervised independent study	53	3.7	3.2	1.8	3.0	6.4	6.6						
Lecture-laboratory	74	5.2	2.2	6.9	1.5	4.3	15.3						
Other or combinations	71	12.1	13.2	4.5	15.5	9.0	19.9						
Number of students enrolled													
1-14 students	175	13.1	9.8	16.0	6.5	15.5	22.9						
15-19 students	169	12.6	12.1	12.7	5.8	19.9	17.9						
20-24 students	232	17.3	20.8	19.8	10.0	17.7	18.4						
25-29 students	192	14.3	23.7	11.1	12.6	9.9	9.5						
30-34 students	220	16.4	16.2	14.8	23.2	16.6	7.8						
35-39 students	104	7.8	5.8	5.9	13.5	7.7	5.0						
40 or more students	248	18.5	11.6	19.8	28.4	12.7	18.4						
Median	25	NA	25	25	31	23	20						
Mean	30	NA	27	29	37	26	26						
Standard error	0.6	NA	0.9	1.1	1.7	1.3	1.4						
Total responding	1,420	100.0	371	335	329	190	195						

smaller than in the social studies area.

Institution Control and Size

Reflecting the relatively greater emphasis given to vocational and technical offerings in public institutions, the characteristics reported by faculty grouped by institution control (Table 2) were in the direction of the previously cited differences between conditions in the academic disciplines and the vocational-technical disciplines. However, the mean sizes of classes in the two groups of institutions were not different.

Also, possibly as a result of the relatively greater emphasis given by large than by small institutions to vocational and technical offerings, the characteristics reported by faculty in institutions grouped by enrollment size were in the direction of differences already noted between the academic and vocational-technical disciplines. However, the mean size of class in the group of largest institutions was greater than in those which enroll fewer than 2,000 students.

Regional Differences

A higher proportion of faculty in the Northeast than in the Middle states and the West had the majority of their students classified as undergraduates.

Geographic region	Number responding	Academic level of the majority of students	
		Under-graduate (Percent)	Vocational-technical (Percent)
Northeast .	275	85.8	13.5
Southeast .	239	79.1	19.2
Middle	359	76.6	22.0
West	547	78.8	20.7

The course objective of "practice, application, or content enrichment" was reported by 34.9 percent of faculty in the Northeast. This was lower than the percentages reporting this objective in the Southeast (43.7 percent) and in the West (42.6 percent).

Distributions of faculty within regions by the teaching procedure used most of the time differed by greater than chance variation associated with sampling in scattered instances. For example: Use of lecture-discussion was less frequently reported in the West (59.3 percent) than in the Middle states (67.0 percent), with this method reported by 64.9 percent of the faculty in the Northeast and by 63.6 percent of faculty in the Southeast. Also, use of the lecture method alone was reported less frequently in the Middle states (7.6 percent) than in the Southeast (12.8 percent) and in the West (12.5 percent), with this method reported by 11.4 percent of faculty in the Northeast.

The mean class size in the West (31 students) was larger than the mean in the Southeast (27 students) and in the Middle states (28 students) but not larger than in the Northeast where the mean was 30 students.

Region	Number reporting	Enrollment of class		
		Mean	Standard error	Median
Northeast	256	30	1.4	25
Southeast	221	27	1.5	23
Middle . .	343	28	1.2	25
West	520	31	0.9	29

Age

Differences in the characteristics of the course taught by faculty

**2-CHARACTERISTICS OF FIRST CLASS THAT FACULTY IN COMMUNITY
AND JUNIOR COLLEGES MET EACH WEEK, SPRING TERM 1970**

Characteristic	Faculty by institu- tion control		Faculty by institution enrollment			
	Public	Non- public	8,000 or more	2,000 to 7,999	601 to 1,999	Below 500
Academic level of majority of students						
Undergraduate	77.2%	95.7%	77.6%	78.5%	79.1%	88.1%
Graduate	0.3	1.1	...	0.3	0.1	1.4
Vocational-technical adult	21.9	2.7	22.1	20.2	19.7	9.3
Other	0.6	0.5	0.3	1.0	..	0.7
Total number responding	1,233	187	299	604	373	146
Major treatment of content						
Introduction to area	31.1	23.1	28.3	31.0	30.9	27.8
Practice, application, or content enrichment	40.3	38.2	42.0	39.9	39.6	37.5
Study in depth	9.0	11.8	8.0	10.9	8.7	7.6
Survey of area	14.5	19.9	13.3	13.7	16.0	23.6
Other or combination	5.0	7.0	8.3	4.5	4.9	3.5
Total number responding	1,231	186	300	604	369	144
Predominant teaching procedure						
Lecture	11.1	11.6	10.6	10.5	11.9	13.1
Lecture-discussion	61.9	70.4	60.6	62.8	64.2	66.2
Discussion	5.0	3.2	6.0	4.8	3.8	4.8
Supervised independent study	3.8	3.2	3.0	3.7	4.3	4.1
Lecture-laboratory	5.9	1.1	7.0	5.6	4.3	2.1
Other or combinations	12.3	10.6	12.9	12.6	11.4	9.7
Total number responding	1,229	189	302	602	369	145
Number of students enrolled						
1-14 students	11.6	22.9	5.3	10.1	18.3	28.8
15-19 students	13.2	8.2	9.6	13.7	14.5	9.1
20-24 students	17.4	16.5	14.9	17.0	21.2	13.6
25-29 students	14.1	15.9	16.7	14.6	10.5	18.2
30-34 students	17.0	12.4	18.8	17.2	15.7	9.8
35-39 students	8.5	2.9	9.2	8.9	5.8	4.5
40 or more students	18.1	21.2	25.5	18.4	14.0	15.9
Total responding	1,170	170	282	582	344	132
Median	26	25	30	27	23	24
Mean	30	30	33	30	27	27
Standard error	0.6	2.2	1.2	0.9	1.0	2.4

grouped by age were scattered. For example, 84.0 percent of the faculty younger than 30 years of age had a majority of their students classified as undergraduates; this was larger than the 77.0 percent of

faculty aged 40-49 who reported this classification, but was not beyond variation associated with sampling from 81.0 percent among faculty age 30-39 and 78.4 percent among faculty aged 50 or more.

However, young faculty to a greater extent than older faculty reported a content objective of "introduction to area."

Age group	Percent reporting content objective	
	Introduction to area	Practice application, or content enrichment
Below 30 years	39.6	27.7
30-39 years	32.9	37.5
40-49 years	28.1	41.8
50 or more years ..	21.2	49.5

The percents of faculty reporting other content objectives and the mean sizes of classes reported by faculty in these age groupings did not differ beyond the range of normal variation associated with sampling.

Teaching Experience

Differences in the distributions of responses and mean class sizes of faculty grouped by years of teaching experience in higher education were within the range of normal variation associated with sampling procedures. The respondents were grouped by less than 5 years (563 respondents), 5 to 9 years (490 respondents), and 10 or more years (365 respondents) experience in higher education.

The information shows actual conditions, not necessarily the conditions faculty would like to have. The responses show that the characteristics of teaching and teachers are varied in 2-year institutions, and that characteristics of the subject matter may provide a useful base for studies of optimal teaching conditions in this type of institution.

THE WORLD PROBLEM OF ILLITERACY

CAN A WORLD of 3.632 billion people continue to indulge in the luxury of illiteracy? Within this mass population, there are 2,287,000,000 adults 15 years of age and above, of which 783,000,000 are totally illiterate, and unable to participate fully in the intensive movement to develop human resources. With an increase of 48,000,000 over the last decade, it is projected that the number of illiterates will increase to over 800,000,000 by 1980. Despite the progress made in functional literacy projects since the 1965 Teheran Conference on the Eradication of

Illiteracy, the magnitude and urgency of this problem is frightening.

The developing nations of Africa, Latin America, the Middle East, and Asia account for about 2.6 billion (72.2 percent) of the total world population and are growing by 2.3 to 2.9 percent a year. The estimates prepared by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Office of Statistics for International Literacy Day, September 8, 1970 (Table 1) covering the last two decades, reveal that the countries with high rates of illiteracy have a pro-

1-ADULT LITERACY (BOTH SEXES): AROUND 1960 AND 1970
(in thousands)

Major region	Around 1960				Around 1970			
	Adult population 15 years old and over	Literate adults	Illiterate adults	Illiteracy percentage	Adult population 15 years old and over	Literate adults	Illiterate adults	Illiteracy percentage
World total*	1,870,000	1,134,000	735,000	39.3	2,287,000	1,504,000	783,000	34.2
Africa.....	153,000	29,000	124,000	81.0	194,000	51,100	143,000	73.7
Northern America.....	137,000	133,000	3,300	2.4	161,000	158,000	2,500	1.5
Latin America.....	123,000	83,100	40,000	32.5	163,000	125,000	38,600	23.6
Asia*	982,000	440,000	542,000	55.2	1,237,000	658,000	579,000	46.8
Europe and U.S.S.R.	464,000	439,000	24,500	5.3	521,000	502,000	18,700	3.6
Oceania.....	10,600	9,400	1,200	11.5	13,000	11,800	1,400	10.3
(Arab States).....	(52,700)	(9,900)	(42,700)	(81.1)	(68,300)	(18,400)	(49,900)	(73.0)

SOURCE: International Bureau of Education. *Educational Trends in 1970: An International Survey*. Paris: UNESCO, 1970. p. 58.

*Not including China (mainland), Democratic People's Republic of Korea, and Democratic Republic of Viet-Nam.

density for increasing the absolute numbers of adult illiterates, while countries with relatively low illiteracy rates tend to lower both the rate and the absolute number of illiterates.

However, it is significant that in 10 years, the percentage of illiterates in Latin America has decreased by more than a quarter from 32.5 percent to 23.6 percent, and, against the world trend, the absolute number of illiterates has also decreased. World-wide in 1960, approximately 735 million (39.3 percent) of the people aged 15 and above were illiterate. By 1970, the estimated percentage had decreased to 34.2 percent, but the absolute figure had increased to 783 million people. Meanwhile, the estimated number of literate adults in the world increased from 1,134 million in 1960 to 1,504 million in 1970.

The proportion of female illiterates significantly exceeds that of males for both census years (Tables

2 and 3). The current male adult illiteracy rate is 28.0 percent, whereas the current female adult illiteracy rate is 40.3 percent. The trend still indicates that the male rate falls faster than the female rate, for in at least three major regions the rate of illiteracy in the female population continues to show a majority.

Literacy is measured at various ages and levels of training in different countries. National tabulations of population by literacy show a minimum age ranging from 0 to 15. To achieve maximum comparability, the United Nations Demographic Yearbook uses the common denominator of 15 years of age in accordance with UNESCO recommendations. In the United States, since 1952, illiterates have been defined as persons 14 years old and over who were reported as not able both to read and to write a simple message in any language and had completed less than 6 years of school

2-ADULT LITERACY BY SEX: AROUND 1960

(in thousands)

Major region	Adult population 15 yrs. old & over		Literate adults		Illiterate adults		Illiteracy percentage	
	Male	Female	Male	Female	Male	Female	Male	Female
World total*	916,000	953,000	609,000	525,000	307,000	428,000	33.5	44.9
Africa	75,900	77,000	20,200	8,800	55,800	68,200	73.4	88.5
North America	66,800	69,700	65,600	67,700	1,300	2,000	1.9	2.8
Latin America	61,300	61,800	44,000	39,200	17,400	22,600	28.4	36.6
Asia*	494,000	488,000	270,000	170,000	224,000	318,000	45.3	65.1
Europe & U.S.S.R.	213,000	251,000	205,000	234,000	7,700	16,800	3.6	6.7
Oceania	5,300	5,200	4,800	4,500	530	680	9.9	13.0
(Arab States)	(26,500)	(26,200)	(7,500)	(2,400)	(19,000)	(23,800)	(71.6)	(90.7)

SOURCE: International Bureau of Education. *Educational Trends in 1970: An International Survey*. Paris: UNESCO, 1970. p. 59-60.

*Not including China (mainland), Democratic People's Republic of Korea, and Democratic Republic of Viet-Nam.

3-ADULT LITERACY BY SEX: AROUND 1970

(in thousands)

Major region	Adult population yrs. old & over		Literate adults		Illiterate adults		Illiteracy percentage	
	Male	Female	Male	Female	Male	Female	Male	Female
World total*	1,127,000	1,160,000	812,000	692,000	315,000	468,000	28.0	40.3
Africa	96,000	97,900	35,100	16,000	60,900	82,000	63.4	83.7
North America	78,000	82,800	77,200	81,200	850	1,600	1.1	1.9
Latin America	81,000	82,200	64,900	59,700	16,100	22,500	19.9	27.3
Asia*	624,000	614,000	393,000	266,000	231,000	348,000	37.0	56.7
Europe & U.S.S.R.	243,000	278,000	327,000	265,000	5,800	12,900	2.4	4.7
Oceania	6,600	6,500	6,000	5,800	580	780	8.8	11.9
(Arab States)	(34,300)	(33,900)	(13,600)	(4,800)	(20,800)	(29,100)	(60.5)	(85.7)

SOURCE: International Bureau of Education. *Educational Trends in 1970: An International Survey*. Paris: UNESCO, 1970. p. 59-60.

*Not including China (mainland), Democratic People's Republic of Korea, and Democratic Republic of Viet-Nam.

The United States is the world's fourth most populous nation and is growing by 2 million persons a year. (Total population on January 1, 1971, was 206 million.) Although the rate of illiteracy in the United States continues to decline, the Current Population Survey conducted by the Bureau of the Census in November 1969, indicates that over one-half of the total yearly growth is still illiterate. According to the March 1971 population series report (Table 4), of the 143,137,000 persons 14 years and over, 1,433,000 are illiterate.

In contrast to the other countries, the illiteracy rate in the United States is traditionally higher for men than for women. However, in 1969, the difference was negligible: 1.1 percent of the men and 1.0 percent of the women were classified as illiterates. This may be attributed in part to the longevity of women, and that illiteracy is most prevalent in the older age groups:

3.5 percent for persons 65 years and over.

The Census surveys have consistently found a great disparity in rate of illiteracy between the black and the white population: 3.6 percent black and 0.7 percent white. The illiteracy rate was approximately the same for both white men and white women; however, about 4 percent of black men and 3 percent of black women are unable to read and write.

In 1969, illiterate white men and women were more likely not to have completed any years of school than were illiterate black men and women (Table 5). However, there was a greater number of women in this category in both ethnic groups.

Education and the development of human resources are of prime importance to the community of nations. Recognizing the principle that there is a relation of cause and effect between literacy and development, many countries are making

4-ILLITERACY OF PERSONS 14 YEARS OLD AND OVER IN THE UNITED STATES, BY AGE, RACE, AND SEX, NOVEMBER 1969
(Numbers in thousands. Civilian noninstitutional population)

Age and race	Both sexes						Male			Female		
	Total population		Illiterate		Total population		Illiterate		Total population		Illiterate	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
ALL RACES												
Total, 14 years and over	143,137	1.0	1,433	1.0	67,306	0.7	708	1.1	75,831	1.1	727	1.0
14 and 15 years	7,898	0.3	22	0.3	4,003	0.3	14	0.3	3,895	0.3	8	0.2
16 to 24 years	28,955	0.3	75	0.3	13,481	0.3	47	0.3	15,474	0.3	29	0.2
25 to 44 years	46,501	0.5	237	0.5	22,272	0.5	118	0.5	24,229	0.5	121	0.5
45 to 64 years	40,985	1.1	449	1.1	19,513	1.3	257	1.3	21,472	1.3	191	0.9
65 years and over	18,798	3.5	650	3.5	8,037	3.4	272	3.4	10,761	3.4	378	3.5
WHITE												
Total, 14 years and over	127,449	0.7	891	0.7	60,136	0.7	410	0.7	67,312	0.7	477	0.7
14 and 15 years	6,790	0.2	22	0.2	3,452	0.2	14	0.4	3,337	0.2	8	0.2
16 to 24 years	25,159	0.2	54	0.2	11,738	0.2	33	0.3	13,422	0.2	21	0.2
25 to 44 years	41,151	0.4	170	0.4	19,885	0.4	70	0.4	21,266	0.4	99	0.5
45 to 64 years	37,068	0.7	248	0.7	17,702	0.8	136	0.8	19,366	0.8	111	0.6
65 years and over	17,280	2.3	397	2.3	7,359	2.1	157	2.1	9,921	2.1	238	2.4
BLACK												
Total, 14 years and over	14,280	3.6	509	3.6	6,495	4.3	282	4.3	7,785	4.3	228	2.9
14 and 15 years	1,030	...	...	...	505	...	...	...	525	...	...	...
16 to 24 years	3,498	0.6	21	0.6	1,619	0.8	13	0.8	1,880	0.4	8	0.4
25 to 44 years	4,784	1.3	61	1.3	2,138	2.1	45	2.1	2,647	1.6	16	0.6
45 to 64 years	3,586	5.5	197	5.5	1,629	7.4	120	7.4	1,957	7.8	78	4.0
65 years and over	1,381	16.7	230	16.7	604	17.2	104	17.2	777	12.6	126	16.2

SOURCE: U.S. Department of Commerce, Bureau of the Census. *Illiteracy in the United States: November 1969*. Current Population Reports, Series P-20, No. 217. Washington, D.C.: Government Printing Office, March 10, 1971. p. 8.

**5-PERCENT DISTRIBUTION OF ILLITERATE PERSONS 14 YEARS
OLD AND OVER IN THE UNITED STATES,
BY YEARS OF SCHOOL COMPLETED, ETHNIC GROUP,
AND SEX, NOVEMBER 1969**

(Numbers in thousands. Civilian noninstitutional population)

Years of school completed and ethnic group	Male		Female	
	Number	Percent	Number	Percent
WHITE				
Total, illiterate	410	100.0	477	100.0
No school years	247	60.2	336	70.4
1 year	33	8.0	25	5.2
2 years	42	10.2	52	10.9
3 years	56	13.7	34	7.1
4 years	17	4.1	24	5.0
5 years	15	3.7	6	1.3
BLACK				
Total, illiterate	282	100.0	228	100.0
No school years	110	39.0	120	52.6
1 year	52	18.4	42	18.4
2 years	43	17.0	19	8.3
3 years	38	13.5	22	9.6
4 years	15	5.3	17	7.5
5 years	19	6.7	8	3.5

SOURCE: U.S. Department of Commerce, Bureau of the Census. *Illiteracy in the United States: November 1969*. Current Population Reports, Series P-20, No. 217. Washington, D.C.: Government Printing Office, March 10, 1971.

an over-all assessment of their systems of education and conducting intensive functional literacy projects through the UNESCO Experimental World Literacy Program.

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POLICY ON ABSENCE FOR RELIGIOUS HOLIDAYS

POLICY IN nearly 25 percent of school systems with enrollments over 12,000 allows teachers to take up to a specified number of days for religious observance without loss of pay or days off charged to any leave allowance. A little more than 45 percent of the school systems provide that teachers may take a specified number of days chargeable to personal leave, 21 percent allow teachers to take a specified number of days for religious observance and charge them to sick leave, and almost 5 percent

provide that a specified number of days may be taken from a separate religious leave allowance.

These data were taken from a survey of a nationwide sample of school systems conducted by the NEA Research Division in May 1971. Table 1 summarizes school system policy regarding religious leave for teachers by enrollment size of school system.

In nearly 7 percent of the school systems the teachers who are absent for religious observance may take a specified number of days at half-

1-CURRENT POLICY REGARDING LEAVES OF ABSENCE FOR RELIGIOUS HOLIDAYS FOR TEACHERS						
Policy	Total*		Enrollment			
	Number	Percent	100,000 or more	50,000-99,999	25,000-49,999	12,000-24,999
May take up to a specified number of days without loss of pay or leave charged	111	23.8%	12.0%	32.7%	21.1%	24.0%
May take specified number of days at half-pay (or charged the pay of a substitute)	30	6.4	8.0	11.5	5.6	5.7
May take specified number of days, chargeable to sick leave	98	21.0	28.0	25.0	15.6	21.3
May take specified number of days, chargeable to personal leave	211	45.2	48.0	28.8	46.7	47.3
May take specified number of days, from separate religious leave allowances	22	4.7	...	11.5	4.4	4.0
Not indicated	49	10.5	8.0	9.6	15.6	9.3

*467 school systems responded; however, some school systems have more than one policy which applies.

**2-CURRENT POLICY REGARDING LEAVES OF ABSENCE FOR
RELIGIOUS HOLIDAYS FOR PUPILS**

Policy	Total		Enrollment			
	Number	Percent	100,000 or more	50,000- 99,999	25,000- 49,999	12,000- 24,999
Excused absence, work may be made up without penalty	392	83.9%	84.0%	80.8%	87.8%	83.3%
Excused absence, work need not be made up	37	7.9	12.0	13.5	6.7	7.0
Work may be made up with penalty	5	1.1	...	...	...	1.7
No absence allowed	22	4.7	4.0	3.8	4.4	5.0
Not indicated	11	2.4	...	1.9	1.1	3.0
Total	467	100.0%	100.0%	100.0%	100.0%	100.0%

pay or are charged the pay of a substitute. Over 10 percent of the school systems reporting did not indicate a policy for teachers' absence for observance of religious holy days.

Table 2 gives a breakdown of the policy statements relating to pupils from the 467 school systems responding. Almost 84 percent of these school systems consider a pupil's absence for religious purposes to be excused with work to be

made up without penalty. Excused absence for pupils with no work to be made up is the policy in nearly 8 percent of these schools. No excused absence for religious observance is the policy in nearly 5 percent of the schools reporting, and in a little over 1 percent pupils must make up the work missed *with a penalty*. Of the schools reporting, about 2.5 percent did not indicate whether or not the school system had a policy on this topic.

HELPING TEACHERS WITH TEACHER AIDES

AN INNOVATION gaining acceptance in the schools of the 1960's was the employment of teacher aides. These teacher assistants relieve the classroom teacher of duties of a general or clerical nature so that the teacher has more "time to teach" or to prepare for the instructional program.

The number of school systems providing aides for their teaching staff has nearly doubled since the 1965-66 school year. A sample of public school systems was queried in the spring of 1966 and again in the spring of 1971 to identify the extent of employment of teacher aides and their duties. The ques-

tionnaire was sent to all school systems with enrollments of 12,000 or more and to a stratified sample of others with enrollments of 300 or more so that national estimates could be made. (Enrollment in school systems with 300 or more accounts for over 97 percent of all enrollment in the public schools.)

School Systems Employing Aides

Although three-fourths of the systems are estimated to use paid aides, nearly one-fourth have both paid aides and also aides who donate their services. In addition, 2 percent of the systems use only aides who donate their time.

	Percent	
	1966	1971
Paid aides only	33.1	55.1
Donated services only ...	3.1	2.0
Both paid aides and donated services	5.9	23.7
No aides used	57.9	19.2
Total	100.0	100.0

Aides are found in a greater percentage of the large and medium size school systems than in the small ones. In fact, all of the 25 largest (enrollments of 100,000 or more) school systems reporting employ teacher aides.

	Percent of enrollment group		
	25,000 or more	3,000-24,999	300-2,999
Paid aides only	34.9	52.2	56.6
Donated services only	0.6	0.7	2.5
Both paid aides and donated services .	61.4	35.8	18.6
No aides used	3.0	11.2	22.3
Total	99.9	99.9	100.0
Number of school systems reporting	166	268	242

May 1972

Though there are an estimated 235,875 teacher aides, 4 out of 5 school systems with aides reported fewer than 26 serving in the system while but 1 percent employed more than 200. The number of aides serving varied directly with the size of the system: the larger the enrollment, the more aides employed.

Number of aides in system	Percent of enrollment group			
	Total systems	25,000 or more	3,000-24,999	300-2,999
1-25	82.1	7.6	50.0	95.7
26-50	9.5	9.2	26.9	3.1
51-75	3.7	9.2	11.8	0.6
76-100	1.4	5.9	4.8	...
101-150	1.6	10.1	5.4	...
151-200	0.8	10.1	0.5	0.6
More than 200 ..	1.0	47.9	0.5	...
Total	100.1	100.0	99.9	100.0
Mean number/system	25	459	37	9
Median number/system	15	200	26	6

Teachers Having Aides

Also in the spring of 1971 a sample of the country's classroom teachers were asked if they currently had one or more teacher aides to assist them. Three teachers in 10 reported that they did. One teacher in 20 has an aide assigned to him alone while 1 in 4 shares an aide. See page 62, top left.

What Teacher Aides Do

The school systems using teacher aides were asked what jobs they were given. The largest response, 9 systems in 10, regardless of system size, was clerical assistance to teachers. Seven systems in 10 with aides listed playground supervision. See page 62, bottom left.

Teacher aide provisions	Percent of teachers by enrollment group			
	Total teachers*	25,000 or more	3,000-24,999	Under 3,000**
Teacher aide assigned to teacher alone	4.6	5.5	4.6	3.8
Teacher aide shared with another teacher	23.8	22.7	25.7	21.8
Teacher aides assigned to teacher alone and also an aide shared with another teacher.....	0.9	0.9	0.9	1.0
Do not have an aide.....	70.6	70.9	68.8	73.5
Total.....	99.9	100.0	100.0	100.1

* For details see *Status of the American Public-School Teacher, 1970-71*, Report in process.

** Includes teachers in systems with enrollments under 300.

Duties of aides	Percent of enrollment group, 1971			
	Total systems	25,000 or more	3,000-24,999	300-2,999
Clerical assistance to teachers....	89.6	95.1	88.5	89.8
Playground supervision....	68.7	72.2	65.1	70.1
Instructional assistance to teachers.....	62.1	84.0	66.0	59.9
Cafeteria supervision....	59.0	75.3	65.1	56.1
Tutoring.....	38.4	60.5	37.9	38.0
Bus loading supervision	28.0	47.5	28.5	27.3
Corridor monitoring....	21.4	45.7	27.7	18.2
Laboratory assistance.....	18.0	38.9	21.3	16.0
Theme reading....	7.6	27.8	10.6	5.9
Other.....	7.2	14.8	8.5	6.4

When *teachers having aides* were asked to list the kinds of duties assigned to the aides, the largest percentage also reported secretarial assistance.

Duties of aides	Percent of enrollment group			
	Total teachers	25,000 or more	3,000-24,999	Under 3,000*
Secretarial assistance ..	68.8	58.2	72.9	72.8
Help with grading papers (objective answers only)	39.6	38.5	35.7	48.5
Help with lunch duty .	39.1	41.8	39.6	35.0
Help with instruction of small groups	34.0	43.4	32.9	25.2
Help with playground duty	33.6	24.6	35.7	39.8
Help with instruction of individuals .	32.6	44.3	30.0	24.3
Assistance with classroom environment	31.9	33.6	30.4	33.0
Preparation of instructional resources ...	27.3	24.6	29.5	26.2
Use of instructional resources ...	20.1	20.5	21.3	17.5
Help with bus duty ...	14.6	10.7	17.9	12.6
Help with grading papers (essay questions, themes, etc.)	6.0	9.0	3.9	6.8
Other	3.9	4.1	4.3	2.9

* Includes teachers in systems with enrollments under 300.

In comparing the responses of school systems in the 1971 survey with those reporting five years earlier in 1966, the largest percentage of school systems with aides

also reported clerical assistance to teachers (65.6 percent). Nearly half (49.6 percent) listed cafeteria supervision, more than 4 in 10 listed playground supervision, and nearly 4 in 10 listed instructional assistance to teachers. Fewer than 1 system in 5 listed other duties at that time.

Duties of aides	Percent of enrollment group, 1966			
	Total systems	25,000 or more	3,000-24,999	300-2,999
Clerical assistance to teachers	65.6	84.0	69.0	63.6
Cafeteria supervision	49.6	54.7	58.9	45.5
Playground supervision	44.1	63.2	50.4	40.9
Instructional assistance to teachers	35.6	45.3	35.7	35.2
Corridor monitoring	18.6	27.4	21.7	17.0
Theme reading	16.2	34.0	20.9	13.6
Laboratory assistance	15.9	27.4	17.8	14.8
Tutoring	13.0	23.6	21.7	9.1
Bus loading supervision	12.1	22.6	18.6	9.1
Other	17.7	10.4	17.1	18.2

Funds for Teacher Aides

School systems in the survey were also asked the following:

If your schools use TEACHER AIDES, are any of their expenses met through funds from the federal government or foundations?

More than 6 systems in 10 with aides reported in the affirmative in 1971 while less than half did so in 1966. Nearly 6 school systems in 10 with aides meet their expenses now from funds provided by ESEA while less than 4 in 10 did so five years earlier. However, in 1966, 15 percent met the expenses of teacher aides from the Economic Opportu-

nity Act while five years later only 6 percent did so. The percentage of systems reporting funds from foundation grants has not changed.

Sources of funds*	1966	1971
	Percent	
Elementary-Secondary Education Act	36.2	58.8
Economic Opportunity Act	14.9	6.0
Foundation grants	2.5	2.6
Other . . . . .	...	3.9
No outside funds	54.0	37.9

*A school system could have more than one source of funds.

It should be noted that the large school systems use funds from outside sources such as ESEA and EOA to a greater extent in meeting the expenses of teacher aides than do either the medium size or small ones.

	Percent of enrollment group		
	25,000 or more	3,000-24,999	300-2,999
Elementary-Secondary Education Act	82.1	56.1	59.3
Economic Opportunity Act	31.5	4.6	5.8
Foundation grants	9.3	3.3	2.1
Other	17.9	4.6	3.2
No outside funds	12.3	39.3	38.1

Conclusion.

The use of teacher aides to relieve teachers of nonteaching duties has increased since the 1965-66 school year although only 1 teacher in 20 has an aide assigned to him alone. The larger the school system, the more likely it is to use teacher aides. Aides are assigned a variety of jobs to assist classroom teachers, but most systems that use them do so to provide clerical assistance.

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