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An assessment of provisions for practical teacher education experiences and research in public, private and laboratory schools

bу

Jerry Max Duea

A Dissertation Submitted to the

Graduate Faculty in Partial Fulfillment of

The Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Department: Professional Studies

Major: Education (Educational Administration)

Approved:

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TABLE OF CONTENTS

	Page
CHAPTER I. INTRODUCTION	1
Statement of the Problem	4
Need for the Study	5
Objectives of the Study	9
Hypotheses	10
Basic Assumptions	13
Definition of Terms	14
Delimitations	20
Sources of Data	21
Organization of the Study	22
Summary	23
CHAPTER II. RELATED LITERATURE	25
A History of Laboratory School Development	25
The normal schools Early and influential laboratory schools Twentieth century developments 1950 to 1960	25 31 40 45
Laboratory schools and professional organizations	50
The Present	53
1960 to 1969 Related research: 1960-1969	53 64
Demographic data Laboratory functions and productivity The period 1970 to 1976	65 68 72
Related research: 1970-1976	78
The Future of the Laboratory School	82

	Page
Summary	87
CHAPTER III. METHODS AND PROCEDURES	89
Introduction	89
The Population to be Studied	90
The Research Design	90
Sample Selection	92
Data Collection Instruments	94
Survey I Survey II Survey III	94 95 96
Data Collection	97
Treatment of Data	98
Descriptive data Data comparisons Identifying causal-comparative relationships	98 99 100
CHAPTER IV. FINDINGS	102
Survey I	102
Response Findings	102 103
Survey II	109
Response Findings	109 110
Schools identified Grades included Enrollmers data Student characteristics Administrative characteristics Faculty data Faculty publishing activities Sources of financial support Laboratory school functions and major objectives	110 112 113 113 115 116 120 121

•	Page
Accreditation and evaluation Future outlook	129 132
Ex Post Facto Analyses of 1969 Data	135
1969-1976 Data Comparisons	139
Enrollments and grade spans Laboratory school functions	140 141
Survey III	143
Response Findings	143 146
Satisfaction with services provided by public, private, and laboratory schools Factors contributing to performance ratings Relationships between contributing factors and performance ratings	147 150 154
Summary	158
Laboratory school numbers Laboratory school termination Laboratory school functions Comparisons of laboratory and nonlaboratory schools Relationships of contributing factors and performance ratings	159 159 160 160
CHAPTER V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	162
Summary	162
Purpose Methods and procedures	162 163
Population and sampling Data collection	163 164
Results	166
Survey I Survey II Ex post facto analyses of 1969 data 1969-1976 data comparisons Survey III	166 167 169 170 171

	Page
Limitations	174
Conclusions and Discussion	176
Recommendations for Further Research	181
BIBLIOGRAPHY	183
ACKNOWLEDGMENTS	190
APPENDIX A. SURVEY I QUESTIONNAIRE	191
APPENDIX B. SURVEY II QUESTIONNAIRE	193
APPENDIX C. SURVEY III QUESTIONNAIRE	198
APPENDIX D. COVER LETTERS	204
APPENDIX E. PHONE INQUIRY FORM	211
APPENDIX F. LABORATORY SCHOOLS IN THE UNITED STAT PASSING THREE OR MORE GRADES AND ENRO THAN FIFTY PUPILS	
APPENDIX G. CHARACTERISTICS OF LABORATORY SCHOOLS UNITED STATES	218

LIST OF TABLES

		Pa	age
Table	1.	Activity emphases in laboratory schools as determined by the research studies included	71
Table	2.	A summary of the publishing activities of laboratory school faculties in the United States in the five years preceding 1969 as reported by Howd and Browne	72
Table	3.	Response to Survey I	L03
Table	4.	Dates of laboratory school closures reported in Survey I	04
Table	5.	Sources of initial recommendations for laboratory school closure	105
Table	6.	Education deans' and department heads' ratings of factors contributing to laboratory school closures. (Ratings ranged from zero to five with five being indicative of high importance	.06
Table	7.	A comparison of the importance of various contributing factors in laboratory school closures 1	.07
Table	8.	Comparisons of mean ratings for factors contributing to laboratory closures via Duncan's New Multiple Range Statistic	.08
Table	9.	Grade spans encompassed by laboratory schools 1	.12
Table	10.	Enrollments of laboratory schools in the United States	14
Table	11.	Racial-ethnic composition of laboratory school student populations	15
Table	12.	Administrative characteristics of laboratory schools	17
Table	13.	Characteristics of laboratory school faculty (with 103 schools reporting)	19
Table	14.	The publishing activities of laboratory school faculty during the past five years	20

			Page
Table 15.	Tuition assessed by laboratory schools in the United States	•	122
Table 16.	Laboratory school directors' rankings of sources of financial support		123
Table 17.	Functions of laboratory schools as perceived by laboratory school directors	•	124
Table 18.	A comparison of the priorities accorded various laboratory school functions by directors of those facilities	•	125
Table 19.	Comparisons of mean priorities assigned to laboratory school functions utilizing Duncan's New Multiple Range Statistic	•	127
Table 20.	Approval and accreditation agency membership on the part of laboratory schools		129
Table 21.	Agencies involved in critical examinations of laboratory schools and the outcomes of those investigations	•	131
Table 22.	Relationships between selected laboratory school characteristics and the future outlooks expressed by laboratory school directors	-	134
Table 23.	Comparisons of grade span and enrollment data reported in 1969 by laboratory schools that were operational in 1976 and those that were defunct	•	136
Table 24.	Faculty publishing activities reported for the five years preceding 1969 by currently functioning laboratory schools and those that had been rendered defunct since that time		137
Table 25.	Comparisons of mean priorities assigned to typical laboratory school functions by operational laboratory schools and those that had been closed or severely reduced in scope since 1969	•	138
Table 26.	Comparisons of priorities assigned research and development activities by functional laboratory schools in 1969 and 1976	•	142

					1	age
Table 2	7. The nature of collegiate relationships with public and private schools for meeting teacher education needs	•	•			145
Table 2	8. Teacher education functions carried out in public and private schools		•			146
Table 2	9. Characteristics of institutions represented by Survey III responses	•	•		•	147
Table 3	O. Degrees of satisfaction expressed with laboratory services and provisions for research in laboratory and nonlaboratory schools		•	•		148
Table 3	1. Subgroup comparisons of ratings assigned to provisions for practical teacher education experiences and research performance	•	•	•	•	151
Table 3	2. Ratings of selected factors that are potential contributors to the performance of laboratory and nonlaboratory schools			•	•	152
Table 3	3. Correlations between contributing factors and performance ratings for practical teacher education experiences and research	•	•	•	•	155
Table G	.1. Characteristics of laboratory schools in the United States					219

CHAPTER I. INTRODUCTION

The provision of practical experience opportunities is an established, highly respected component of teacher education models and programs. Preservice laboratory experiences occupy a prominent position relative to recommended teacher education practices and in the evaluative criteria developed and adopted by accrediting agencies.

The standards developed by the National Council for the Accreditation of Teacher Education (NCATE) for purposes of guiding the development and evaluation of teacher education programs attest to the importance accorded laboratory experiences. A model response from the 1960 Edition of Standards for Accreditation of Teacher Education is excerpted below.

The 1960 Edition was reprinted in 1968 and remained in effect through 1970-1971.

The following description is an example of the kind of program that clearly meets the Standard. It should not be interpreted as being the only program of laboratory experiences which meets the Standard, however.

A faculty member has been designated as the director of professional laboratory experiences. His duties are to make provision for facilities and otherwise take care of the administrative arrangements necessary for faculty members to provide professional laboratory experiences prior to student teaching, do the same with reference to student teaching, and provide the leadership necessary to develop an effective partnership between the institution and the cooperating school(s). Through his efforts, the campus laboratory school provides laboratory experiences prior to student teaching for 200 of the 300 students involved and two other school systems within ten miles of the institution provide for the others. He has negotiated satisfactory arrangements with seven school systems to provide for all student teaching. These arrangements clearly define the responsibilities of the institution and the schools and provide for periodic conferences at the institution involving administrators and cooperating teachers from all seven cooperating schools. (57 p. 10)

Evidence of the continuing importance of laboratory experiences can be found in the current NCATE standards that were adopted in January, 1970 and became mandatory for accreditation purposes in 1971-1972.

Standard 1.3.3 reads as follows:

Standard: The professional studies component of each curriculum includes the systematic study of teaching and learning theory with appropriate laboratory and clinical experience. (58 p. 6)

This standard is followed by six questions that elaborate on the standard.

Question 1.3.3b offers a definition of the term "laboratory experiences."

1.3.3b What practices or procedures show that the study of teaching and learning theory requires and is accompanied by laboratory experiences (observation, demonstration, problem-solving, tutoring, microteaching, and/or other direct experiential activities)? (58 p. 6)

Standard 1.3.4 is related to the student teaching requirement. It, along with the preamble that precedes it, is reproduced below.

1.3.4 <u>Practicum</u>. "Practicum" refers to a period of experience in professional practice during which the student tests and reconstructs the theory which he has evolved and during which he further develops his own teaching style. It provides an opportunity for the student to assume major responsibility for the full range of teaching duties in a real school situation under the guidance of qualified personnel from the institution and from the cooperating elementary or secondary school. It presupposes the learning experiences included in all other professional studies; it is not a substitute for them. It is a more complete and concrete learning activity than laboratory and clinical experience.

It is assumed that the institution carefully selects the cooperating schools used for practicum and that it establishes effective working arrangements with these schools.

Practicum in most situations may be called student teaching; in some situations it may be a type of internship.

Standard: The professional studies component of each curriculum for prospective teachers includes direct substantial participation in teaching over an extended period of time under the supervision of qualified personnel from the institution and the

cooperating school. (58, p. 6)

Like the previous standard, Standard 1.3.4 also has six accompanying questions designed to guide evaluation efforts.

Unless teacher preparatory institutions elect to ignore these recommendations and requirements—a rather remote possibility as it would be tantamount to rejecting accreditation—they are faced with three alternatives: (1) maintaining their own educational facilities for school—aged youth adequate for meeting the experiential requirements of their teacher education curricula; (2) providing for these opportunities through the establishment of cooperative working agreements with existing public and private elementary and secondary schools; or (3) implementing the practical phases of their teacher education programs via a combination of alternatives one and two.

According to the data compiled by Howd and Browne in 1969 (36, pp. 1-3), 196 institutions of higher education maintained laboratory facilities as suggested by alternative one above. Although these facilities are operated under many aliases (the 1974-75 National Association of Laboratory Schools directory shows twenty-eight different categorical names), traditionally, they have been referred to generically as laboratory schools. Current, unofficial figures reveal a reduction in the number of operational laboratory schools; they numbered approximately 171 in 1974-75.

When this study was initiated, no comprehensive data were in existence regarding the number of colleges and universities providing laboratory experiences via working agreements with public and private schools. There was a similar lack of information regarding the number of institutions implementing the practical aspects of their teacher education
curricula through the combined efforts of institutionally-sponsored laboratory schools and other public and private elementary and secondary
schools. Neither were there comprehensive data available concerning:
(1) the nature and extent of these working agreements; (2) evaluations
of their relative effectiveness; and (3) the factors contributing to the
perceived success of these arrangements, either positively or negatively.

For the most part, such information had been compiled on rather parochial bases. That is, these data generally were confined either to descriptions of the programs associated with individual colleges and universities or the reports of investigations of limited scope. More often than not, the latter involved samples drawn from individual states or comparatively small, multistate geographic regions.

Statement of the Problem

On a national scope, current, comprehensive data were lacking in regard to laboratory school characteristics and provisions for the experiential components of teacher education curricula in public, private and laboratory schools. Similarly lacking were effectiveness estimates relative to the services provided in these facilities.

Two studies were widely recognized in teacher education circles for their treatment of the problem of collecting census data on laboratory schools. They were: (1) Kelley's "The Status of the Campus Laboratory School in the United States," an unpublished doctoral dissertation

from Indiana University that was begun in 1964 and completed in 1967 (42); (2) Howd and Browne's National Survey of Campus Laboratory Schools that was compiled in 1969 and published by AACTE in 1970 (36). No national surveys were known to exist in the area of cooperative arrangements between institutions of higher education and public and private schools for purposes of implementing the experiential components of preservice teacher education curricula. Nor were there any comprehensive data available as to the perceived success of these arrangements.

It appeared reasonable to assume that the commissioning of Howd and Browne by AACTE to conduct a follow-up study in 1969 was indicative of the perceived obsolescence of the data compiled by Kelly five years earlier. If this assumption was tenable, it further could be assumed that the Howd and Browne data was at least equally subject to obsolescence in 1976. Lending credence to the latter assumption was the fact that the 208 operational laboratory schools reported by Howd and Browne in 1969 (36, p. 2) had been reduced in number to 171 by 1975.

This investigation endeavored to dispel the void of current, comprehensive data related to laboratory schools and the teacher education practices implemented in those facilities and other elementary and secondary schools.

Need for the Study

Heretofore in this report, allusions were made to the relative absence of current, comprehensive data on laboratory school characteristics and the teacher education arrangements between colleges/universities

and public/private and laboratory schools. Needless to say, the potential worth of a study cannot be based on the absence of data alone--a need for such data must be established.

The National Association of Laboratory Schools (NALS) is the professional organization that administers exclusively to the needs and interests of the nation's college and university-controlled laboratory schools. Its membership is comprised of administrators and faculty employed by these institutions. Owing to the fact that the organization originated as the Laboratory School Administrators' Association (LSAA), a majority of its members hold administrative responsibilities—director, principal, assistant or associate principal, research coordinator, etc. Recently, however, the emphasis shifted to broadening the organization's scope to better serve the needs of all laboratory school faculty.

In his role as NALS corresponding secretary and treasurer, a continuing, appointive office, the writer served as official spokesman for the organization. The person occupying this role often is called upon by NALS members and other individuals having related interests to provide information regarding laboratory schools. Among the data often requested were indications of institutional numbers, locations, sponsorship, professional placement opportunities, and information about member institution characteristics and roles.

Recent years had seen a considerable amount of attrition from the ranks of college and university-supported laboratory schools with the closure of a substantial number of these institutions. As earlier reported, Howd and Browne identified 208 operating laboratory schools in

1969 (36, p. 2); the best contemporary information, a continuing revision of the Howd and Browne data, indicated that only 171 remained in existence. This closure phenomenon served to prompt additional inquiries. Most often, these inquiries included requests for information about: the number of closures; the reasons for same; factors that promote persistence; and finance plans--particularly those that offer unique, alternative solutions for meeting rapidly increasing costs in the face of funding lags, a problem that has plagued many institutions of higher education and their subordinate divisions.

Closely related to these inquiries were requests for information about the working agreements entered into by teacher preparatory institutions and public and private schools for purposes of providing experiential opportunities in the preservice training of teachers. Attendant requests were for comparative cost and effectiveness estimates demonstrating the relative desirability of offering those services in public, private or laboratory schools.

Generally, inquiries of this nature originated from one of three sources: (1) institutions desiring to expand practical experience offerings beyond those which could be accommodated in existing laboratory school facilities; (2) institutions where laboratory school closure decisions were finalized thereby necessitating the procurance of alternative practical experience opportunities; (3) laboratory schools which were under threat of closure and seeking to justify their continuing existence on the bases of service availability and financial considerations. Cost and effectiveness data were also of interest to those

institutions planning agreements with public and private schools as they attempted to ascertain the expenditures that could be expected in association with such agreements and the factors that might contribute to their maximum efficiency and effectiveness.

As a result of a survey of fifty-four selected laboratory schools in 1965, White concluded, and most teacher education authorities would agree:

The teacher education institutions which operate collegecontrolled laboratory schools should carefully evaluate the present and potential functions of these schools. Those laboratory schools which do not perform a useful function in teacher education should be modified or closed. (80, p. 68)

.... Their future is precarious, if they do not make changes to meet the changing needs of the times. College-controlled laboratory schools can serve a unique and useful function if they will adjust their programs, their staffs, their pupil populations, and their relationships to other segments of the educational enterprise and meet the needs and demands of today. (80, p. 71)

White expressed little optimism about the likelihood of such changes being implemented on a broad scale. If his perceptions were accurate, a study such as this could be justified on two counts:

- 1. Laboratory school personnel need to be aware of the characteristics embodied by their counterparts on other campuses. The adjustments others have made may serve as a source of inspiration in prompting appropriate adjustments to changing needs.
- 2. If laboratory schools are unable to fulfill changing needs and roles and forced to close as suggested by White, teacher education institutions are going to be forced to look beyond the campus for alternative teacher education experiences. White suggested such an alternative:

Jointly operated laboratory schools, cooperatively controlled by colleges and local public school systems may have particular utility as centers for research demonstration, and in-service education. The value of such schools should be further tested, either as adjuncts to or as substitutes for college-controlled laboratory schools. (80, p. 68)

If laboratory school host institutions must move in the direction of public and private schools in order to meet their practical experience and research needs, the chances for making successful transitions would be enhanced by the availability of a data pool that could provide some insights into the factors that influence the success of such arrangements.

Evidence that the National Association of Laboratory Schools acknowledged and subscribed to these needs was offered by the organization's support of this investigation. In February 1974 when this study was little more than a mere idea, the NALS Executive Board as a matter of official business approved the preliminary concepts underlying the study and pledged partial financial support so as to ensure its realization.

Objectives of the Study

This investigation was designed to accomplish seven major, terminal objectives. They were:

- 1. the compilation of comprehensive census data on all operational university and college-controlled laboratory schools in the United States
- 2. the comparison of these data with those collected in similar, previously-conducted investigations--Howd and Browne's National Survey of Campus Laboratory Schools in particular. Provisions were made in the design of data collection instruments that would facilitate direct

comparisons between the findings of that survey and those of this study

- 3. the identification of those laboratory schools which were subject to closure in recent years and the examination of potentially causal factors in their demise
- 4. the investigation of existing working relationships between teacher education institutions and public, private and laboratory schools for the provision of preservice laboratory experiences and research opportunities
- 5. the identification and analysis of those factors which contribute to the effectiveness of the organizational schemes employed in facilitating laboratory experiences
- 6. the compilation and analysis of authoritative indications of satisfaction with the research output facilitated by the various arrangements
- 7. the organization, analysis and presentation of data compiled that would facilitate meaningful interpretation and dissemination

Hypotheses

Fifteen hypotheses were postulated for testing in this investigation. Some were broad in nature and involved numerous data comparisons; the individual comparisons made are elaborated in Chapter III, Methods and Procedures. The hypotheses tested, stated in null form, are listed below.

1. There are no differences in the importance attached to potentially contributing factors in past laboratory closures as

- evidenced by the perceptions of education deans and depart-
- No differences exist in the priorities accorded various laboratory school functions by directors of those facilities.
- No differences exist between operational and defunct laboratory schools on the basis of enrollment and grade span data reported in 1969.
- 4. Faculty publishing activities reported in 1969 show no differences between operational and defunct laboratory schools.
- 5. No differences exist between operational and defunct laboratory schools that can be determined from the priorities the two groups assigned to the functions carried out by those institutions in 1969.
- 6. No differences exist between the grade span and enrollment data collected in this investigation and those reported by operational and defunct laboratory schools in 1969.
- 7. There are no differences between the faculty publishing activities reported by the three laboratory school groups: (1) those by functional laboratory schools in 1969; (2) those by defunct laboratory schools in 1969; (3) those collected from the institutions participating in this investigation.
- 8. The mean priority ranks assigned research and development activities by functional laboratory schools in 1969 were equal to or lower (higher numerically) than those assigned by the operational laboratory schools examined in 1976.

- 9. As determined from ratings assigned by education deans and department heads, laboratory schools and nonlaboratory schools do not differ in the quality of the practical teacher education experiences provided.
- 10. No differences exist between laboratory and nonlaboratory schools in research implementation and output as determined by the evaluations of education deans and department heads.
- 11. No differences exist between the degrees of satisfaction expressed with the practical experience and research opportunities provided in laboratory and nonlaboratory schools that can be identified with the institutional status of survey respondents.
- 12. There are no differences between laboratory and nonlaboratory schools that can be identified with the factors that contribute to teacher education performance.
- 13. Ratings of the factors that are potential contributors to teacher education performance by representatives of laboratory school-sponsoring institutions reveal no differences between laboratory and nonlaboratory schools.
- 14. No relationships exist between teacher education and research performance and evaluations of individual contributing factors.
- 15. The strength of corresponding factor-performance relationships do not differ for laboratory and nonlaboratory schools.

Basic Assumptions

A number of assumptions were basic to the research design in this investigation and the hypotheses to be tested. They follow.

- 1. Laboratory school characteristics in terms of descriptive data, relationships with the sponsoring institutions, functions, and future outlook and directions can be effectively evaluated and reported by a single individual in each institution
- 2. Subsequently, the persons best-qualified to supply these data are the chief administrators of laboratory schools
- 3. The characteristics of teacher preparatory institutions in terms of descriptive data, arrangements for laboratory services and research, and factors important to these arrangements can be effectively evaluated and reported by a single individual in each institution
- 4. The person in each institution best-qualified to supply these data is the ranking administrator in charge of professional teacher education curricula--the dean of the college of education where applicable; otherwise, the head or chairperson of the department of education or an individual holding comparable responsibilities
- 5. A random sample of education deans/department heads would be sufficiently representative to permit the generalization of findings to that population
- 6. Observable similarities and differences exist between the characteristics and operations of individual laboratory schools and teacher preparatory institutions; causal-comparative relationships can

be inferred from those differences

- 7. The data reported in Howd and Browne's <u>National Survey of</u>

 <u>Campus Laboratory Schools</u> in 1969 are comparable to the data collected in this investigation and can be analyzed for differences and causal-comparative relationships
- 8. Finally, in terms of effectiveness, efficiency and economy, the best method of collecting the necessary data for this study would be the mailed questionnaire with appropriate follow-ups by mail and telephone as necessary

Definition of Terms

In order to facilitate the understandings to be gained from this investigation, it is important that the reader shares a common vocabulary with the investigator. The following definitions of terms, phrases and abbreviations are presented in the interest of promoting this objective.

AACTE: The abbreviation for the American Association of Colleges for Teacher Education; this organization's membership is comprised of institutional representatives, administrators and faculty from teacher education institutions that are accredited by national and regional accrediting associations.

Accreditation: The status achieved when an institution or program is recognized to have met the minimum standards of excellence prescribed by state, regional or national agencies that have been established to promote high standards of professional competency. Accreditation usually involves a vote of approval by representatives of these agencies and

the payment of dues. See also Accrediting agencies.

Accrediting agencies: Organizations established on a state, regional or national basis for purposes of promoting high professional standards. The National Council for Accreditation of Teacher Education is the most respected agency in the field of teacher education. Six regional accrediting agencies are recognized for their commitments to elementary, secondary and higher education; they are the: New England Association; Middle State Association; Southern Association; North Central Association; Northwest Association; and Western Association. Most states have agencies established for the approval of elementary and secondary schools, usually in connection with the state education department. See also Accreditation.

American Association of Colleges for Teacher Education: See AACTE.

Closure: The act of phasing out or terminating the functional existence of a laboratory school.

<u>Common school</u>: Historically, the predecessor to today's elementary school.

<u>Defunct laboratory school</u>: One that has been closed or reduced in scope to the point that it no longer qualifies for inclusion in this investigation. <u>See</u> Laboratory school.

<u>Demonstration</u>: The exhibitionary teaching of a lesson before a group of observers having common objectives or a similar frame of reference such as an entire class of teaching aspirants. Demonstrations may also be conducted electronically via video transmissions or video-audio tape.

<u>Department chairperson</u>: The ranking member in an academic department within a college or university in terms of administrative responsibility.

Department head: See Department chairperson.

Education curriculum: A program of general, professional studies apart from specific content areas which may lead to an education degree.

Education dean: The dean of the college of education within the administrative structure of a university--the person holding the top administrative position in that division.

Education dean/department head: The person holding the highest level of administrative responsibility in respect to the education curricula of a teacher preparatory institution regardless of whether it is designated as a college or a university.

<u>Functional laboratory school</u>: A laboratory school that meets the minimum criteria for inclusion in this investigation.

Grade equivalent: An approximation of a school grade unit in terms of the age range of pupils included.

<u>Inservice</u>: Developmental activities for teachers who are practicing their profession in schools to which they are under contract.

<u>Internship</u>: An extended, culminating practical experience opportunity for teachers in training--usually for a semester or more.

Jointly operated school: A school which is cooperatively administered and staffed by a school district and a teacher education institution.

<u>Laboratory experience</u>: The practical experiences associated with teacher education programs--observation, participating, practicum, student

teaching, demonstration and internship.

Laboratory school: The generic name for schools that are administered by and draw financial support from teacher education institutions. Generally, they enroll children of preschool, elementary and/or secondary school age and have been established to assist the host institution in the implementation of laboratory experiences, consultant services, inservice programs, educational research, and research and development activities. Not all laboratory schools participate in all of these functions, but most engage in two or more of them.

This investigation focused only on those institutions that encompassed a minimum of three grades and enrolled fifty or more pupils.

(Twenty-eight different titles for these facilities appear in the NALS directory of laboratory schools; they are: academy, campus learning center, campus school, center for innovation in education, child study center, children's house, children's school, college school, demonstration school, early childhood center, educational research and personnel development center, educational resource center, education center, elementary school, high school, institute, laboratory kindergarten, learning resources center, model school, nursery school, research and development center, research learning center, teacher education center, training school, university school, and school—the latter is usually preceded by a specific surname or religious denomination.)

<u>Laboratory School Administrators' Association</u>: The original name of the National Association of Laboratory Schools. <u>See also National Association of Laboratory Schools</u>.

LSAA: The abbreviation for the Laboratory School Administrators' Association. See also Laboratory School Administrators' Association.

NALS: The abbreviation for the National Association of Laboratory Schools. See also National Association of Laboratory Schools.

National Association of Laboratory Schools: The professional organization that administers exclusively to the needs and interests of the nation's college and university-controlled laboratory schools. Its membership is comprised of laboratory school administrators and faculty.

See also NALS.

National Council for Accreditation of Teacher Education: The recognized agency for accrediting teacher education programs on a national scope. See also Accreditation, Accrediting agencies, NCATE.

NCATE: The abbreviation for the National Council for Accreditation of Teacher Education. See also National Council for Accreditation of Teacher Education.

Nonlaboratory schools: Elementary and secondary schools other than laboratory schools; public and private schools that are neither financed nor administered by colleges or universities.

Normal school: The teacher training institution that was predominate in the field of training elementary teachers until the twentieth century. It was a nondegree institution that roughly approximated the junior college. It later evolved into the teacher's college.

<u>Nursery school</u>: An educational facility that enrolls preschool children-below kindergarten level.

Observation: The viewing of teaching/learning situations by individual teaching aspirants.

Operational laboratory school: See Functional laboratory school.

<u>Parent institution</u>: The teacher education institution that sponsors or controls a laboratory school.

<u>Practical experience</u>: A teacher training activity that actively involves the trainee in a teaching/learning situation. <u>See also Laboratory experience</u>.

Practicum: A culminating, practical teacher education experience of substantial duration (six weeks to a semester) in which the trainee assumes major responsibility for the full range of teaching duties under the guidance and supervision of qualified personnel identified by the teacher education institution. It is the experience often referred to as student teaching.

<u>Preservice</u>: The adjective used to describe anything to which a teaching aspirant is exposed before entering the profession--undergraduate experiences.

<u>Private school</u>: Any school that is operated by private organizations or religious denominations as opposed to those that are operated by governmental agencies and supported by tax monies.

<u>Public school</u>: Any school that is operated by a governmental unit and draws most of its support from tax monies.

Research: Unless specifically identified, this term may apply to any variety of research activities: basic, applied, action or research and development.

Research and development: Those activities that involve the development, testing, revision and dissemination of educational products.

Secondary school: Any school that enrolls students above the sixth grade. It may be a middle school, junior high or high school.

Sponsorship: The condition characterized by administrative control

and financial support such as the sponsorship of a laboratory school by a teacher education institution.

Student teaching: See Practicum.

<u>Teacher education curricula</u>: Professional coursework designed for the purpose of training teachers apart from specific academic subjects.

<u>Teacher education institution</u>: A college or university that offers degree programs that lead to teacher certification.

<u>Teacher education model</u>: A program of sequential studies designed for the preparation of teachers.

Teacher education program: See Teacher education model.

Teacher preparatory institution: See Teacher education institution.

Delimitations

This investigation was limited to opinions expressed and data reported by ranking teacher education administrators and laboratory schools. In the case of teacher education institutions having university status, the ranking administrators were college of education deans. Chairpersons of education departments were surveyed in those institutions having college status.

In order to qualify for inclusion in this investigation, laboratory schools were required to be actively functioning institutions that met two criteria: (1) the inclusion of at least three grades or grade equivalents; (2) the enrollment of fifty or more school-age children.

The data comparisons involved in this study were not limited to the data collected by the instruments designed for this investigation.

Those data collected in Howd and Browne's <u>National Survey of Campus</u>

<u>Laboratory Schools</u> (36) also were analyzed in comparison with the data collected. However, the latter comparisons were limited to those data collected from laboratory school administrators in this study as they were the data source utilized in the Howd and Browne survey.

The data collected in this investigation were compiled in three phases. These phases correspond with the three data collection instruments developed. Survey I was limited to the reports of education deans and department heads in United States colleges and universities, Survey II to the directors of university/college-controlled laboratory schools, and Survey III was confined to a sample of 222 education deans and department heads, half of which were randomly selected.

Finally, the inferences made from the findings of this investigation were limited to the population from which samples were drawn: teacher education institutions and laboratory schools.

Sources of Data

The sources of data utilized in this study may be dichotomized according to sources of data that were available at the time the investigation was initiated and sources tapped by the data collection instruments developed for the study. In the case of the former, a number of primary and secondary sources were probed in search of related literature. Among them were journal articles, <u>Dissertation Abstracts</u>, ERIC reports, other bulletins and reports, unpublished dissertations, and selected books. An invaluable source that gave direction to the study

and provided comparative data was Howd and Browne's <u>National Survey of Campus Laboratory Schools</u> (1969) that was published by the American Association of Colleges for Teacher Education in 1970 (36).

In data collection, three major sources were exploited: ranking administrators of all laboratory schools known or discovered to be in existence; college of education deans from selected universities; and education department heads in nonuniversity institutions (colleges). The sampling procedures utilized are elaborated in Chapter III, Methods and Procedures.

Yet another source that was important to the implementation of this study was the computerized list of education deans and department heads in the United States supplied by the RITE Project at Indiana University (68). This compilation was critical to sampling and questionnaire mailing procedures.

Organization of the Study

The report of this investigation is organized into five chapters, a Bibliography, Acknowledgments, and pertinent Appendices. Chapter I includes an Introduction, the Statement of the Problem, Need for the Study, Objectives, Hypotheses to be tested, Basic Assumptions, Definition of Terms, Limitations of the Study, Sources of Data, Report Organization, and a brief chapter Summary.

Chapter II, entitled "Related Literature," is organized as follows: it begins with the historical origins of laboratory schools related to the teacher education practices of the times and the forces affecting

host institutions; it notes progress to the present and related research findings; and it culminates with a presentation of the future directions the literature suggested for laboratory schools.

Chapter III details the methods and procedures employed in conducting this investigation. It includes explanations of population identification, research design, sample selection, data collection instruments, data collection procedures, data analysis and statistical procedures, and the assumptions applicable to tests of significance.

Chapter IV presents and summarizes the findings of the investigation.

It is followed by Chapter V which includes a summary of the investigation, discussions of the findings, conclusions, and recommendations for further study.

Summary

Laboratory experiences and research are important aspects of teacher education and facilities have long been in demand for the implementation of these teacher education components. Originally, laboratory schools fulfilled these roles almost exclusively, but increased demands and changing emphases served to broaden the range of resources exploited for these purposes. This generated concerns about laboratory school roles, arrangements for implementing laboratory and research activities, and evaluations of their effectiveness.

This investigation undertook to compile data that may provide answers to some of the questions related to those concerns. It involved a laboratory school census and the solicitation of information and

opinions from the directors of all known laboratory schools and a random sample of education deans and department heads.

A number of hypotheses were tested, but they may be categorized into three main groups: (1) comparisons between the present status of laboratory schools and the conditions that prevailed in 1969; (2) comparisons between operational and defunct laboratory schools; and (3) comparisons of the characteristics and effectiveness of public, private and laboratory schools in the implementation of laboratory and research activities plus the identification and analysis of contributing factors.

CHAPTER II. RELATED LITERATURE

A History of Laboratory School Development

It is the common custom of those writing about teacher education and training in the United States to go back about four hundred years for a running start. References are ordinarily made to Jesuit pedagogy of the late sixteenth century, to La Salle's normal school at Reims (1685), to Basedow at Dessau in the 1770's and eventually, by way of Pestalozzi at Yverdon, to the nineteenth century founding of state teachers' seminaries in Prussia and normal schools in France. Since the two latter institutions aroused lively interest in America, the impression may be created that one thing led to another—that we have, in fact, an unbroken chain whose links are clear. The theory is somehow inspiring. The truth is that over-simplification could hardly be carried further. . . (39, p. 2)

These words of Hutton's offer a particularly apt description of the writing habits of those who have undertaken the task of describing the historical development of laboratory schools in the United States, institutions whose history is closely allied with the development of normal schools. In recognition of this fact, this account was limited to the American period of development. This was not to deny the presence of strong European influences. However, such references were confined to the acknowledgment of certain European educational philosophies which have had profound effects upon the development of some early American laboratory schools and the postures they assumed in defining their roles and functions.

The normal schools

Cubberly (18), Perrodin (62), Kelley (41) and others credit Duke

Ernest of Gotha (Germany) with originally suggesting that teachers should

be provided opportunities to gain supervised practice in a central location in order to heighten their educational awareness and hone their pedagogic skills. They show similar agreement in acknowledging that Abbe de La Salle established the world's first normal school at Rheims, France (1965) and that Prussia, under the direction of Carl Zeller, founded the first state-supported normal schools, the foundations of which were laid in 1809. Some would argue that the laboratory school movement in the United States took root from these seeds, but Hutton (39) drawing heavily on Cubberly's <u>History of Education</u> (18) did not share this position:

A reasonable case can be made out for the thesis that teacher training in the United States was of indigenous origin. Certainly things were stirring here long before Victor Cousin, of France, and Calvin Stowe, of Ohio, wrote two of the halfdozen reports that did so much to focus attention on Prussian state institutions established in 1819 [sic 1809] for the preparation of elementary teachers. Some of the academies, including the first one in Philadelphia (1751), had at least dabbled in teacher training. A letter to the editor of the Massachusetts Magazine of June, 1789, advocated county grammar schools which would prepare young men for school-keeping. Speeches had been made on the need for training, a notable one at Yale College by Denison Olmstead in 1818. Hall's private and prioneer teachers' seminary, started in 1823, can hardly have been inspired by publicity about European institutions of the 1830's. (39, pp. 2-3)

McCarrel (47) suggested that the first laboratory experiences in the cause of teacher education probably took place in the Indian pueblo schools operated by Franciscan fathers where "student teaching" was required as early as 1600. The earliest known, truly American utilization of practice teaching was at Mother Seaton's teacher training school in Emmitsburg, Maryland in 1808. In effect, however, the development

of what have since become known as laboratory schools did not really take place until the emergence of normal schools created a need for such facilities.

As alluded to in the quote above, "the first private normal school in America was opened in 1823 at Concord, Vermont by the Reverend Samuel Hall and [it] provided demonstration and practice teaching experiences for its students" (73, p. 263). Impetus was given to the evolution of the laboratory school by the Reverend Thomas Gallaudet of Connecticut who, in 1825, published a plan for the training of teachers which recommended that all students be required to have experience in practice teaching in a training school. The writings and actions of Carter lent similar support to this concept:

During the winter of 1824-25 James G. Carter, called by some "the father of the normal school in the United States," wrote a series of articles for the <u>Boston Patriot</u> in which he strongly recommended practice schools in all seminaries for teachers; in 1827 Carter opened the second private normal school in the country at Lancaster, Massachusetts. (41, p. 7)

The year 1838 saw the way paved for the institution of public normal schools in the United States. No less renowned historical figures than John Quincy Adams and Daniel Webster promoted their development out of their respective concerns for the improvement of the common schools. At a meeting of the "Plymouth County Association for the Improvement of Common Schools" arranged by one Charles Brooks, Adams backed his plea for normal schools with the observation that the monarchies of Europe (notably Prussia) were far ahead of the United States in providing proper educational opportunities for the common people—to him a rather disgusting

irony. Webster, speaking out at the same meeting, based his arguments on pedagogical concerns. His insights would be equally appropriate and acceptable today:

He said, for instance, "We teach too much by manuals, too little by direct intercourse with the pupil's mind; we have too much of words, too little of things. For example, geology must be taught by excursions in the field. . . . Teachers must teach things!" (31, p. 23)

Other factors also contributed to Massachusetts' readiness for initiating the institution of public normal schools.

By the year 1838 everything was ready for action in Massachusetts. The State Board of Education had been organized in 1837 and put under the leadership of Horace Mann. In 1838, Edmund Dwight, a friend of Horace Mann and a member of the Board, offered a gift of \$10,000 to be used in the cause of teacher education provided a like sum should be appropriated by the state for this purpose. As Mr. Dwight was a noted industrialist and philanthropist of Boston, his offer bore political as well as financial weight.

On April 19, a date rich in historical significance both for the nation and for Massachusetts, Governor Edward Everett signed the bill authorizing the establishment of three normal schools, provided suitable buildings, furniture, and equipment could be obtained from towns or other private sources. The \$20,000 was to be used for providing faculty and for other instructional expense. . . . (31, p. 24)

The original bill provided only for a three-year trial period.

Eventually, it was decided that the three institutions should be located in such a fashion as to provide convenient access for the state's populace; they were established at Lexington in the northeast, Bridgewater in the southeast, and Barre which was centrally located. The institution at Lexington was established first. However, it was not exactly overwhelmed by client response—only three young ladies matriculated for its first session in 1839. Neither was there much stability in terms of

location: the normal school at Lexington was moved to West Newton in 1844 and to Framingham in 1853; similarly, the Barre institution was moved to Westfield in 1844. The institution at Bridgewater was the only one that was able to establish a permanent site.

Despite their rather inauspicious start and their nomadic tendencies, the normal school concept did catch on and their numbers multiplied.

According to Harper (31), the Bridgewater Normal School was particularly noteworthy for the influence it exerted in the establishment and administration of other normal schools; no less than twenty-six of its early graduates went on to serve as heads of normal schools in ten other states. He credits this capacity for generating leadership largely to the exemplary work of Nicholas Tillinghast, a West Point graduate and former military officer who served as principal at Bridgewater during the first thirteen years of that school's existence (1840-1853).

Following the lead of Massachusetts, New York was the next state to institute the establishment of public normal schools with the founding of its state normal school at Albany in 1844. From there the normal school movement spread westward; by 1860, twelve publicly-supported normal schools were operating in nine different states. In addition to these, six private normal schools were in existence and the city of St. Louis had established a public city normal school in 1857 bringing the total number to nineteen. The first nine states to establish public normal schools and the dates of their openings are listed below:

1839	Massachusetts	1849	Michigan	1857	Illinois
1844	New York	1854	Rhode Island	1859	Pennsylvania
1849	Connecticut	1855	New Jersey	1860	Minnesota

Although the number of normal schools was expanding and they seemed to be exerting influence in the field of teacher education by the middle of the nineteenth century, their early existence was not without its problems. Hutton makes some interesting allusions to the problems they faced:

"Normal School" was an unfortunate name. To Englishspeaking people it carried none of the signifiance of "normale"
in the French "ecole normale". There was something at least
faintly ridiculous about the term and an automatic suggestion
of its antonym. It was inevitable that a satirist would one
day write a story about a school called "Fairly Normal." More
than one early principal was amused or annoyed when he was
associated with a "Norman School" or even a "Mormon School."

We can see plainly enough now that our first teacher-training institutions were destined to labor under many handicaps. Peirce had more than his share of experiences that were "dismal and discouraging." Resented by academies and scorned by colleges, having to make their way for years before any state legislature dreamed of setting any requirements for certification, the normals were essentially deadend schools. They were post-elementary, semi-secondary at best, but in no way connected with higher education. Here the European influence seems painfully clear.

Many of the trials and tribulations were mercifully concealed from Horace Mann, and, it is to be hoped, from James G. Carter, preeminent in campaign for teacher training as early as the 1820's. When the former spoke at the official opening of a new Bridgewater Normal School Building in 1846, it was his judgment that, "Coiled up in this institution, as in a spring, there is vigor whose uncoiling may wheel the spheres." One hundred and eighteen years later it is safe to say that Horace not only rose to the occasion but soared well above it. So slowly did the whole teacher training movement gain ground in Massachusetts that it was not until 1904 that 50 percent of the teachers in the Commonwealth (7,392 out of 14,741) had attended normal school, of whom 42.7 percent had actually graduated. (38, pp. 5-6)

The training period offered by the early normal schools was extremely brief; students stayed as little as eleven weeks.

Mr. A. E. Winship, an early student at Bridgewater, wrote

Reverend Cyrus Peirce, the first principal of Lexington Normal School.

that he entered when the institution was only twenty-three years old, but that he was in the sixty-first class... At best the length of the course was indeed short. In 1839 the Lexington course was one year in length; ten years later it was just one and one-half years; and it was not until 1860 that the course was lengthened to two years. (31, pp. 34-35)

Harper provides additional insights into the problems facing the early normal schools including accusations that even a preparatory course of this limited duration was excessive:

As early as 1840, the normal movement was almost crushed in its infancy. . . . On March 3, the committee on Education of the state legislature was directed by the House of Representatives to consider the expediency of doing away with both the Board of Education and the normal schools. On March 7, the majority of the Committee recommended the abolition of both institutions. This proposal was defeated by the legislature by a vote of 246 to 184.

The objections of the Committee are worth quoting: "The establishment of the Board of Education seems to be the commencement of a system of centralization and of monopoly of power in a few hands, contrary in every respect to the true spirit of our democratic institutions; and which, unless speedily checked, may lead to unlooked for and dangerous results. . . . Another project, imitated from France and Prussia . . . is the establishment of normal schools. . . . Academies and high schools cost the Commonwealth nothing; and they are fully adequate to furnish a competent supply of teachers. . . . Considering that our district schools are kept, on an average, for only three or four months in the year, it is obviously impossible, and perhaps it is not desirable, that the business of keeping these schools should become a distinct and separate profession, which the establishment of Normal Schools seems to anticipate."

But that was exactly what the normals were beginning to doto make a profession of teaching. (31, pp. 35-36)

Early and influential laboratory schools

From the outset, the normal schools evidenced a commitment to the inclusion of demonstration and laboratory practice as integral parts of the teacher training regimen. These activities were carried out in model

schools enrolling children of common school (elementary) age. Again,
Harper provides insight into these beginnings:

In October 1839 such a model school was organized at Lexington and the other schools followed suit. These early practice schools in Massachusetts were not outstanding successes. They were established on much too slender a financial foundation and the teaching staff of the normals was much too busy to give proper attention to the practice schools. In every case they languished and died and had to be revived as the experiences of normal schools outside of Massachusetts proved that practice teaching was essential in teacher education. (31, p. 32)

Norton (60) reveals much about this model school's operations by quoting from a letter written by the first principal of the Lexington Normal School, Cyrus Peirce. This correspondence was addressed to Henry Barnard who Harper (31) describes as an outstanding educational journalist, statesman and theorist who was largely responsible for the normal school movement in both his home state of Connecticut and in Rhode Island. An excerpt from the letter appears below:

This school consists of thirty pupils, of both sexes, from the age of six to ten, inclusive, taken promiscuously from families in the various districts of the town. dren pay nothing for tuition, find their own books, and bear the incidental expenses. After it was arranged, the general course of instruction and discipline being settled, it was committed to the immediate care of the pupils of the Normal School, one acting as superintendent, and two as assistants, for one month in rotation, for all who are thought prepared to take part in its instruction. In this experimental school, the teachers are expected to apply the principles and methods which they have been taught in the Normal School, with liberty to suggest any improvements, which may occur to them. Twice every day the Principal of the Normal School goes into the model school for general observation and direction, spending from one half to one hour each visit. In these visits I either sit and watch the general operations of the school, or listen attentively to a particular teacher and her class, or take a class myself, and let the teacher be a listener and observer.

After the exercises have closed, I comment upon what I have seen and heard before the teachers, telling them what I deem good, and what faulty, either in their doctrine or their practice, their theory or their manner. Once or twice each term, I take the whole Normal School with me into the model schoolroom, and teach the model school myself, in the presence of the pupils of the Normal School, they being listeners and observers. In these several ways, I attempt to combine, as well as I can, theory and practice, precept and example. In regard to the materials of which it is composed, and the studies attended to, the model school is as nearly a facsimile of a common district school, as one district school is of another. In regard to the discipline and management, I am aware there may be more dissimilarity. The superintendent is not situated precisely as she will be, when placed alone in a proper district school. This could not be effected without having several model schools. But, limited as is the field of operation for the superintendent, it is wide enough, as the teachers find, for the development of considerable tact and talent. From the model school we exclude all appeals to fear, premiums, or emulation; and yet, we have had good order, and a fair amount of study. (60, p. liii)

Commitment to the model school concept was demonstrated further by the fact that it was not abandoned when Lexington Normal School was transferred to West Union and, later, Framingham. In each instance, model school associations were resumed and maintained, at least, temporarily.

Following the growth pattern exhibited by the normal schools, New York was the next state to engage in model school development. David Page, who was installed as principal when the state normal school was established at Albany, secured the relationship of normal and model schools. He also was among the first to draw a distinction between the model and practice functions of these embryonic laboratory schools. He perceived the model function as closely approximating what has come to be known as observation and demonstration today; in the area of practice, he instituted a program of practice teaching of sufficient duration to effect

impact and credibility.

What came to be known as the "Oswego Movement" proved to be the second surge of impact emanating from the normal schools and their attendant model facilities, rivaling the impact exerted by Tillinghast and the Bridgewater Normal School. It was launched by the efforts of Edward Sheldon who was named board secretary and superintendent of the Oswego schools in 1853.

Sheldon, like Zeller (Prussia) before him, was particularly taken with the teachings of Pestalozzi, the well-known Swiss educator influenced by the writings of Rousseau. His philosophy of teaching-learning emphasized "real studies, based on observation, experimentation, and reasoning. Sense impression became his watchword" (18, p. 541).

Drawing on the Anglicized version of Pestalozzi's teachings, Sheldon developed a widely acclaimed instructional program in the Oswego public schools in his charge. Eventually, this led to what Harper (31) calls a well-organized model school and a city-supported teacher education program. "The legislature of New York on April 7, 1866, passed an act which would make the city training school of Oswego into a state normal school if certain conditions were complied with; and these conditions having been duly met, the buildings, grounds, and furnishings of the school were accepted by the state March 27, 1867" (31, p. 48).

For twenty years Oswego was a training center for normal school professors, training school critic teachers, and school administrators. Between 1861 and 1866, a total of 897 of the 1373 graduates of the Oswego State Normal School . . . had accepted teaching or administrative positions outside the state of New York although only 175 of these same graduates had originally come to Oswego from outside the state. (41, p. 11)

The Pestalozzi-influenced Oswego Movement proved to be a contagious force in stimulating the development of normal and model schools. Within two years after the Oswego institution was placed under state control in 1866, six more public normal schools were established in New York, bringing that state's total to eight.

Contemporary with these developments in New York, Henry Barnard, the recipient of Peirce's letter quoted earlier, was laying the ground work for the development of normal schools in Connecticut and Rhode Island. In fact, he served as state superintendent in Rhode Island from 1843 to 1849 and then assumed the principalship of the normal school opened in New Britain, Connecticut in 1850. While in Rhode Island, as a measure preliminary to the establishment of that state's first public normal school in 1854, "Barnard converted one district school in each town or county into a model school which young and inexperienced teachers could visit for demonstrations of good teaching" (31, p. 58). He continued to demonstrate his high esteem for model schools upon his return to Connecticut.

The New Jersey State Normal and Model School was established by act of the state legislature in 1855, being the ninth state normal in the United States. . . . The early normal of New Jersey strengthened the practice school concept of New York and Connecticut and added a forceful increment to the notion of the education a teacher should receive. (31, p. 62)

William F. Phelps, who was trained at Albany and eventually became supervisor of the "experimental school" there, served as the first principal of New Jersey State Normal before moving on to assume the presidency of Winona Normal School in Minnesota and later, the same position

at State Normal of Whitewater, Wisconsin. At the first national convention of normal school teachers in 1859, Phelps countered the skepticism of Massachusetts representatives for model schools, with which they had had little lasting success, with the statement: "I look upon them as indispensable. I do not think a normal school is complete without them!" (31, p. 65).

In New Jersey's wake, Pennsylvania was the next state to give model schools legal status:

The Pennsylvania law of 1857 divided the state into twelve districts, each of which might have a normal school. [This number was increased to thirteen in 1874] These schools were to be erected and controlled by private corporations. . . . The course of study and entrance qualifications were to be determined by normal-school principals and approved by the state superintendent of schools. The requirements in the way of equipment to be met before a normal could be designated as a state normal were: ten acres of ground, buildings to accommodate 300 students, a model school having at least 100 pupils, and a normal school faculty of at least six professors. (31, pp. 66-67)

The number of both normal and laboratory schools increased rapidly after the Civil War which had temporarily interrupted their development. "Reports of the United States Commissioner of Education in 1874 listed a total of 67 state normal schools, of which 47 maintained laboratory schools" (41, p. 12).

Following these examples of the status that model schools had achieved in teacher education movement, the next philosophical wave to surface in the field was Herbartianism which appeared in the late nineteenth century. Herbart, a professor of philosophy at Konigsberg, Germany, had developed an educational theory and method while dabbling with a practice school he had organized in addition to his professorial duties.

He addressed himself chiefly to three things: (1) the aim, (2) the content, and (3) the method of instruction. . . . The chief purpose of education Herbart held to be to develop personal character and to prepare for social usefulness. (18, p. 760-61)

This being the case, the educator should analyze the interests and occupations and social responsibilities of men as they are grouped in organized society, and, from such analyses, deduce the means and the method of instruction. (18, p. 761)

Herbart maintained that man's interests were related to his environmental perceptions and his social contacts. Pestalozzi had adequately provided for environmental studies and language in the elementary curriculum but, in order to better accommodate social interests, Herbart suggested the addition of literature and history with a social emphasis. Although he did not use this term, motivation was the cornerstone of the method he espoused. He was the first writer to emphasize proper instructional procedures over content. "He thus conceived of the educational process as a science in itself, having a definite content and method, and worthy of special study by those who desire to teach" (18, p. 761).

Although Herbart died in 1841, his ideas sparked little interest until 1865 when Ziller published a book setting forth his philosophy.

The movement began to spread when one of Ziller's pupils, William Rein, was placed in charge of the practice school associated with the pedagogical seminary at the University of Jena in 1885.

Early American proponents of Herbart's theories included Charles

De Garmo and Charles McMurry of Illinois State Normal School, both of

whom had taken graduate work at the University of Jena.

From the normal schools these ideas spread rapidly to the better city school systems of the time and soon found their way into course of study everywhere. Practice schools and the model lessons in dozens of normal schools were modeled after the pattern of those at Jena, and for a decade Herbartian ideas and the new child study vied with one another for the place of first importance in educational thinking. (18, p. 763)

Although Cubberly suggests that the Herbartian and child study or experimental theories were vying for attention, they were by no means incompatible as evidenced by the electic manner in which two of the early child-study proponents merged the two schools of thought. Noteworthy in this regard were Francis Parker who gained fame at Cook County Normal School (Chicago) where he became principal in 1883 and John Dewey who needs no introduction. Parker went on to head up the Chicago Institute which later became the School of Education at the University of Chicago (1901). The training school at Cook County Normal was probably the first of the experimental-type laboratory schools. "From the beginning the laboratory schools of these institutions practiced experimentation, curriculum study, and the investigation of the science of teaching" (41, p. 25). Through his leadership, which often was controversial, the institutions he headed became national centers for new ideas and practices in teacher education.

Parker combined Pestalozzian methods with Herbartian organization around a central theme, added Spencerian concerns for science instruction, and advocated Froebelian kindergarten principles of self-expression along with greater freedom for children and teachers in the educational process.

The paths of Parker and Dewey, a charter member of the Society for the (Scientific) Study of Education -- a Herbartian organization headed by McMurry, crossed at the University of Chicago. Dewey joined the faculty as head of the Department of Philosophy and Education in 1894 and, in 1896, he established the University Elementary School where his wife served as principal until 1904. Upon Parker's death in 1902, he succeeded him as Director of the School of Education.

Dewey was probably the foremost educational philosopher in impact upon the schools during the first half of the twentieth century. He conceived and stated an educational philosophy that was widely accepted and followed. Both his experimental and his theoretical work tended to "repsychologize" education, to add practical content, and to interpret modern society to the child by relating the activities of the school closely to those of real life. (41, p. 28)

When Charles Judd succeeded Dewey as Director of the School of Education in 1909, he chose to moderate the laboratory school's position, selecting a course midway between the rigidity of traditional schools and the degree of freedom advocated by Dewey. However, the school's experimental bent was retained.

Upon leaving the University of Chicago, Dewey joined the faculty of Columbia University in New York City, an institution that is equally rich in laboratory school tradition.

Teachers College, New York City, opened in September, 1887, and at the same time a "Model School" was opened which became known as the Horace Mann School. This laboratory school was designed to be one in which "professors of education might experiment with the curriculum and methods of teaching as professors of science experiment in the laboratory." Although the Horace Mann School was ahead of its time in curriculum study, the need for the use of the school in the training of teachers and for observation by graduate students and other educators, together with the opening of the Speyer Laboratory School in 1899, ultimately resulted in Horace Mann's becoming more of a demonstration than experimental school. The Horace Mann School concentrated upon the improvement of instruction "through the existing subjects of study" and exerted an

extremely important influence during its time through the large numbers of graduate students and visiting educators who studied its practices, materials, and methods. (41, p. 27)

The aforementioned Speyer School was somewhat unique in its time in that it did not charge tuition of its patrons thereby facilitating the assimilation of a student body more typical of urban public schools. The school's principal aim was helping its clients achieve social efficiency. It included a kindergarten, eight elementary grades, offered a variety of adult education activities, and it featured curriculum adaptations designed to meet the needs of the local community. In 1913, emphases were shifted from elementary to junior high education.

Twentieth century developments

The 1900s witnessed the spread of the child study or experimental school concept. Among those most frequently mentioned in the literature is the eight-grade laboratory school established at the University of Missouri under the direction of J. L. Meriam in 1904.

From all accounts the school associated with Meriam's name was an unusual and bustling one. Like Parker's [Chicago] it was guaranteed to "terrify the conservative." It was a school where "subjects" in the ordinary sense were abolished, where what came to be known as "block-scheduling" replaced the standard class periods of so many minutes, where something like an advanced core curriculum with emphasis on personal problems of living was in operation. . . (39, p. 25)

Teachers College at Columbia University continued to remain in the business of establishing laboratory schools. In 1917, Lincoln School, its third laboratory school, was established.

The purpose of this school was to endeavor to assist, by experimental methods, in the reorganization of subjects and methods of study which were already established in elementary and

secondary education. No practice teaching was permitted, and observation was limited in this school. (62, p. 31)

The experimental schools certainly were not without their critics and detractors:

Of similar schools which were undoubtedly "experimental" as traditional model schools never were, one may read sympathetic descriptions in Dewey's book. That they were heralds of "schools of tomorrow" seems so far to have been an overly-optimistic view. For if they scandalized old-line educators they were also found wanting by those who reverenced not tradition but the canons of science and measurement.

Bonser spoke out strongly, and it would appear with considerable effect, when he was sharply critical of the claims made by many of the new-type experimental schools. He examined eleven of them and charged that on the whole they appraised their work subjectively and philosophically, rather than scientifically. He went on to say, "There is provision for no testing of results in comparison with results from control situations which would afford objective evidence of measurable differences in achievement, if such exist. Both the amount and value of achievements claimed, rest upon assertion rather than upon incontrovertible evidence." The laboratory schools at the Universities of Iowa and Chicago and Lincoln School in New York were given a good bill of health. Bonser considered that they "employed the most thorough-going scientific procedure" in curricular experimentation. (38, p. 26)

Hutton (39) was particularly critical of the lack of initiative demonstrated in testing and adopting technological advances. Among the deficiencies he cited was the apparent reluctance of laboratory schools to adapt motion pictures, radio, slides, and other media for instructional uses. Furthermore, he decried the lack of meaningful research, especially in view of the fact that this was an avowed purpose of many of the schools.

Although the teachings of Dewey exerted continuing influence during the first half of the twentieth century, no new schools of thought or widespread methodologies emanated from the laboratory schools during that time which could rival the Pestalozzian, Herbartian and experimental school influences of earlier times. The literature is virtually silent on the topic of laboratory school influences during this period with the exception of acknowledging their potential training value as perceived by accrediting agencies. Even Harper (31), whose writing chronicles teacher education developments and laboratory school influences during the eighteenth and nineteenth centuries (to 1939), has little to say about the period following the spread of the experimental school concept.

Formal recognition of the teacher education potential of campus laboratory schools was well documented in 1926 by the American Association of Teachers Colleges at their annual meeting when they adopted Standard VII-A which stated, in part, that a "teachers college shall maintain a training school under its control for purposes of observation, demonstration, and supervising teaching on the part of students. (48, p. 21)

However, Standard VII-A could be satisfied by the utilization of cooperating schools in the provision of practical experiences. The enduring nature of this standard is exemplified by the 1960 and 1970 NCATE standards which retain its basic substance.

Probably the most profound changes during the early part of the century were taking place in the laboratory schools' parent institutions, the normal schools. After considerable controversy, and the valiant efforts of the midwestern normal school presidents who conspired to found the North Central Council of Normal School Presidents prevailed and the normal schools achieved college status. (It--NCCNSP--later evolved into the American Association of Teachers Colleges and, later still, the

name was changed to the American Association of Colleges for Teacher Education.) Michigan State Normal School at Ypsilanti was the first to award a four-year degree in 1905.

With the impetus from the middle and far West the Department of Normal Schools of the National Education Association in 1908 drew up a <u>Statement of Policy for the Normal Schools</u> which became a veritable platform for transforming normals into teachers colleges. It was here strongly urged that: "Good as the word 'normal' is, it should be dropped from the name of these schools and they should be called Teachers Colleges." (31, p. 138)

Institutions in the West and South adopted the change rather quickly, but those in the East were met with delays, largely because of the dominance exerted by long-established seaboard colleges and universities.

The Normal School at Trenton, New Jersey did not fully complete the transition until 1937.

The movement for college status was prompted by the rapidly increasing numbers of high schools that were developing in the country. Heretofore, the training of secondary teachers was the prerogative of colleges and universities; in order to gain credibility and participate in the training of secondary teachers, the normal schools were compelled to seek college status. This movement and its underlying causes subsequently affected laboratory schools as many added secondary grades to accommodate expanding training needs.

Studies of laboratory schools were also on the increase, most of which were demographic in nature. Kelley (41) cites statistics from a number of these studies, some of which are digested below:

1. Unidentified (1910): There were approximately two-hundred

public and seventy-five private normal schools operating in the United States.

- 2. Walk (1915): In a study of sixty representative state normal schools, seventy-eight percent maintained their own laboratory schools and 22 percent utilized cooperating schools.
- 3. American Association of Teachers Colleges (1927): With 113 member institutions out of 150 responding to an organizational survey, the survey committee concluded that all of the institutions, with one or two possible exceptions, either maintained or were affiliated with schools for practice teaching purposes.
- 4. Williams (1934): In a study of 111 American Association of Teachers Colleges member institutions, it was found that eighty-eight maintained campus schools that encompassed the junior high grades and fifty-four operated laboratory schools that included grades eleven and twelve.
- 5. Carrington (1938): Of 194 normal schools and teachers colleges reporting, 154, or seventy-nine percent maintained campus laboratory schools; of 161 multipurpose colleges and universities surveyed in the same study, fifty-nine, or thirty-seven percent, maintained laboratory schools. Thus, 213 laboratory schools were believed to be in existence at the time.

Commenting on the Williams study, Hutton (39) concluded that few laboratory schools were used for experimental purposes. The overriding functions were student teaching (95.4 percent) and observation (94.5 percent).

The fate of the Horace Mann and Lincoln Schools at Teachers College, Columbia University in 1948 may well have signified in advance the threats to their existence many laboratory schools would face in the quarter century that followed. According to Hutton (39), these two schools which were merged in 1941 left a meager legacy of research but, separately and as a unit, they focused their efforts in the area of curriculum and were highly productive in the development of curricular materials such as tests, workbooks, units, etc.

In any event, the Horace Mann-Lincoln School was disbanded. According to Kelley (41), this school's departure from the nontuition policy of the earlier Speyer School contributed to its demise due to the fact that the elitist nature of the resulting student body severely handicapped research efforts. Hutton also emphasizes this point:

Somewhere there seemed to be a fatal weakness that prevented Lincoln and the merged Horace Mann-Lincoln School . . . from having any great influence on school systems throughout the country. The fact that the pupils paid tuition fees and fees that were much more than nominal (\$200 to \$300 a year in 1917 and within ten years from \$300 to \$500) introduced a selective factor not found in the public schools. When one reads that 75 of Lincoln's first 78 graduates went on to college the selectivity becomes dramatically obvious.

In terms of experimentation that was widely applicable, Horace Mann-Lincoln "proved a disappointment" and its fate was definitely sealed when it was a "disappointment financially" as well. The doors were closed at the end of the 1947-48 school year. (39, pp. 27-28)

1950 to 1960

This decade saw another phenomenon affecting the traditional host institution of the laboratory school—the teachers college, nee normal school. A move was underway to accomplish yet another name change

and the accompanying role modifications implied. Bigelow provides some insight into the strength of this trend while commenting on the changes taking place in the 164 normal schools he had been studying on a long-itudinal basis:

But now let us take a look at what has happened to our 164 institutions during the eighteen years <u>since</u> 1938. None, of course, remains a normal school, and only three retain the word "normal" in their titles--now "normal college" or "university." But the word "teachers" has also proved to be only a temporary part of many institutional names . . . in 1938 about three-quarters of the institutions I have been studying "both were and called themselves 'teachers colleges.'" By 1956 the proportion using that title had fallen below one-half and the proportion actually limiting themselves to teacher education considerably below that The popular move has been to the name "state college," although even the word "state" is increasingly dispensed with.

In 1920, 98 per cent of my 164 institutions were classifiable as "primarily teacher preparatory"; in 1938 that proportion had fallen only very slightly, to 92 per cent; but by 1956 the figure had plummeted to 38 per cent. (5, pp. 2677-78)

Bigelow concluded that the teachers college was on the way to oblivion and it was proving "to have been a way-station between the normal school and the state college--whether or not so-called--a multi-purpose institution for which teacher education is only one among several functions" (5, p. 2678).

The shifting roles of host institutions and the enrollment increases that were beginning to be observed during the decade would have important future implications for laboratory schools along with other developments. McGoech (51) cites two of these as being important antecedents to the pressures that eventually would be brought to bear on laboratory schools: the failure of Horace Mann-Lincoln School in 1948 and the

recommendations of the American Association of Teachers Colleges, the forerunner of AACTE.

Another event which occurred in 1948 had an even more immediate effect on the role of the campus school. The subcommittee on School and Community Laboratory Experiences of the American Association of Teachers Colleges published a report which emphasized pre-student-teaching laboratory experiences and student teaching in a variety of "representative" situations. The influential report and the concern for more effective ways of influencing practice in the schools gave impetus to the development of a variety of cooperative arrangements between colleges and school systems. Student teachers were placed for all or part of their experience in off-campus schools and college staff members, including campus school teachers, began to work with their neighboring schools. (51, p. 4)

There is little reason to doubt that the adoption of this recommendation was accelerated by enrollment increases that overtaxed existing laboratory schools which formerly had held the major responsibility for the provision of laboratory experiences, including student teaching.

The net result of the aforementioned influences—the trend toward role diversification in the colleges, the failure of the notorious Horace Mann-Lincoln School, the increasing numbers of students to be served, and increasing emphases on college—school cooperation—was a more intense scrutiny of laboratory schools in examination of their contributions to college and university programs. In effect, there was a growing awareness of the possibility that the traditional needs and functions they served could be accommodated in other ways. The research concerning laboratory schools during this period reflected this growing awareness.

Evidence of the heightened awareness and concern about laboratory schools is provided by the fact that the Association for Student Teaching

(more recently known as the Association of Teacher Educators) devoted its entire thirty-fourth yearbook (1955) to this topic. It was entitled: <u>Functions of Laboratory Schools in Teacher Education</u> (62).

Research on laboratory schools While the research emphasis on laboratory schools remained largely demographic, more attention was being given to the investigation of current and future laboratory functions and roles.

Exemplary of the greater involvement of noncampus schools in meeting student teaching needs is Rucker's study (69) in 1952. Replies representing 113 laboratory school-sponsoring teacher education institutions, showed that only seventeen relied exclusively on campus schools for meeting their student teaching needs. Similarly, only sixteen institutions relied solely on off-campus schools. The eighty remaining institutions utilized both campus and off-campus schools in meeting these needs.

Kelley (42) provided a comprehensive summary of the research on laboratory schools during the decade. A few selected findings should help the reader grasp the tenor of the times.

E1-Shibiny (20), in 1951, concluded that laboratory schools should discard the traditional student teaching function in favor of experimentation, research and leadership to the profession.

Rucker's investigation in 1952 (69) focused on student teaching trends at the time. Of 185 institutions sponsoring laboratory schools, an overwhelming percentage used them for demonstration, student teaching, participation, and observation--85.7 percent and up were utilized for these

purposes. A lesser number, 37.2 percent were employed in research activities. Other noteworthy findings included: (1) 56.7 percent reported that laboratory activities other than student teaching were on the increase whereas only 3.2 percent were experiencing decreases; (2) 36.7 percent had increasing student teaching responsibilities, but 25.4 percent reported decreases in this area; (3) research emphases were on the increase in 20.1 percent of the institutions reporting and declining in only 1.6 percent; (4) 21.6 percent reported no changes in activity emphases.

Bucklen's investigation (12), also in 1952, involved the analysis of twenty-nine research studies and the professional literature generated between 1945 and 1950 for purposes of evaluating the status and functions of laboratory schools. Many of the conclusions he reached reemphasize the points made by the El-Shibiny and Rucker investigations. Additional conclusions were: (1) there is widespread confusion regarding laboratory school purposes; (2) efforts are being made to dispel this confusion; (3) few laboratory school programs are guided by written, well-defined statements of purpose; (4) fewer functions are demanded of individual laboratory schools due to increasing outside provisions for student teaching; (5) the latter should facilitate greater involvement on the part of laboratory schools in research, professional leadership and inservice functions; (6) teacher education programs should center on the campus school; (7) local conditions should dictate the functions of individual laboratory schools.

Despite the apparent movement calling for increased research

activity in laboratory schools, Southall (73) found in 1955 that experimentation and research ranked fifth behind the traditional laboratory responsibilities in a survey that included 113 laboratory school directors in the sample. Similarly, Lang (44) in an investigation involving seventy-five publicly-supported, college/university-controlled secondary laboratory schools conducted in 1957, found that thirty-one of them had not done any experimentation in the two years preceding the study.

Commenting on the state of affairs pertaining to educational research, Lindsey concluded:

Although a limited amount of experimentation and research is going on in laboratory schools, even less seems to be present in off-campus schools. (46, p. 62)

Laboratory schools and professional organizations The 1950s gave rise to a national professional organization comprised entirely of laboratory school representatives, the Laboratory School Administrators Association (LSAA). The formation of the Midwest Laboratory School Administrators Association in 1948 preceded the institution of what later became the parent organization of this group.

The midwest organization evolved from a conference hosted by the University of Iowa that was held at Iowa City, Iowa in that year. Sixty-three educators representing forty colleges and universities from sixteen of the nineteen states that comprise the North Central Association (NCA) were in attendance. "The Midwest LSAA--though organized and operated informally, without a constitution, by-laws, written rules, central headquarters of permanence or officers of tenure--has met annually for

two or three days each fall since 1948" (40, pp. 192-93). On occasion, meetings also were held as deemed necessary during the annual NCA Convention in Chicago each spring.

The national organization grew out of a conference of laboratory school administrators held March 22 and 23, 1957, in Cincinnati, Ohio. Robert Fox, Director of the University School, the University of Michigan was chairman of the conference. Jerry Kuhn, Principal of the University Elementary School, the State University of Iowa, served as secretary. The conference was hosted by William Jennings, Coordinator of Instruction, the University School, Ohio State University. . . .

It was the consensus of members of the conference that there was need for a national organization of laboratory school administrators which could perform services and supply media of communication on a nation-wide basis such as were offered by the Midwest LSAA in the area covered by the North Central Association. Robert Fox was named charman of a committee to develop a constitution and to plan for another national meeting of laboratory school administrators. (40, pp. 193-94)

The second meeting was held in Philadelphia on March 21 and 22, 1958 and LSAA was formally organized. The first slate of officers included: Avard Rigby of Brigham Young, President; Andrew Rippey of Fresno State College, Vice-President; Lynn E. Brown of County Day School, Philadelphia, Secretary-Treasurer; and Robert Ohm of the University of Chicago, Newsletter Editor.

After due consideration, it was decided that an annual convention should be held in conjunction with those of the American Association of Colleges for Teacher Education and the Association for Student Teaching (later Association of Teacher Educators) in Chicago each February. This practice was initiated in 1959.

In 1971, the name of the LSAA, by virtue of the adoption of a new set of by-laws, was changed to the National Association of Laboratory

Schools (NALS). The new name and by-laws carried with them an emphasis on extending membership privileges to laboratory school faculty in addition to administrators.

Over the years, the organization has sought to provide inservice opportunities for members and to serve as an avenue of communication both inside the organization and throughout the educational profession. During the early history of the organization, the <u>NALS Newsletter</u> (nee <u>LSAA Newsletter</u>) was published three times yearly--in fall, winter and spring editions. However, in 1975, the name of the publication was changed to the <u>NALS Journal</u>.

Before taking leave of the 1950s one should be apprised of the problems facing laboratory schools in that era:

Blair, Curtis and Moon (9), comprising a joint committee for the AST and the AACTE in 1958, studied the purposes, functions, and uniqueness of the college-controlled laboratory school. They found five critical problems affecting the role of the campus laboratory school that follow:

- 1. Expanding demands for a broader concept of professional laboratory experience in the laboratory school.
- 2. Rising costs of both program and facilities.
- 3. Increased pressures on all personnel in the school, both staff and pupils.
- 4. Problems of integration of professional laboratory experiences with the total college or university program.
- 5. Greatly increasing difficulty in the recruitment and retainment of the highly qualified and competent teachers desired. (42, pp. 53-54)

This joint committee also offered the suggestion that the problems of the laboratory school, including the determination of roles and goals, could best be approached through collaborative efforts of college and laboratory school faculty while keeping the following criteria in mind: "(1) significance in the teacher education program; (2) complexity of performance; (3) laboratory school staff judgment; (4) pupil welfare; (5) parent support; and (6) all-college cooperation" (42, p. 54).

Possible functions were also suggested: "(1) the exemplification of theory in practice; (2) provisions for direct experiences; (3) experimentation and research; (4) professional leadership; and (5) other professional services, including production centers for teaching aids, telecasting, and broadcasting" (42, p. 54).

The Present

1960 to 1969

The 1960s proved to be merely an extension of the previous decade. Enrollments continued to climb and laboratory schools were subject to ever-increasing scrutiny. Host institutions continued their transition to state college status and began tooling up for the next shift in role and nomenclature--the achievement of university status.

Some made the transition alone and retained their identity. Many of these either retained or adopted regional references in their newly assumed names, i.e., University of Northern Michigan, . . . of Eastern Michigan, . . . of Western Michigan; each of the compass points of Illinois; likewise for Missouri, but it went for Northeast, Northwest,

Southeast, Southwest and Central; . . . Northern Iowa, <u>ad infinitum</u>.

Others were adopted as branch campuses of their state university system, notably New York and Wisconsin.

This transition was not accomplished with any less controversy than was characteristic of the move from normal schools to teachers colleges.

The words of the Seventh Annual Report of the Carnegie Foundation for the Advancement of Teaching, which was presented in 1912, appeared to echo into the 1960s:

How great a part personal and institutional ambition has played in the development of educational politics it would be difficult to say, but the results of it can be seen in every state where the divided institution exists. These appear usually in two forms: first, the endeavor of each institution to cover the whole field of education and the consequent duplications which ensue; secondly, the widespread tendency to drop the legitimate work for which the institution was founded in order to take up some other work, which appeals to the ambitions of its president, or of its board of trustees, or of its faculty or alumni.

Where three or four institutions exist, this rivalry has inevitably led to much commerce with the legislature, to overlapping institutions, and in nearly all cases to a strenuous struggle for students. (71, p. 2670)

The University of Northern Iowa exemplifies the evolutionary development of the institutions that began their existence as normal schools: it was founded in 1876 as Iowa State Normal School; in turn, it became Iowa State Teachers College in 1912, the State College of Iowa in 1961 and the University of Northern Iowa in 1967. Many institutions have similar histories, and some, like Western Michigan University, carried the name business even farther; it logged time as Western Michigan College of Education between its teachers college and college phases.

Social and humanitarian influences were also surfacing in the form of demands for relevancy, school desegregation efforts, and a growing concern for the education of exceptional children that began with improved provisions for the mentally handicapped and was extended to include other areas of exceptionality. These influences generated an awareness of the need for differentiated, alternative teaching methods, multiethnic course and materials emphases, and broadened perspectives in the training of teachers.

Many laboratory schools were ill-equipped to meet these needs, largely due to the fact that the previously-mentioned criticism of the elitist nature of the student body at Horace Mann-Lincoln School following its closure in 1948 was not uniquely applicable to that institution. Other institutions, as well, had accumulated equally unrepresentative student populations through highly selective admissions policies, prohibitive tuition rates, and offering preferred admission status to the offspring of their colleagues on college and university faculties.

The changing roles of host institutions and continually rising enrollments did little to stabilize the functions and status of the laboratory school. In reality, they served to fragment the comparatively cohesive support formerly provided by the host institutions when they were
engaged almost exclusively in teacher education. The scene was set for
the intense competition for space and funding that was to follow.

The title of Rzepka's (70) article, "The Campus School: Its Search for Identity," is especially descriptive of the challenges that laboratory schools were beginning to face during this period.

H. M. Brickell, in a report of the New York State Education Department was scathingly critical; in the words of Hutton:

Perhaps the sharpest criticism on record of a group of campus schools is that of Brickell. He concluded that those at New York's eleven state university colleges were not experimental and were subject to "powerful restraints that made bold experimentation impossible." They seemed to be wedded to the theory that "the best known methods" should be demonstrated, that untested methods should be left severely alone. Brickell was satisfied that "in the eyes of the public schools, the campus schools are abnormal, artificial and unreal." He granted that they are conveniently located and do provide "readily accessible artificiality." He made one recommendation about them. They should be closed. (39, pp. 551-52).

Although Brickell's recommendations were not to be implemented for another fifteen years, they were not lost from sight or mind. Buck, reflecting on these recommendations in 1975, wrote:

Unfortunately the conclusions which were reached were based on faulty premises lacking substantive supportive data. Be that as it may statements in print have a tendency to stay alive in the memory of those who agreed with the recommendations. (11, p. 14)

Brickells' charges related to tranditionalism and conventionality serve to point up a dilemma laboratory schools have long confronted.

As far back as the 1800's, leaders in teacher education were debating the proper function of the laboratory school. In the early days, the debate was concerned with whether the laboratory school should: (1) duplicate as closely as possible conditions that would be found in a "typical school," or (2) demonstrate new and better teaching methods and materials.

This same debate still rages today in laboratory school circles. . . (5, pp. 54-55)

Obviously, the laboratory school of the 1960s was leading an increasingly threatened existence. In the introductory chapter of her report on the laboratory schools in Wisconsin in 1968, Dorothy McGoech

stated:

There is no doubt that the campus schools are feeling the threat to their continued existence. One evidence of this is the increased emphasis on research and experimentation. The demonstrated need for better teacher education programs, the search for academic respectability in institutions which are rapidly becoming multi-purpose state universities, and newly developed graduate programs are all contributing causes of this emphasis. For many schools, however, the desire to claim some attention to research is one more attempt to insure [sic] survival.

For, like the condemned man who tries all avenues of appeal in the hope that something will work, the campus school of the 1960's is seeking desperately to hold on to the familiar functions which it knows well while at the same time adding whatever seems necessary and desirable to gain the support and security required to continue its existence.

But there are dangers, too, in attempting more than the available resources of the individual schools can support. The search for a unique function and identity is at present the major task of the laboratory school. (51, pp. 5-6)

Although greater emphases on research and experimentation were most frequently mentioned as appropriate new directions for laboratory schools to take, other avenues were explored as well. To name but a few, among them were: (1) curriculum development and materials generation (often referred to as research and development activities); (2) the provision of consultant services and inservice opportunities for other schools and educators; (3) multiethnic educational projects emphasizing integration and appropriate instructional adaptations; (4) greater involvement in the education of exceptional children, particularly the mentally handicapped and learning disabled; (5) downward extensions of early childhood education (labeled by some wags the "womb to tomb" approach); (6) increased involvement in educational applications of video techniques and

equipment; (7) new staffing and organizational schemes; and last but not least; (8) involvement in new approaches to teacher education, notably performanced-based teacher education, microteaching, etc.

Regardless of the directions they took in the redefinition of roles and functions, there was one thing that most laboratory schools held in common-the vigor with which they sought to publicize what they were doing. "Publish or perish" became much more than a tired cliche, it became a way of life for laboratory schools as they attempted to marshall public and political support. "Dissemination" became a watchword.

Rare indeed was the school that did not institute the publication of a locally-prepared research report, newsletter or bulletin of some type, and faculty-published journal articles and commercially available instructional materials were highly prized.

Howd (35) credits, in part, the sharp criticisms regarding the relative dearth of information about laboratory schools and their contributions in Bixby and Mitzel's compilation (6) with awakening the renewed vigor with which the problem of communication was being attacked.

Another phenomenon was observable in the behavior of laboratory schools during this period. Taking a cue from their host institutions, some of which had undergone as many as four name changes during the course of their existence, many were adopting new titles along with new roles and functions. Popular inclusions in these titles were such terms as: research and development, innovation, learning center, demonstration, education center, research learning center, etc. Probably the most elaborate of titles was adopted at the University of Wisconsin--Stevens

Point which opted for "Gesell Institute for the Study of Early Child-hood."

The popularity of the name change movement is evidenced by the item in Howd and Browne's 1969 survey which asks, "Is there a study on [sic] plan to change organization or names to emphasize new or changed function?" (36, p. 6). Twenty-eight percent of the respondents to that national survey replied that they had undergone name changes.

Regarding this phenomenon, Bigelow's comments on the propensity of teachers colleges for assuming new names could be applied to laboratory schools as well:

Now I do not want to make too much of changes in names, it being notorious that function cannot safely be inferred from the title of an American institution of higher education. (5, p. 2678)

McGoech (51) was quoted earlier on the dangers of laboratory schools assuming more responsibilities than their limited resources can bear. Another perplexing problem that confronted laboratory schools during this period—and it continues to do so—was how to conciliate the sometimes incompatible and often marginally compatible demands of their various roles. This is particularly true of the demonstration, research and student—teaching functions as well as the desire to provide exemplary educational programs for the children enrolled.

The latter, of course, is important for the maintenance of credibility in the profession and for securing and holding patron support.

Many parents would hesitate to put their children in a laboratory school if they felt they would be guinea pigs. They do not want anyone to try out untested theories on their children, and they cannot be blamed for this attitude. If research is to succeed in a laboratory school, parents must be constantly assured that the hypotheses being tested are the best inferences the staff can make from present information. . . . They should be helped to understand that any educational program is based on certain hypotheses and assumptions, and that the only difference in the laboratory school is that evidence is continually being collected to test whether present assumptions are really valid. They should also know that teachers who test hypotheses in which they believe do better teaching. (81, p. 122-23)

However, many authorities cautioned against over-emphasizing this function to the detriment of others. According to Lathrop and Beal:

In the opinion of the writers most college-related schools cannot continue to exist as autonomous entities whose primary function is the education of a population of elementary or secondary school children. If the campus school is to survive it must re-examine its objectives and functions, relating them to the broader purposes of the academic setting in which it exists. For many laboratory schools such a re-alignment of functions will mean a de-emphasis of responsibility for the education of a continuous population of elementary or secondary school pupils. . . . In most schools such a re-alignment of purposes will be agonizing, requiring re-establishment of long dormant relationships with academic faculty and substantial re-orientation of laboratory school personnel. (45, p. 94)

Of the potentially negative relationship between demonstration and research, White concluded:

In the opinion of the writer, the laboratory schools may have to choose between research and demonstration functions. Properly controlled research is not usually compatible with the insertion of variables which is a part of an exhibition situation. (80, pp. 69-70)

A source of continuing debate among laboratory personnel has been the compatibility of student teaching with other laboratory school functions. Research advocates tend to call for the deemphasis of student teaching for the same reasons that White (80) cites for the incompatibility of demonstration and research functions.

Furthermore, heavy commitments to student teaching may interfere

with the effectiveness of the demonstration function as well. The neophyte (student teacher) is seldom well-equipped to perform in the exemplary manner demanded by exhibitionary functions. Owing to his/her limited experience, neither is the teacher-in-training's confidence equal to the demands of these situations. As a result, the effectiveness of either or both of these functions may be compromised when they are given simultaneous emphasis.

That many laboratory schools directors were recognizing this fact is pointed out by Howd and Browne's (36) finding that less than half of the schools polled considered student teaching to be one of their "important activities in 1969 as compared with the findings of Kelley's survey in 1964 (42) in which sixty percent of the respondents ranked student teaching among their top three responsibilities.

Unfortunately, few laboratory schools were afforded the luxury of limiting their roles solely to compatible alternatives because of institutional service demands and a desperate need to justify their existence.

The evidence, again, is clear. The campus school exists to serve institutional purposes and, where such purposes are not clearly implemented, the school loses much, if not all reason for being. (51, p. 21)

Consequently, the norm seemingly was the assumption of a variety of sometimes conflicting roles which exceeded the capacity of available resources and were carried out at less than optimum levels of effectiveness.

The late 1960s were times of extreme stress for laboratory schools in many states where state-wide inquiries were launched to consider the relative merits of their continuing existence and closure. The adjoining

states of Michigan and Wisconsin were noteworthy in this regard.

The Wisconsin investigation originated in April 1967 when the Council of Presidents of the Wisconsin State University System requested that a report on laboratory school activities be prepared by the deans of education representing each of the eight branch campuses and the University of Wisconsin--Milwaukee, all of which maintained campus schools. Although the University of Wisconsin--Madison was represented, it no longer sponsored such a facility. The resulting reports were presented at the Wisconsin Conference on June 28, 29, 30, 1967. This conference, the complete title of which was "The Wisconsin Conference: Roles and Functions of the Laboratory Schools in the State University System," was conducted under the joint sponsorship of The Johnson Foundation and the Upper Midwest Regional Educational Laboratory (UMREL). "Agencies or groups represented were: The Coordinating Council for Higher Education, The Board of Regents of the Wisconsin State University System, The Wisconsin State Department of Public Instruction, The Upper Midwest Regional Educational Laboratory, the laboratory school directors, and the Council of Deans of Education" (67, p. 3).

Growing out of the conference was a list of goals and objectives for laboratory schools and the recommendation that a more complete study of the state's laboratory schools be undertaken. As recommended by UMREL, the services of Dorothy McGoech of Columbia University were secured to conduct the investigation.

The results of this study were reported in August 1968: six implications and four recommendations emerged. Briefly, the implications

inferred that: (1) the contributions of laboratory schools can be evaluated only in the context of the host institution and in respect to its needs; (2) the schools under study were overextending their resources as a result of the many roles they were attempting to assume; (3) they were in need of more clearly defined purposes; (4) closing laboratory schools, of itself, will not promote economy; (5) the development of more cooperative programs with public schools is desirable; and (6) campus schools possess no irreplaceable function.

The nine laboratory schools in question received a "stay of execution" when Dr. McGoech's report made the following paraphrased recommendations:

- 1. Henceforth, each laboratory school should be evaluated solely on its own merits in its own institutional context. Each host institution should have the prerogative of determining the future of its laboratory facility.
- 2. The institutions should support "as fully as possible" efforts to develop alternative, off-campus means of providing laboratory and clinical experiences.
- 3. The host institutions should continue to study their laboratory schools and develop their potential for limited, manageable, unique functions.
- 4. "And finally, it is recommended that future study of the Coordinating Council for Higher Education concern itself with the professional education of teachers in Wisconsin. . . . [It] would make possible an assessment of the remaining campus schools in the context of the institutional programs they support" (51, p. 46).

The laboratory schools in Michigan were not so fortunate. Due to a variety of contributing factors, plans were formulated so that by the end of the 1970-71 school year all of the laboratory schools in Michigan's public institutions of higher education would have closed their doors for the last time. Those institutions affected were the University of Michigan (Ann Arbor), Central Michigan University (Mt. Pleasant), Eastern Michigan University (Ypsilanti) and Western Michigan University (Kalamazoo).

According to Quick, in a study of the demise of the laboratory schools at the latter four institutions, significant contributing factors included: "(a) lack support from university administration, (b) inadequate operational funds, (c) inability to hire quality teachers once older teachers died or retired, (d) the growth of the volume of student teaching, (e) delay in changing from student teaching and professional laboratory experiences to experimentation and research, (f) inaffective communication between the laboratory schools and the university community in addition to professionals throughout the state and nation, (g) the need for additional classrooms by parent institutions, (h) the feeling by university administrators that laboratory schools have low priority among the pressing needs of growing universities" (65, pp. 3789A-90A).

Related research: 1960-1969

Blackmon, who conducted a survey of laboratory schools and their research functions in 1961 and has maintained an active interest in related studies since, reported in 1975 (8) that the following

investigations represented the comprehensive studies of laboratory schools and their functions during the period from 1960 to 1969:

Blackmon, 1961 (7), Kelley, 1964 (42), Howd, 1964 (34), Blackmon, 1967

(7), and Howd and Browne, 1969 (36). The findings of these studies provide the substance of the data reported herein.

In order to dispel confusion, it should be noted that Kelley proceeded to follow-up the nonrespondents to his 1964 survey over the next two years after which the complete data (100 percent return) were compiled and analyzed for his doctoral dissertation at Indiana University; it was completed in 1967 (42). The latter serves as the source of data reported in this section.

<u>Demographic data</u> One thing that each of the studies mentioned had in common was an attempt to ascertain the number of laboratory schools in existence in the United States.

In 1961, with 386 colleges and universities responding out of 439 polled, Blackmon (7) identified 187 college-controlled laboratory schools. In 1964, Kelley (42) identified 177 which were extended to 212 over the next two years. Howd found 163 in 1964 (34) and five years later, he and Browne (36) identified 208, 198 college-controlled laboratory schools and ten which were not. Blackmon, expanding on his 1961 investigation, identified 226 college-controlled laboratory schools in 1967 (7). The differing numbers of such institutions identified by the various surveys can be attributed, in part, to sampling variability and differing rates of response.

Kelley's (42) and Howd and Browne's (36) findings show agreement

on the fact that no laboratory schools exist in Delaware, Nevada, South Dakota and Vermont. However, Howd and Browne (36) found one to be in existence in Alaska whereas Kelley (42) did not.

In some cases, individual colleges or universities were credited with the sponsorship of more than one laboratory school. This was true when an institution supported separate elementary and secondary units and, in some cases, junior high or middle school facilities. For example, in reporting the findings of their 1969 investigation, Howd and Browne (36) indicated that the 208 (gross) laboratory schools identified were affiliated with 196 colleges and universities.

In no case were minimum criteria established for determining what constitutes a laboratory school except that they be largely sponsored and administered by a college or university. As a result, Howd and Browne's figures (36) show eighteen schools with preschool programs only and nine nongraded facilities of indeterminant scope.

On the topics of grades, grade equivalents and enrollments, the most recent of these investigations (1969) reported:

Approximately sixty percent of the laboratory schools are elementary schools or a combination of elementary and junior high schools. Of the remaining forty percent, about eighteen percent include pregrade one through twelve; five percent, grade one through twelve; six percent, various combinations of junior and senior high school classes; eight percent, a pre-kindergarten or pregrade one or some combination of these groups with a grade one; and slightly less than four percent have an ungraded program. . . .

Of the 142 schools that reported enrollment, approximately seventy-one percent enroll fewer than 500 pupils. Exactly half of the schools that are identified as elementary or elementary-through-junior high school enroll fewer than 250 pupils, and fifteen percent of the schools in this category enroll more than

500 pupils. Of those schools that enroll pre-first grade through twelve, or grade one through twelve, approximately two-thirds enroll more than 500 pupils and three of these schools have an enrollment [sic] in excess of 1,500. (36, p. 2)

As for sponsorship, Kelley (42) reported that, of the 212 laboratory schools his survey identified, 178 were affiliated with publicly-supported colleges and universities and thirty-four were sponsored by private institutions. Likewise, Howd and Browne (36) found the majority of the laboratory schools they identified to be associated with publicly-supported colleges and universities. Of the 132 schools for which such data were available, 115 were publicly-supported and seventeen drew support from private sources.

These two investigations also found similar trends in laboratory school closures, but they differed on the matter of program reductions. Kelley (42) found twenty laboratory schools to have ceased operations in the ten years preceding 1964 and that about equal numbers added and dropped grades during that period--thirty-four and thirty-eight respectively. Howd and Browne indicated that:

Sixty-five schools were reported reduced in scope or in the process of closing. Of these, forty were closed between 1964 and 1969, five were to close in the next two or three years, and twenty had one or more grades eliminated. . . .

The twenty schools that eliminated grades confined them to the sixth or higher level with but a single exception. This one, which had found it expedient to close grades seven through twelve three years earlier, closed grades one through six in 1969, leaving only kindergarten. The remaining twenty-one eliminated grades as follows: grade six, one; grades six to eight, one; grades seven to nine, thirteen; grades seven to twelve, two; grades nine to twelve, three. (36, pp. 5-6)

Kelley (46) reported that most of the responding schools indicated

that their faculties were eligible for full college or university faculty status and could achieve rank--138 out of the 167 for which these data were available.

Additional demographically-related findings of the Howd and Browne (36) investigation follow.

- 1. Of 155 laboratory schools reporting, forty-eight indicated that pupil admission was determined by residence in a prescribed attendance district; 107 schools indicated that admissions were based on applications.
- 2. Financial considerations were the predominant cause of laboratory school closures.
- 3. Eleven new laboratory schools were established between 1964 and 1969, most of which emphasized early childhood education.

Laboratory functions and productivity Blackmon investigated the research function in selected laboratory schools in 1962 (7). In the initial phase of this investigation, 187 laboratory schools were identified via their responses and 140 reported engaging in research activity. Based on a research activity index developed for the study, twenty-three schools including at least grades one through twelve were isolated for more intense study; nine of them indicated a willingness to participate.

Among the conclusions reached after more intense study of the nine institutions were:

1. "The college controlled laboratory school is a unique resource for research and experimentation" (7, p. 89).

- 2. "Much research and experimentation is being and has been conducted in certain laboratory schools in this country" (7, p. 89).
- 3. Research emphasis in laboratory schools seems to be somewhat related to the status of the sponsoring institution, whether it is a college devoted to teacher education or a university.
- 4. "Basic research of rigorous design seems to be the neglected phase of the research function . . ." (7, p. 90).
- 5. Nearly all schools provided safeguards to prevent research activities from interfering with "good instruction" or "education of children," and research activities seemed to have contributed to staff development and instructional quality.
- 6. "Much research and experimentation--particularly 'action research'--has gone unrecorded, unreported, and undisseminated" (7, p. 91).
- 7. College or university faculty members have not taken full advantage of the research opportunities laboratory schools provide, nor have the laboratory schools themselves.
- 8. "Control over the admission, size, and nature of the pupil population of a laboratory school is related to performance of research as a major function" (7, p. 93).
- 9. "Major inhibitions to research productivity seemed to be lack of finances, lack of specific personnel, certain administrative arrangements, and inadequate communications, including inadequate dissemination of findings" (7, p. 94).

Two of Blackmon's concluding recommendations are especially worthy of note:

College-controlled laboratory schools accepting research as an important function should develop through intensive study and self-examination a statement, subject to periodic review, of philosophy, objectives, and functions, including a flexible program of both short- and long-range research studies. . . .

Administrators wishing to promote research activity in laboratory schools and associated colleges should create a climate in which research is encouraged, welcomed, facilitated, and respected. When involvement in research is made profitable and relatively easy, productivity may be expected to follow. (7, pp. 94-95)

In 1967, Blackmon expanded upon the study he conducted in 1962. Although he reported more demographic and comparative data in 1967, the conclusions reached were much the same. In his words:

In view of these data, the writer believes that the conclusions regarding the research function expressed in his 1962 study are valid today. (7, p. 83)

Kelley (42) and White (80) in 1964, Lathrop and Beal (45) in 1966, and Howd and Browne in 1969 (36) all examined the relative degree of importance that directors of laboratory schools attached to those functions typically carried out in these institutions. Their findings are summarized in Table 1.

Both White (80) and Lathrop and Beal (45), as reported elsewhere in this review of literature, decried the extreme emphasis given to educating the pupils enrolled in the laboratory schools they surveyed while these same institutions seemingly were neglecting their research potential. As a result, none of the researchers involved in these investigations held very favorable prognoses for the future of laboratory schools unless priorities were reexamined and productivity increased.

Howd and Browne (36), while recognizing the shortcomings of attempting to quantitatively evaluate faculty productivity, tried to

Table 1. Activity emphases in laboratory schools as determined by the research studies included

Activity	Studies and activity emphases				
	Kelley 1964	White 1964	Lathrop & Beal 1965	Howd & Browne 1969	Mean rank
Educating pupils enrolled		1	1		1.0
Observation and demonstration	1ª	2 ^a		1	1.5
Participation	3		2ª	2	2.3
Student teaching	2	3		5	3.0
Experimentation and research	4 ²	4	4	3ª	3.8
Inservice activites	5		3	4	4.0
Others		5			5.0

²Composite estimates involving the combining of categories.

secure such an estimate by a compilation of the contributions to the professional literature made by the faculties of the laboratory schools included in the national survey they conducted in 1969. The findings are summarized in Table 2.

Such were the findings of the major investigations involving laboratory schools during the period 1960 to 1970.

Table 2. A summary of the publishing activities of laboratory school faculties in the United States in the five years preceding 1969 as reported by Howd and Browne (36)

	Types of publications				
Number of contributions	Research studies	Professional journals	Textbooks, work- books, tests, etc.		
None	40	21	78		
One to five	68	54	46		
Six to ten	34	34	16		
More than ten	0	32	1		
Total represented	142	141	141		

The period 1970 to 1976

The decade of the seventies saw a reversal of the enrollment trends of the 1950s and 1960s. Generally, enrollments in institutions of higher education had peaked out during the late 1960s and were now on the decline.

Laboratory schools found enrollment to be a "two-edged sword" and they managed to get "cut" by both edges. Increasing enrollments had threatened their collective existence by forcing the bulk of teacher education experiences off campus and creating intense competition for space and funds; enrollment declines proved equally threatening. No longer was the competition for space as intense, but financial resources which have traditionally been related to enrollment, both in terms of

allocations and tuition income, were becoming an even more competitive item. Laboratory schools were among the first collegiate divisions to feel pressure as their host institutions sought means to ease the resultant financial crunch.

As a result, the attrition experienced from the ranks of the nation's laboratory schools during the 1960s continued into the seventies. By 1975, only three of the nine laboratory schools that were the subject of the Wisconsin Conference in 1967 and the study that followed remained in existence. By sheer weight of numbers, the pressure would have appeared greatest in California on a state-wide basis in the early part of the decade; the laboratory school at U. C. L. A. was the only one that continued to survive on that state's nine university branch campuses, many of which formerly supported such institutions.

John Goodlad, former director of the U. C. L. A. laboratory school who became Dean of the Graduate School of Education at that institution, summed up the situation with tongue-in-cheek at the outset of a presentation he made at the 1971 NALS Convention:

It's nice to be with my friends on death row. I don't know what the state of your future is these days; maybe it's a good idea that I am Dean, or I'd be out of a jeb pretty soon. Seem's like about every week I get a letter from someone or some director of a lab school that says, "You folks are still surviving, what's the secret? Write a letter defending use [sic], or whatever." It's a little ironic to me that in a period of education when we are talking a great deal about spending substantial American funds on the creation of experimental schools, we are simultaneously eliminating those schools which should have the greatest potential for being the kind of experimental schools that we want. (28, p. 31)

On the same topic, J. B. Hodges, Director of the P. K. Yonge

Laboratory School at the University of Florida, speaking at the 1974 NALS Convention said:

It is doubtful that any educational institution in America has been attacked more frequently or more intensely, in proportion to the extensiveness of the enterprise, than has the college controlled laboratory school. Certainly, even in this day in which so much emphasis is placed upon educational accountability, no administrators have been held more rigidly accountable than have those associated with laboratory schools. One cannot review the programs of the annual convention of National Laboratory School Association [sic] and its quarterly publications without being impressed by the degree to which interest has focused upon questions of survival. (33, p. 8)

During this period, a new rival in the former domain of the laboratory school was gaining popularity—the teacher center. Generally, teacher centers are not facilities as such but, rather, involve close, cooperative working agreements between a teacher training institution and a public school, often in the inner city. Advantages of such arrangements often cited are the mutual benefits that accrue to the school district and the college or university; the latter obtains a realistic site for its practical experience teacher education components and the school district has the opportunity to profit from the inservice and consultant services offered by the faculty of the cooperating teacher education institution as well as the instructional assistance provided by the teachers—in-training.

During the seventies, a variety of remedies have been suggested and tried in laboratory schools in an effort to overcome their short-comings and meet the challenges they face.

For one, they have sought alternative sources of funding above and beyond their traditional sources: the host institution budget and

tuition. The reports of Nielsen (59) and Frisbie (24) indicate that the laboratory schools at the University of Northern Iowa and the University of Northern Colorado have successfully gained access to conventional state public school-aid moneys on a per pupil basis, sources which heretofore were denied them. In both instances, legislative action was required to remove the schools from their quasi-private school status.

Budgetary limitations and attendant staffing deficiencies, as cited earlier by McGoech (51), have long deterred laboratory schools from the productivity to which they aspired. Focusing on the oftenmentioned research function, in Goodlad's words, "No money for research, no money for experimentation--no research, no experimentation" (28, p. 49).

Entering the 1970s, a plan was evolved at P. K. Yonge Laboratory School at the University of Florida that appeared to hold promise for meeting both deficiencies mentioned in the previous paragraph. "Based on the assumption that resources for the instruction of students attending a laboratory school should be no greater than for students attending public schools in the district" (33, p. 20) staff resources were reallocated in such a manner as to meet this criterion and create released time for research activities as well. By increasing teaching loads from the former norm of twenty hours per week to twenty-five hours at the middle and high school levels, 8.3 positions were made "available on a part- or full-time basis to all members of the Laboratory School faculty on a needs basis" (33, p. 21).

Upon identification of an instructional problem or need

related to the attainment of the School's goals for its pupils, any faculty member may apply for time and funds to conduct an R & D [research and development] project. Upon completion of the product, additional time is allocated for writing and reporting, for conducting conferences and workshops for public school personnel, and for providing consultant service in order for R & D products to be adopted or adapted for use in public schools. (33, p. 21)

Hodges and Fox (33) reported that, within four years of this plan's inception, sixty-one percent of the school's regular faculty has been directly involved in research and development projects. Furthermore, increased research activity had facilitated the employment of from one to five additional faculty each year with grant funds that were procured.

To meet charges that their student bodies were atypical, static and elitist, many schools adopted new admissions and attendance policies. Generally, they followed one of four patterns or a combination thereof:

(1) instituting attendance agreements with previously untapped minority communities; (2) establishing quotas designed to ensure the attainment of a cross sectional, representative student body; (3) determining enrollees from available applicants on the basis of a lottery; and (4) in a few instances, establishing a plan for periodic student exchanges with neighboring schools.

That development offered a partial solution to another problem suggested by McGoech:

As the years went on there was convincing evidence that an established school with a continuing faculty and student body carried within itself the seeds of its own dissolution as an experimental school. What had been genuinely experimental became institutionalized in practice and the new rigidities were no more adaptable than the old. (52, p. 10).

How to deal with tenured, career faculty in avoiding the stagnation

implied is more problematic. Many writers agree that periodic, critical self-examination may help--especially if done as objectively as possible and followed up with the development of written, well-defined short-term and long-range goals. This is not always an easy task. As suggested by Goodlad, it may be found that, "We are not at work on the kinds of things we talk about and in effect, to some degree, [we may find] 'We have met the enemy, and he is us'" (28, p. 37).

Another possible solution to the problem may be a teacher exchange program as suggested by Cierpilowski and Zimmerman (14).

In closing out this report on the conditions and developments of the 1970s, it should be mentioned that, despite many of their best efforts, laboratory schools continued to be subject to the closure phenomenon. On Wednesday, February 25, 1976, during the second day of the 1976 NALS Convention, representatives of the State University Colleges of New York received word the Bureau of Budget in that state had decreed that the eight laboratory schools sponsored on the various branch campuses would not be funded beyond August 31, 1976. Telephone inquiries by the writer later, however, revealed that in the ensuing month this order was recinded and the eight laboratory schools were to be funded for another year's operation at a figure not to exceed that allotted for 1975-76.

The announcement was made by Richard Collier, director of the laboratory facility at the Buffalo campus, who was making a presentation following receipt of this news at lunch.

Related research: 1970-1976

Six investigations comprise the known related research during this period. They are studies reported by: (1) Cornthwaite in 1972 (16); (2) Cappa in 1972 (13); (3) Stredwick and Orlich in 1973 (75); (4) Hearn in 1974 (32); (5) Wolfe in 1974 (84); and (6) McConnaughhay in 1974 (48). None of the studies involved an attempt at a comprehensive, nation-wide study. Cornthwaite (16) confined his interests to inferences about the future roles of laboratory schools from the outcomes of investigations of the ninety-one laboratory schools that were reported by Howd and Browne (36) as having undergone critical examinations that threatened their existence in the five years preceding 1969. Additional inquiries expanded the population to include a total of 106 institutions that had been subject to critical examinations since 1965. Usable data were supplied by sixty-five institutions for analyses.

Regarding current functions of the laboratory schools studied,

Cornthwaite (16) found observation, participation, demonstration, and

innovation to rank highest in priority. A great deal of interest also

was expressed in research and experimentation. Generally, student teaching was not found to be a major function of the reporting schools.

"During the course of this research eight, or 7.5 percent, of the total population of 106 campus laboratory schools were closed" (16, p. 55).

Little in the way of unique, future functions was projected by Cornthwaite's investigation (16); the seven functions he identified were observation, demonstration, participation, experimentation, research,

dissemination and innovation. He did, however, project that the observation function would be augmented by electronic means, primarily video, and that the research emphasis would receive high priority during the decade to follow.

Like Cornthwaite, Cappa (13) reporting on data collected by thirty-two usable responses from laboratory schools in thirty states, indicated that involvement in student teaching and observation-participation functions far exceeded that in research and experimentation. Additionally he found that: (1) 81.2 percent of the respondents cited finances as a limiting factor in their productivity; (2) 56.2 percent were handicapped by legal interpretations (unidentified); (3) seventy-five percent suffered from staffing limitations; and (4) 78.1 percent were experiencing facility limitations. He, too, recommended that greater attention be given to research and experimentation emphases.

Hearn (32), in 1974, examined the research activities of laboratory schools between 1967 and 1972. Essentially, this investigation was a replication of Blackmon's work (7) but it was confined to NCATE-accredited institutions sponsoring graduate programs.

Of seventy-four laboratory schools identified, sixty-seven reported research activity, but only fifty-four reported research that was quantifiable according to criteria established by the investigator. Twenty-three schools were selected for further study and seventeen of them agreed to participate.

Hearn's (32) findings, conclusions and recommendations depart little from those identified earlier with Blackmon's investigations (7).

Stredwick and Orlich (75) took a different tack in their investigation--the analysis of the perceptions of and attitudes toward laboratory schools by nonlaboratory school faculty in seven institutions of higher learning that host laboratory schools in the states of Idaho, Montana, Oregon and Washington.

Conclusions were drawn based on data from 228 respondents from a sample of 237. Among them were:

- 1. Most academic faculty (noneducation) felt themselves to be inadequately informed for making judgments about the laboratory schools.
- 2. Respondents were better-informed of laboratory school functions and organization than about ongoing programs. "Model and practice school functions" were believed most emphasized and were most supported for continuance.
- 3. "Respondents did not generally consider the research function to be a major emphasis of those laboratory schools" (75, p. 27), but those recommending change favored moving in this direction.
- 4. "Respondent opinion generally considered the laboratory school student curriculum 'educationally sound'" (75, p. 28).
- 5. "The employement and retention of highly competent laboratory school faculties has been impaired by the policies under which the laboratory schools have operated. . . . A respondent majority recommended the employment of laboratory school staff on college faculty status" (75, p. 28).
- 6. "Financial allocations to laboratory school facilities were considered inadequate for current and projected programs" (75, p. 28).

Wolfe (84) and McConnaughhay (49) confined their investigations to laboratory schools in delimited regions, Wolfe to a study of the present status and future of five such institutions in the state of Kentucky and McConnaughhay to the status and functions of laboratory schools in the Southeastern Laboratory School Association.

Based on data supplied by college and university administrators, laboratory school directors, and selected teachers, like many other, Wolfe (84) found the current laboratory school functions to be educating the children enrolled, providing a place for experimentation and research, exercising a demonstration responsibility, and providing laboratory experiences in teacher education. The latter was emphasized to the greatest extent.

Projections of the future were tendered with less certainty, but major emphases were given to "serving as a pilot school for innovations, serving as a 'model' school or 'educational center,' increased provision for prestudent teaching experiences, and more theoretical and/or 'action' research" (84, pp. 155-56).

McConnaughhay (48), through questionnaires and interview tapes, investigated the status and functions of thirty laboratory schools in the eleven states comprising the Southeastern Laboratory Association, a regional division of NALS. He, too, found teacher education activities to be the predominant functions of laboratory schools at the time and that experimentation and research were expected to assume more importance in the future.

Other findings revealed that: (1) slightly more than half (sixteen)

of the schools investigated charged tuition; (2) "by application" was the most common admissions procedure; (3) college and university budget allocations and payments from other school districts were the leading sources of operating funds for laboratory schools; (4) the institutions were evenly divided according to whether or not laboratory school faculty were eligible for full faculty status; (5) sixteen schools indicated they had undergone critical examinations in recent years; ten of which survived intact, program emphases were shifted in four, and two were awaiting final outcomes; (6) generally, adequate communication between the laboratory schools and the agencies they serve was lacking; (8) the major impediments to more effective research involvement were limitations of funding, personnel, and those imposed by heavy teacher education demands; and (9) most respondents felt that the future outlook for their schools was either "reasonably good" (thirteen) or "very bright" (fourteen).

The Future of the Laboratory School

By reason of the fact that a substantial number of laboratory schools were phased out across the nation during the 1950s, 1960s and the first half of the 1970s, the future as of 1976 for laboratory schools involves a more select group than formerly was the case. But what does it hold?

According to McGoech (51) in 1968, the successfully functioning laboratory school will be the one that serves the unique needs of its host institution. Howd and Browne (36 in 1970 saw a decreasing emphasis on student teaching and a trend toward greater involvement in early

childhood education. Dinger (19) would suggest greater attention in the area of education for exception children.

As early as 1900, John Dewey and his followers in the experimental school movement perceived that the future held increasing emphasis on research and experimentation. Most of the studies since 1950 and the literature reviewed to this point share this opinion. Generally, the following two trends were predicted in the area of laboratory school functions: (1) a deemphasis of student teaching in laboratory schools; and (2) increasing emphasis on research, experimentation and dissemination activities.

But when will the future arrive? El-Shibiny (20) and Bucklen (12) as early as 1951 and 1952 respectively, were predicting increased emphasis on research and calling for its implementation. And, in the middle 1960s, White (80) and Lathrop and Beal (45) were highly critical of the neglect that laboratory schools had demonstrated regarding research and dissemination functions. Yet, each of the investigations conducted in the 1970s--Cornthwaite (16); Cappa (13); Stredwick and Orlich (75); Hearn (32); Wolfe (84); and McConnaughhay (48)--showed that most laboratory schools continued to place major emphases on teacher education functions and that their directors showed a continuing disposition toward predicting greater research emphasis in the future.

With the exception of Lathrop and Beal (45) who emphasized research into the instructional applications of media, little presented here has provided direction in terms of potential undertakings for those who desire to accept responsibility for the research function. Hunter (38),

writing in a 1970 issue of <u>Phi Delta Kappan</u>, provided one of the more comprehensive presentations on this topic. Regarding the future, she wrote:

The last quarter of the twentieth century may well be distinguished by the emergence of the laboratory school as a productive center for educational inquiry, exerting powerful influence upon and shaping public education of the twenty-first century. For this potential to be released, however, the laboratory school must shed its role as a demonstration and training installation inducting novitiates into accepted and traditional practice. It must become a center for inquiry, an essential component of the educational design to produce new theory, to translate that theory into generalizable practice, to disseminate that knowledge and practice into the mainstream of American education, and to develop vigorous leaders.

Without laboratory schools, however, there remain two major unsolved problems in education. One is the ever-widening gap between knowledge generated by educational research and practice in the classroom. The other problem is the critical need for an experimental laboratory to refine or field-test theory in an environment uncontaminated by the very necessary restrictions imposed on public schools. An installation created for and dedicated to the resolution of these two problems constitutes the <u>raison d'etre</u> of the laboratory school of the future.

A school which adopts this new role will have as its functions: 1) research, experimentation, and inquiry into the phenomena of education; 2) dissemination of results of such activities; 3) development of leaders in clinical practice; 4) demonstration, observation, and other activities germane to the first three functions. (38, p. 14)

Hunter maintains that these functions would require laboratory school personnel to continually be alert to the identification of problems to investigate including extrapolations from existing research findings that may prove to be fruitful avenues of further investigation.

Considering the expanse of the field of education, laboratory schools should not attempt take a "shot gun" approach. "Ad hoc interests of independent researchers will undoubtedly make contributions, but they will

not achieve a sufficient number of studies of central relevance to justify a laboratory school as a center unless that schools' major emphasis is an organized and directed program of research" (38, p. 15).

It is becoming increasingly apparent that the extensiveness of educational questions needing answers precludes the laboratory school moving ahead with equal energy on all fronts. Consequently, laboratory schools of the future will need to "major" in specified areas where they can mount considerable research effort, possibly "minor" in a few related areas, and leave to other laboratory schools the areas where they could direct only minimal and therefore wasteful effort. (This conscious and explicit concentration of energy follows the pattern set by many of our national research and development installations.) It then becomes the function of demonstration schools, rather than laboratory schools, to synthesize the field-tested programs into stable models. Because this will yield minimal problems with transfer and generalizability, such demonstration schools should be a part of the public school system rather than the costly and often artifical installations on a university or college campus. (38, p. 15)

Among the potential areas of study appropriate for investigation by laboratory schools suggested by Hunter were:

- 1. How to more effectively train teachers
- Instructional applications of various technological developments
- Goals and objectives of education, unrestricted by practice and tradition
- 4. Intense study of various educational segments such as early childhood, upper elementary, etc.
- 5. Teaching methodology free from the stagnating effects of "good" and "bad" labels
- 6. Organizational schemes
- 7. Staffing patterns that better utilize teacher competencies.

Hunter concludes her presentations on the expanded future role of laboratory schools as follows:

In summary, the expanding role of the laboratory school necessitates a research facility and staff to accomplish the plans formulated, and an educational facility and teaching staff to develop an experimental program which makes research possible. This expanding role includes: inquiry, research, and experimentation with a major focus; bridging theory and practice; dissemination through many media; production of clinical leadership; a new and vigorous relationship with the department of education as an essential team member in the production of knowledge and the joining of theory and practice in the education of professionals; a complementary relationship with other university departments; and productive and purposeful interaction with and service to the expanded educational community.

These functions cannot be assumed by a public school whose primary commitment is the education of its clients. Only the laboratory school which exists to fulfill this expanded role can render the services necessary to accomplish a function that is of such educational significance to the nation. (38, p. 19)

The three brief quotes that follow seemingly present a meaningful picture of the future of laboratory schools and the challenges they must meet.

Their future is precarious, if they do not make changes to meet the changing needs of the times. College-controlled laboratory schools can serve a unique and useful function if they will adjust their programs, their staffs, their pupil populations, and their relationships to other segments of the educational enterprise and meet the needs and demands of today. (80, p. 71)

If the campus laboratory school cannot or will not adapt itself to a new and expanded set of educational responsibilities it will, in all probability, prove to be an institutional counterpart of the Dodo bird. (45, p. 95)

Dodo Bird or phoenix--which will it be? (52, p. 17)

Summary

The laboratory school has a long and varied history, perhaps totaling as much as three-hundred years. Its development and spread were closely allied with the development of normal schools which appeared on the scene in America during the first half of the nineteenth century and spread rapidly after the Civil War.

The teachings of Pestalozzi and Herbart are among the European influences that have affected laboratory schools in the United States, but authorities disagree on whether the laboratory school and its host, the normal school, are of European origin or indigenous to America. The experimental school movement led by John Dewey probably has been the most widespread American influence that affected these institutions and their development.

After rapid expansion in the latter half of the nineteenth century, normal schools matured into degree-granting institutions during the early part of the twentieth century. Their evolution appeared complete when many achieved university status in the 1960s after internediate service as teachers colleges and state colleges. Their affiliated laboratory schools reached their zenith, in terms of numbers, shortly before that time when more than two-hundred were in existence.

The enrollment boom experienced by U.S. colleges and universities in the 1950s and 1960s necessitated the transfer of many teacher education functions formerly assumed by laboratory schools to cooperating public schools due to the pressure of numbers. During this period,

confusion about the role of the laboratory school and intense competition between collegiate divisions for space and funds precipitated the closure of a substantial number of laboratory schools.

Traditionally, laboratory schools have shouldered a variety of teacher education functions, notably observation, demonstration, participation, and student teaching plus involvement in research activities and inservice teacher education. But since the 1950s, many authorities have predicted that the most productive future for laboratory schools lies in the area of research and dissemination activities and they have urged these institutions to accept this responsibility. However, recent investigations provide evidence that the provision of teacher education laboratory experiences still dominates the role of the laboratory school while research remains a popular choice in forecasts of future emphases.

It appears that the laboratory school faces an uncertain future unless it can effectively adapt to new educational demands and the roles they imply.

CHAPTER III. METHODS AND PROCEDURES

Introduction

In review, the seven terminal objectives of this investigation were as follows:

- 1. the compilation of comprehensive census data on all operational university and college-controlled laboratory schools in the United States
- 2. the comparison of these data with those collected in similar, previously-conducted investigations--Howd and Browne's <u>National Survey</u> of <u>Campus Laboratory Schools</u> in particular. Provisions were made in the design of data collection instruments that would facilitate direct comparisons between the findings of that survey and those of this study
- 3. the identification of those laboratory schools which were subject to closure in recent years and the examination of potentially causal factors in their demise
- 4. the investigation of existing working relationships between teacher education institutions and public, private and laboratory schools for the provision of preservice laboratory experiences and research opportunities
- 5. the identification and analysis of those factors which contribute to the effectiveness of the organizational schemes employed in facilitating laboratory experiences
- 6. the compilation and analysis of authoritative indications of satisfaction with the research output facilitated by the various arrangements

7. the organization, analysis and presentation of data compiled that would facilitate meaningful interpretation and dissemination

The Population to be Studied

The population studied in this investigation included all of the four-year institutions of higher education participating in the training of teachers irrespective of their status or sponsorship; all private and publicly-sponsored colleges and universities were included. The most comprehensive and current source listing these institutions available was the computer data provided by the RITE Project at Indiana University (68). When this study was initiated, the listing was just nearing completion.

From this list, 1362 colleges and universities in the United States offering programs of study that leading to teacher certification were identified. These institutions constituted the population studied in this investigation.

The Research Design

Four assumptions were basic to the research design selected for this investigation. They were:

- 1. Observable similarities and differences exist between the characteristics and operations of individual laboratory schools and teacher preparatory institutions; causal-comparative relationships can be inferred from these similarities and differences
 - 2. A random sample of teacher education institutions would be

sufficiently representative to permit the generalization of findings to institutions having similar general characteristics

- 3. The data reported in Howd and Browne's <u>National Survey of Campus Laboratory Schools</u> in 1969 are comparable to the data collected in this investigation and can be analyzed for similarities, differences and causal comparative relationships
- 4. In terms of effectiveness, efficiency and economy, the best method for collecting the data necessary for this study would be the mailed questionnaire with appropriate follow-ups by mail and telephone as necessary

Based on these assumptions, the design for this investigation was representative of both descriptive and causal-comparative research. It also involved some ex post facto comparisons of and with the data collected in the Howd and Browne survey.

Current data were collected via mailed questionnaires. As deemed appropriate, selected data were descriptively presented; others were statistically analyzed on comparative bases. Statistical comparisons also were made between current data and those collected in the Howd and Browne study (36) as well as ex post facto comparisons of pertinent subgroupings represented by the data compiled in that study. These comparisons are treated in greater detail in the Statistical Analyses section of this chapter.

Sample Selection

The second assumption stated under "The Research Design" regarding the representativeness of random samples was equally critical to sample selection. Four other assumptions were basic to the sampling of procedures employed in planning this investigation. They were:

- 1. Laboratory school charcteristics in terms of descriptive data, relationships with the sponsoring institution, functions, and future outlook and directions can be effectively evaluated and reported by a single individual in each institution
- 2. Subsequently, the persons best-qualified to supply these data are the chief administrators of laboratory schools
- 3. The characteristics of teacher preparatory institutions in terms of descriptive data, arrangements for laboratory services and research, and factors important to these arrangements can be effectively evaluated and reported by a single individual in each institution
- 4. The person in each institution best-qualified to supply these data is the ranking administrator in charge of professional teacher education curricula -- the dean of the college of education where applicable; otherwise, the head or chairperson of the education department or an individual holding comparable responsibilities

This investigation included three different surveys, each of which involved different samples. They are described in the paragraphs that follow.

Survey I. The intent of this survey was to identify all laboratory

schools that either were or had been in existence in recent years. Data also were gathered regarding plans for the establishment of new laboratory schools in the future and, in the case of defunct laboratory schools, an attempt was made to identify closure dates and to elicit opinions regarding contributing factors. Consequently, it was desirable that all teacher education institutions be polled. Therefore, ranking teacher education administrators in all of the 1362 such institutions included in the RITE Project listing (68) constituted the sample for this survey.

Survey II. A more detailed survey was made of laboratory school directors for purposes of gathering census data on these institutions. The intent was to include the top administrators in all laboratory schools in this survey. The sample for Survey II consisted of the directors of all the laboratory schools identified in Survey I supplemented by the listings in the directory prepared by the National Association of Laboratory Schools (58).

Survey III. The purpose of this survey was to solicit data regarding provisions for research and laboratory experiences in teacher education implemented via cooperative relationships between institutions of higher education and public, private and laboratory schools. Descriptive and evaluative data were sought. Teacher education administrators in all laboratory school-sponsoring institutions and an equal, random sample of those representing nonlaboratory school affiliates were surveyed. The latter were stratified on the basis of public and private support; proportions equal to those for laboratory school-sponsoring institutions were polled.

Ninety-two public institutions and nineteen privately-sponsored institutions were represented in each sample group.

A table of random numbers was used to draw an appropriate number of administrators representing each stratification category.

Yet a fourth sample was included in this investigation for purposes of comparative analyses. Comprising this sample were the respondents to the Howd and Browne study in 1969 (36). The data provided by responses to that survey were analyzed on an <u>ex post facto</u> basis and also compared with the data compiled in this study. Information was reported on 194 laboratory schools in the Howd and Browne report. However, varying numbers of schools were represented in responses to individual items.

Data Collection Instruments

Three questionnaires were constructed for purposes of carrying out this investigation, one for each of the three surveys involved.

Survey I

As mentioned earlier in this chapter, the purpose of Survey I was the identification of all laboratory schools that were either currently operational or had been so in the recent past. Among the objectives to be achieved by the brief questionnaire designed for this survey were:

- 1. The identification of teacher education institutions which currently sponsored laboratory schools and the administrators of those schools
- 2. The identification of institutions that either no longer sponsored laboratory schools or never did support facilities of this nature

- 3. In the case of laboratory schools which had been phased out recently, the identification of the groups responsible for recommending this action and the evaluation of contributing factors according to their perceived importance.
- 4. The identification of institutions considering the establishment of laboratory schools and the status of these deliberations

A sample of the questionnaire utilized in Survey I appears in Appendix A of this report.

Survey II

The purpose of this survey was the collection of laboratory school census data based on the reports of the laboratory school administrators identified by Survey I and supplemented by the 1975-1976 NALS directory (58). The objectives of the questionnaire designed for this survey were:

- 1. The collection of the following descriptive data:
 - a. The name of the laboratory school
 - b. Sponsoring institution and address
 - c. Director's name and title
 - d. Dates of establishment and construction
 - e. Instructional organizational plan
 - f. Administrative organization
 - g. Enrollment statistics and student characteristics
 - h. Faculty characteristics and professional activities
 - i. Sources of financial support
 - j. Accreditation
- 2. The elicitation of evaluative comments regarding:

- a. The functions carried out by the school
- b. The overriding objective or mission of the school
- c. The outcomes of critical examinations of the school
- d. The future outlook for the school

A draft of the questionnaire designed for Survey II appears in Appendix B of this report.

Survey III

The third survey included in this investigation sampled the opinions of ranking teacher education administrators. Its major purposes were surveying provisions for the implementation of laboratory experiences and the facilitation of educational research. The objectives of the questionnaire designed to be utilized in Survey III were:

- 1. The collection of descriptive data about the institutions that participants represented including:
 - a. Institutional name and address
 - b. Status--college or university
 - c. Sponsorship
 - d. Degree programs
 - e. Enrollment and graduate statistics
 - f. Provisions for the implementation of laboratory experiences and research in teacher education
 - 2. The elicitation of evaluative comments regarding:
 - a. The effectiveness of provisions for the implementation of laboratory experiences and research
 - b. The individual factors that have potential for contributing to the effectiveness of these provisions, either positively

or negatively

Appendix C. of this report includes a copy of the questionnaire drafted for use in this survey.

As can be noted from an examination of the three questionnaire drafts, each included a working definition of the term "university and college-controlled laboratory schools" to promote a common frame of reference among respondents as they considered their replies to items related to this concept. In order to promote ease of response and its concomitant, higher rate of return, all of the items that lent themselves to that format were presented in multiple choice form. However, many of them included the response category "other" plus room for explanations in order to prevent forced choices from obscuring important data to be gained.

Due to the multitude of data sought and the many choices offered for some items, the bulk of the questionnaires in typed form could have proved discouraging to potential respondents. In an effort to overcome this deficiency, each questionnaire form was submitted to a commercial printer for final preparation. Through attractive, compressed type-setting and format selection an attempt was made to minimize this limitation.

Data Collection

The primary data collection method utilized in this investigation was the mailed questionnaire. Two mailings of each survey were employed, an initial one and another for nonrespondents. These were conducted during January and February 1976. Cover letters were drafted for purposes of soliciting the cooperation of persons selected for participation in

each of the surveys; they explained the purposes and importance of the study and offered respondents the opportunity to receive summary reports if they so desired. Samples of the initial and follow-up letters used with the three surveys appear in Appendix D.

Deadlines for responding were included in the cover letters with each questionnaire mailing. It was intended that follow-up mailings for nonrespondents be made within two weeks of each initial mailing, but mail service delays necessitated that these deadlines be extended. This was done by placing deadline extensions on each letter in large print.

A telephone survey was made of all nonresponding laboratory school directors in Survey II. An abbreviated survey form was utilized. A sample of the recording form used for telephone follow-ups appears in Appendix E.

Treatment of Data

Some of the statistical manipulations involved in the processing of the data collected were handled via computer. Others were computed by hand calculator.

Descriptive data

Many of the data collected by the three surveys involved in this study were descriptive in nature. Some of those that relate to the laboratory school census were placed in appendices to this report in raw form because of their nature and extent. Thus, the reader is afforded opportunities to examine these data and draw his/her own conclusions based on the purposes he/she has in mind. Descriptive statistics such

as mean, median, mode, standard devaition, range, percents and proportions were used in the summarization and discussion of these findings as appropriate.

Data comparisons

Numerous comparisons were made between the data collected in this investigation in order to identify existing trends and tendencies. Most of these involved comparisons of nominal data and descriptive statistics compiled on subgroupings of the samples investigated in this study and in Howd and Browne's <u>National Survey of Campus Laboratory Schools</u> (36). Among the subgroup comparisons to be made are:

- 1. 1969 findings vs. 1976 findings
- Data reported by university representatives vs. those reported by college representatives
- Characteristics of operational laboratory schools vs. those of defunct laboratory schools
- 4. Data reported by representatives of institutions maintaining laboratory schools vs. those reported by representatives of institutions which do not
- 5. Data reported by representatives of large institutions vs. those reported by smaller institutions

The significance of the differences uncovered in many of these comparisons were tested statistically. Depending on the nature of the data involved, one of four statistical tests were applied in ascertaining the significance of the findings; they were: analysis of variance, Chisquare; t tests and Duncan's New Multiple Range Statistic. The criteria

for rejecting null hypotheses were adjusted according to the number of comparisons involved so as to control experimentwise error. They ranged from .005 to .05.

<u>Identifying causal-comparative relationships</u>

Some causal-comparative relationships could be inferred from the data comparisons discussed in the previous section. Others were investigated via the computation of correlation coefficients.

In order to investigate the relationships between variables characteristic of school settings and the criterion measures, effectiveness of arrangements for laboratory experiences and research, the product-moment technique was employed. The assumption underlying the use of this method is that both variables have been measured on continuous scales. Although the independent and dependent variables involved in these comparisons were measured on five-point scales, it was contended that these scales represented degrees of effectiveness which are in fact continuous. Therefore, the assumption of continuity was met.

To evaluate the relationships established between independent and dependent variables, the observed differences in correlation coefficients were tested for significance. Two statistical tests were applicable--Fisher's \underline{z} and Hotelling's t test. The former is appropriate for testing the significance of differences between correlation coefficients derived with two independent samples. It was employed in testing the significance of between group comparisons. Hotelling's t test was selected for testing the significance of differences between correlation coefficients obtained with the same sample. It takes

into account the intercorrelations of the variables being compared and it, therefore, was more appropriate for evaluating within-group comparisons, many of which involved significant intercorrelations.

CHAPTER IV. FINDINGS

The data analyzed in this investigation were collected via three survey instruments and ex post facto analysis of Howd and Browne's National Survey of Campus Laboratory Schools (36) which was conducted in 1969.

Findings are organized and presented under the following major headings: (1) Survey I; (2) Survey II; (3) Ex Post Facto Analyses of 1969

Data; (4) 1969-1976 Data Comparisons; and (5) Survey III.

Survey I

Survey I was designed to gather information about past, current and future sponsorship of laboratory schools and to provide data concerning contributing factors in those instances where laboratory school operations had been discontinued. It consisted of a brief questionnaire (see Appendix A) that was dispatched by mail to ranking teacher education administrators—education deans or department heads—at the 1362 colleges and universities in the United States that sponsor teacher education programs.

Response

Two mailings of Survey I were issued in an effort to maximize survey response. A total of 797 questionnaires were returned, a response rate of 58.5 percent. A breakdown of returns appears in Table 3.

Table 3. Response to Survey I

	Public Institutions	Private Institutions	Unidentified	Total
Institutions included	490	872		1362
Questionnaires returned	308	484	5	7 97
Rate of response	62.9%	55.5%		58.5%

Findings

Of the 797 respondents to Survey I, 173 indicated that their institutions currently sponsored laboratory facilities according to the definition supplied with the questionnaire. It should be noted, however, that this definition did not limit responses on the basis of enrollment and grades included as was to be the case as this investigation progressed.

An additional 105 respondents indicated that their institutions formerly sponsored laboratory facilities, but no longer did so. The remaining 519 institutions had never engaged in laboratory school sponsorship.

One-hundred fifteen of the institutions that were not currently engaged in laboratory school sponsorship had given consideration to the establishment of such facilities in the past five years. In only ten instances, however, was the outcome of these deliberations positive

and planning underway for their establishment. Furthermore, in at least four instances, planning was limited to the development of early child-hood centers. Information regarding the scope of the other six was not provided.

Of the remaining 105 institutions considering the establishment of laboratory facilities, fifty-eight respondents indicated that decisions regrading this matter were yet to be reached and forty-seven institutions had arrived at negative decisions and deliberations had ceased.

Survey participants who indicated that their institutions formerly sponsored laboratory schools, but no longer did so, were asked to supply three additional pieces of information: (1) the date of closure; (2) the level at which closure was first recommended; and (3) ratings of the importance of potentially contributing factors.

These data are presented in Tables 4, 5, and 6.

Table 4. Dates of laboratory school closures reported in Survey I

		
	Number	Percent
Before 1950	8	7.6
1950-1959	11	10.5
1960-1969	44	41.9
Since 1970	34	32.4
Unspecified	8	7.6
		
Totals	105	100.0

The figures presented in Table 4 regarding the dates of laboratory school closures show a discernible increase in the rate at which this phenomena was taking place, beginning in the 1960s and continuing into the decade of the 1970s.

Table 5 shows the levels at which laboratory school closures were first recommended. It can be noted that local college and university administrators accounted for more than half of the total reported and that they were the first to recommend such action in slightly more than twice as many instances as the next leading source.

Table 5. Sources of initial recommendations for laboratory school closure

Source	Number	Percent
Laboratory school personnel	3	3.4
Local college/university faculty bodies	14	16.1
Local college/university administrators	48	55.2
Higher authorities	22	25.3
Totals	87	100.0

Respondents choosing the "higher authorities" option were asked to identify the bodies involved. Of the twenty-two respondents selecting this option, ten indicated that the decision was recommended by higher boards of education (regents, trustees, etc.); seven credited legislative groups with suggesting closure; one each indicated governor's

advisory board, the state university system central office, and citizens and parents; two did not identify sources.

Eighty-nine respondents supplied ratings of the factors which may have contributed to the demise of laboratory schools on their campuses. They rated the six factors shown in Table 6 on a zero to five scale. Zero was used to indicate that the factor did not play a part in the closure decision; five indicated extreme importance.

Table 6. Education deans' and department heads' ratings of factors contributing to laboratory school closures. (Ratings ranged from zero to five with five being indicative of high importance)

	Factors	Mean Rating
1.	Facility inadequacy (physical plant)	1.33
2.	Lack of meaningful contributions to teacher education	1.49
3.	Intrainstitutional competition for funds	1.73
4.	Inability to accommodate growing and changing needs	1.89
5.	Ultimatum from a higher authority	2.36
6.	Insufficient operating funds	2.76

The data supplied by these ratings of contributing factors were used to test the following hypothesis:

Hypothesis 1: There are no differences in the importance attached to potentially contributing factors in past laboratory school closures as evidenced by the perceptions of education deans and department heads.

The hypothesis was tested by means of analysis of variance (< = .05).

The null hypothesis may be rejected (p < .05). As shown in Table 7 a highly significant difference was established between the importance of various contributing factors as determined by the ratings of education deans and department heads.

Table 7. A comparison of the importance of various contributing factors in laboratory school closures

Source of variation	đf	SS	MS	F
Between factors	5	131.4101	26.2820	6.6152**
Within factors	528	2097.7416	3.9730	
Total	533	22 29.1517		

^{**&}lt;sub>p</sub> < .01.

A posteriori comparisons of mean ratings were made via Duncan's New Multiple Range Statistic in order to investigate the significance of the differences between individual means. In order to maintain collective type I error (2) below the .05 level, the acceptable criterion for significance was 2 = .01. The results of this examination appear in Table 8.

As can be seen in Table 8, the mean ratings of only two contributing factors held significant advantages over other mean ratings: (1) insufficient operating funds (No. 6) differs to a highly significant degree from all other means save mean number five; (2) ultimatums from

Table 8. Comparisons of mean ratings for factors contributing to laboratory closures via Duncan's New Multiple Range Statistic

Mea	ıns	1	Dif 2	ferences be	tween means 4	5	6
1.	1.32		.17	.41	.57	1.04**	1.44**
2.	1.49			.24	.40	.87*	1.27**
3.	1.73				.16	.63*	1.03**
4.	1.89					.47	.87 ^{**}
5.	2.36						.40
6.	2.76						

 $[*]_p < .05.$

higher authorities (No. 5) met the criterion for significance only when compared with mean number one. Consequently, it is tenable to conclude that insufficient operating funds exceeded in importance all other factors contributing to the demise of laboratory schools with the exception of ultimatums from higher authorities (No. 5). However, the latter exceeded facility inadequacy (No. 1) in importance.

The reader should note that the contributing factors examined are not mutually exclusive. It is conceivable that any or all of them could stem from ineffectiveness and/or financial concerns. Attention is directed not so much to cause as to the way in which these deficiencies were manifested.

^{**&}lt;sub>p</sub> < .01.

Survey II

Response

Survey II was designed to collect demographic data on existing laboratory schools and to secure information about roles, functions, faculty productivity and future outlook. Utilizing the findings of Survey I and supplementing these data by initiating contacts with nonrespondents listed in the 1975-1976 NALS directory of laboratory schools (56), laboratory school directors in 157 institutions were polled regarding the characteristics of the laboratory facilities thus identified. As with Survey I, two mailings were issued in an effort to enhance survey response.

A degree of selectivity was exercised in determining which institutions to include in Survey II from among those identified by Survey I and the NALS directory. An effort was made to exclude those that could not meet two minimum criteria: (1) the inclusion of three grades or the equivalent thereof; and (2) enrollment of fifty or more pupils. Initial screening was done on the basis of institutional titles. Those identified which obviously did not qualify by reason of the fact that their titles included restrictive terms such as "kindergarten, preschool, nursery, day care," etc., were excluded from further consideration.

Ninety-three of the 157 institutions contacted in Survey II, or 59.2 percent, responded to mail inquiries. Directors of the remaining sixty-four institutions were contacted by telephone as were those of

eleven other laboratory facilities that were identified too late to be included in the mail survey. As a result, contact was established with each of the 168 institutions identified for further study.

For reasons of economy, in terms of time and money, an abbreviated form of the Survey II questionnaire was utilized in conducting telephone inquiries. Appendix E includes a sample of the form used to record telephone responses. The numbers appearing on this form correspond with the items in Survey II (see Appendix B) which were asked of telephone respondents once it was established that minimum criteria for inclusion were met.

Findings

Schools identified Despite the restrictions imposed by the definition of laboratory schools included in the survey instruments and the discretion exercised in preliminary screening, fifty-one of the 168 institutions contacted did not meet the minimum criteria established and six were no longer in existence. Thus, one-hundred eleven institutions were found to meet the grade and enrollment criteria necessary for inclusion in this investigation. The data collected from these institutions provide the substance for analyses in the remainder of this section of the report. A listing of these laboratory schools and selected demographic data pertaining to them appears in Appendix F.

Complete data were not available for all of the schools included in the investigation. A number of factors contributed to this absence of data: (1) not all respondents completed every item on the questionnaire; (2) certain items were excluded from telephone surveys; and (3) laboratory school directors were not always available to participate in the telephone survey that served as a follow-up to mailed requests for information. The latter condition was applicable in four cases where repeated telephone calls failed to establish contact with intended respondents. In each instance secretaries supplied nominal data including grade spans, organizational patterns, bases for admission, and enrollments.

Ninety-two of the 111 laboratory schools were affiliated with publicly-supported colleges and universities. The other nineteen were associated with privately-sponsored institutions.

Six of the laboratory schools reporting appeared to have a very limited future as termination notices have been issued. The host institutions and the intended termination dates are listed below.

Central Connecticut State College--1978

Western Illinois University--1977

State University of New York, Albany--1977

Southern Oregon State College--1976

California State College (Pennsylvania)--1976

Westchester State College (Pennsylvania) -- 1976

In addition to these, the status of the laboratory schools on eight of the State University Colleges of New York campuses could be described as tenuous at best. In February 1976, they received notice of termination to be effective in August of that year. However, shortly thereafter, this order was rescinded and the schools involved received another year's funding at their 1975-76 budget levels.

Grades included Table 9 shows the grade spans encompassed by 109 of the 111 schools reporting. Grade span data were not supplied by two respondents.

Table 9. Grade spans encompassed by laboratory schools

Grades included	Number of grades	Number of schools	Percent
P - 3 ^a	5	1	0.9
P - 4	6	2	1.8
P - 5	7	2	1.8
P - 6	8	22	19.8
P - 7	9	1	0.9
P - 8	10	11	9.9
P - 9	11	3	2.7
P - 12	14	15	13.5
K - 4 ^b	5	1	0.9
K - 5	6	2	1.8
K - 6	7	18	16.2
K - 8	9	8	7.2
K - 9	10	2	1.8
K - 12	13	9	8.1
1 - 6	6	3	2.7
1 - 8	8	3 2	1.8
1 - 12	12	4	3.6
7 - 12	6	1	0.9
9 - 12	4	1	0.9
) - 12	3	1	0.9
Not identified		2	1.8
Totals		$1\overline{1}1$	99.9
Include provisions for spec	ial education	30 ^c	27.0
Grade span mode	8.0		
Mean grade span	9.3		
Median grade span	8.5		

^aP indicates prekindergarten.

 $^{^{}b}\mathtt{K}$ indicates kindergarten.

^COne of these, Jersey City State College, is completely devoted to programs for the physically disabled.

It can be noted that the most frequently encompassed grades reported were prekindergarten through grade six with twenty-two schools represented. These grades were closely followed in popularity by their closest approximation, K - 6.

Sixth grade was identified as the highest level included in the reports of forty-three respondents. The next most frequently occurring upper limit was twelfth grade which applied to thirty-one of the institutions reporting; twenty-eight of these schools encompassed all numbered grades.

One-hundred nine schools supplied information about their organizational patterns. Thirty of them were organized on a graded basis, forty-three were nongraded, and the other thirty-six utilized combinations of the two patterns.

Enrollment data Enrollments were reported by 107 of the laboratory schools. They ranged from a low of seventy-three reported by Lincoln University of Jefferson City, Missouri to a high of 1696 at the University of Chicago. The mean enrollment of the 107 schools reporting was 383.5 with a standard deviation of 278.4. Median enrollment was 294. Enrollment statistics are shown in Table 10.

Student characteristics The ethnic composition of laboratory school student populations was investigated and these data were reported by 105 of the 111 schools surveyed. Survey participants were asked to approximate the percent of their students that represented various racial-ethnic groups. The findings appear in Table 11.

Table 10. Enrollments of laboratory schools in the United States

Enrollment	Number of schools	Percent
Up to 249	45	38.7
250-499	36	32.4
500-749	14	12.6
750- 999	11	9.9
1000-1249	1	0.9
1250-1499	0	0.0
1500 and over	2	1.8
Unreported	4	3.6
Totals	111	100.0
Mean enrollment Median	383.5 294	

Eight laboratory school directors out of 105 reporting indicated that their student bodies ranked well above average in terms of mental ability (mean I. Q. above 115). Of the remaining schools, forty-seven indicated that their student populations were of about average ability (mean I. Q. - 95-105) and fifty indicated above average student abilities (mean I. Q. - 105-115).

Table 11. Racial-ethnic composition of laboratory school student populations (N = 105)

		Number	and percent o	f schools	represented
Ethnic proportions		Black	Spanish American	White	Other
Less than .01	No.	18	66	1	38
	%	17.1	62.9	1.0	36.2
.0109	No.	46	34	4	58
	%	43.8	32.4	3.8	55.2
.1019	No.	10	4	4	8
	%	9.5	3.8	3.8	7.6
.2029	No.	14	1	1	1
	%	13.3	1.0	1.0	1.0
.3039	No.	4			
	%	3.8			
.4049	No.	1		2	
	%	1.0		1.9	
.5059	No.	2		3	
	%	1.9		2.9	
.6069	No.			5	
	%			4.8	
.7079	No.	1		12	
	%	1.0		11.4	
.8089	No.	4		21	
	%	3.8		20.0	
.9099	No.	4		46	
	%	3.8		43.8	
More than .99	No.	1		6	
	%	1.0		5.7	
Mean proportions		.168	.014	.790	.026

Administrative characteristics Survey participants were asked to supply data about three areas related to school administration. Included were: (1) the position occupied by the school within the college or university administrative structure; (2) the identification of policymaking groups; and (3) information about the laboratory school director's

responsibilities.

As can be seen in Table 12, almost all of the laboratory schools polled either were administered as a separate department within the institutional structure or as a division within another department. The lone departure from this norm was the laboratory school at Eastern Montana College which occupies <u>quasi-public</u> school status--it is jointly administered by the college and the local public school district.

Laboratory school directors, either alone or in combination with other college/university administrators, were found to predominate in the area of policy determination. Such arrangements prevailed in nearly two-thirds of the institutions studied. The groups responsible for policy determination are presented in Table 12 as are the areas of responsibility assumed by laboratory school directors.

The examination of specific, additional teaching and administrative duties assumed by laboratory school directors show that they generally lie in the areas of teaching education classes (graduate and undergraduate), student teacher supervision, and the administration of student teaching arrangements.

Faculty data With one-hundred three schools reporting, it was found that the numbers of faculty employed in laboratory schools ranged from a low of six in two institutions to a high of 175 at the University of Chicago. Full-time faculty equivalencies (FTE) showed similar variability ranging from 5.0 to 157.5.

Two institutions, those at Gallaudet College (for the deaf) and Jersey City State College (for the physically disabled), showed

Table 12. Administrative characteristics of laboratory schools

		strative teristics	Number of schools	Percent
Α.	Pos	sition within institution hierarchy:		
	1.	Independent of other college/ university departments	41	36.9
	2.	Part of a given college or university department	64	57.7
	3.	Other	1	0.9
	4.	Not reported	5	4.5
		Totals	111	100.0
3.	Maj	or policy-determining groups:		
	1.	College/university-wide committee or council	4	3.6
	2.	College of education committee or council	3	2.7
	3.	Laboratory school committee or council	14	12.6
	4.	Administratorslaboratory school, college, universitysingularly or collectively	72	64.9
	5.	Ad hoc groups of laboratory school faculty	1	0.9
	6.	No established group	1	0.9
	7.	Other	10	9.0
	8.	Not reported	6	5.4
		Totals	111	100.0

Table 12 (Continued)

Administrative characteristics			Number of schools	Percent
c.		e laboratory school director's sponsibilities:		
	1.	Are confined exclusively to the laboratory school	46	41.4
	2.	Encompass other administrative responsibilities	19	17.1
	3.	Include other instructional duties	41	36.9
	4.	Not reported	5	4.5
		Totals	111	100.0

comparatively high FTEs considering the number of students they serve:

57.0 for 161 students and 43.5 for 225 students respectively. These comparatively high faculty to student ratios reflected the special needs of their clientele.

Because of the distortion resulting from some extreme values, the median is a more appropriate measure of central tendency than the mean for both faculty numbers and FTE. The median number of faculty was found to be 23.6 and for FTE the median was 21.0. Additional data regarding faculty numbers and characteristics are presented in Table 13.

On the topic of laboratory school faculty eligibility for full college or university faculty status including tenure, rank, fringe benefits, and voting privileges, sixty-seven of the 104 schools reporting indicated

Table 13. Characteristics of laboratory school faculty (with 103 schools reporting)

Cai	cegories	Number	Percent
1.	Full-time professionals assigned exclusively to the laboratory school	1960	65.7
2.	Full-time professionals dividing their their time between the laboratory school and other college divisions	225	7.5
3.	Part-time professionals assigned exclusively to the laboratory school	193	6.5
4.	Part-time faculty whose professional services are shared with other college divisions	14	0.5
5.	Graduate assistants having faculty status (as opposed to those gaining supervised practical experience)	112	3.8
6.	Unspecified	481	16.1
	Totals	2985	100.0
	Median number of faculty per school = 23.6 Median full-time equivalency = 21.0		

that their faculties were fully eligible for these privileges. Another twenty-three indicated that some of these privileges were extended to laboratory school faculty; fourteen reported that their faculties enjoyed no such privileges. Rank and or tenure were the benefits most commonly denied in those institutions in which laboratory school faculty were not eligible for full faculty status.

Faculty publishing activities Indications of laboratory school publishing activities over the previous five years were secured in an effort to get an estimate of one aspect of their professional endeavors. The findings in this area of investigation are shown in Table 14.

Table 14. The publishing activities of laboratory school faculty during the past five years

	lication ductivity		Number of schools	Percent
Α.	Research stu	dies:		
	2. One to f	e published. ive were published	39 47	35.1 42.3
	4. More tha	en were published n ten were published were reported	9 8 8	8.1 7.2 7.2
	Totals	were reported	111	99.9
В.	Articles in	professional journals:		
	 One to f Six to t More that 	e published ive were published en were published n ten were published were reported	21 52 15 15 8	18.9 46.8 13.5 13.5 7.2
	Totals		111	99.9
C.		ooks, workbooks, tests, and instructional works:		
	 One to f: Six to te More than 	e published ive were published en were published n ten were published were reported	53 37 9 4 8	47.7 33.3 8.1 3.6 7.2
	Totals		111	99.9

Sources of financial support Four aspects of financial support were investigated: (1) whether or not tuition was charged of laboratory school clientele; (2) the amount of tuition assessed; (3) whether or not other fees were assessed; and (4) laboratory school directors were asked to rank the sources of financial support they drew upon to meet operating expenses.

Forty of the 105 institutions supplying information about sources of financial support indicated that tuition was charged of school patrons. In those cases where variable tuition rates were charged for students of different grade levels, weighted means based on per level enrollments were used to permit the establishment of a single tuition figure for purposes of analysis. On this basis, tuition figures ranged from a low of twenty-nine dollars per year to a high of \$3000. The latter figure was reported by the laboratory facility affiliated with Lesley College of Cambridge, Massachusetts. The school's regular tuition rate is \$985 per year, but it places considerable emphasis on special education for which a tuition rate of \$3445 per year is assessed. Findings related to tuition appear in Table 15.

Forty-seven of the schools indicated that they did charge incidental fees either in addition to or in lieu of tuition. However, dependable indications of amounts and bases for assessment were not secured.

Table 16 summarizes the results obtained from director's rankings of financial resources tapped by laboratory schools in meeting operating expenses. The six sources were ranked in order according to the proportion of funds each supplied. Survey participants were asked to assign

Table 15. Tuition assessed by laboratory schools in the United States

	ition	Number of schools	Percent
Α.	Schools that charge no tuition	68	61.3
В.	Annual tuition rates charged by schools utilizing this income source:	(43)	(38.7)
	 Less than \$100 \$100 - \$399 \$400 - \$699 \$700 - \$999 \$1000 - \$1499 \$1500 - \$2000 Over \$2000 	14 6 3 8 2 2 2	12.6 5.4 2.7 7.2 1.8 1.8
c.	No data reported	6	5.4
	Totals	111	100.0
	Median tuition rate for those charging same =	\$270	

a rank of six to all unexploited sources so that meaningful rank averages could be computed. The reports of 106 laboratory schools were represented by these findings.

Laboratory school functions and major objectives In the course of Survey II, participating laboratory school directors supplied indications of the priority accorded certain functions and roles in their institutions. Table 17 includes these findings. On the questionnaire, laboratory school administrators rated the functions shown from zero to three. Zero was indicative of the fact that the function was not implemented in the school; three indicated that the function was accorded the

Table 16. Laboratory school directors' rankings of sources of financial support

			Ranks assigned						Mean
Sources			High 1	2	3	4	5	6 Low	rank
1.	Host institution budget	No.	67	27	6	0	0	6	1.65
		%	60.4	24.3	5.4	0.0	0.0	5.4	
2.	Tuition and other fees	No.	16	23	12	7	0	48	3.91
		%	14.4	20.7	10.8	6.3	0.0	43.2	
3.	Conventional state aid to public	No.	14	14	6	1	0	7 1	4.62
	schools	%	12.6	12.6	5.4	0.9	0.0	64.0	
4 .	Project grants from governmental	No.	0	15	23	7	1	60	4.64
	and private agencies	%	0.0	13.5	20.7	6.3	0.9	54.1	
5.	Payments from other school	No.	7	10	4	0	0	85	5.18
	districts	%	6.3	9.0	3.6	0.0	0.0	76.6	
6.	Other (unspecified)	No.		8	9	0	1	85	5.29
		%	2.7	7.2	8.1	0.0	0.9	76.6	

Table 17. Functions of laboratory schools as perceived by laboratory school directors

			Priority ratings				Mean
Fun	ctions	H	lgh 1	2	3	4 Low	rating
1.	Participation and other prestu-	No.	83	15	6	1	1.29
	dent teaching practical experiences	%	79.0	14.3	5 .7	1.0	
2.	Observation and demonstration	No.	73	25	7	0	1.37
	(live and electronically)	%	69.5	23.8	6.7	0.0	
3.	Providing consultant services and	No.	39	35	27	4	1.96
	inservice activities for other schools and educators	%	37.1	33.3	25.7	3.8	
4 .	Developing and testing new	No.	28	39	28	10	2.19
	curriculum materials	%	26.7	37.1	26.7	9.5	
5.	Leadership activities with	No.	25	46	23	11	2.19
	professional and subject area organizations	%	23.8	43.8	21.9	10.5	
6.	Student teaching	No.	39	15	36	15	2.26
		%	37.1	14.3	34.3	14.3	
7.	Researchpure or of action	No.	18	27	42	18	2.57
	quality	%	17.1	25.7	40.0	17.1	
8.	Graduate level practicum and	No.	13	30	37	25	2.71
	internships	%	12.4	28.6	35.2	23.8	
9.	Pilot testing curriculum	No.	11	33	37	24	2.71
	materials developed by other agencie	es %	10.5	31.4	35.2	22.9	

highest level of priority. These ratings were transposed for purposes of computer processing; one then became the highest priority and four indicated that the function was not implemented in the school. One-hundred five laboratory school directors supplied data for these comparisons.

The data appearing in Table 17 were used in testing the following null hypothesis:

Hypothesis 2: No differences exist in the priorities accorded various laboratory school functions by directors of these facilities.

The hypothesis was tested by analysis of variance. Allowable Type I error was set at a probability of .05.

Table 18. A comparison of the priorities accorded various laboratory school functions by directors of those facilities

Source of variation	d£	SS	MS	F
Between functions	8	230.4783	28.8098	36.02**
Within functions	936	748.6381	.7998	
Total	944	979.1164		

^{**&}lt;sub>p</sub> < .01.

The null hypothesis was rejected at the .05 level. Highly significant differences (p < .01) were found to exist between the mean priority ratings of laboratory school functions.

In order to determine the significance of the differences between specific, individual function means, the data were tested by means of Duncan's New Multiple Range Statistic ($\ll = .01$). The findings are presented in Table 19.

Due to the inverse nature of priorital relationships between the means compared in Table 19, the following conclusions were tenable regarding the priorities assigned to laboratory school functions:

- 1. Participation and other prestudent teaching practical experiences (No. 1) and observation and demonstration (No. 2) exceeded all other functions in priority to a highly significant degree as determined by mean laboratory school director ratings (p < .01).
- 2. Although inferior in priority to the functions mentioned in the preceding item, inservice functions (No. 3), the development of curriculum materials (No. 4), and leadership activities in professional organizations (No. 5) exceed most of the remaining functions in priority to a highly significant degree. The latter held no advantage over student teaching as the difference did not qualify at the .01 level.
- 3. The priorities identified with student teaching (No. 6) are significantly greater (p < .01) than those associated with graduate practicum (No. 8) and pilot testing curriculum materials developed by others (No. 9).

Regarding laboratory school functions, the administrators participating in this investigation also were asked to identify the major objectives or missions they perceived for the facilities they headed. Each participant was asked to limit his/her choices to two of the six

Table 19. Comparisons of mean priorities assigned to laboratory school functions utilizing Duncan's New Multiple Range Statistic

	1				we en means				
Mean 	1	2	3	4	5	6 	7 	8	9
1. 1.29		.08	.67**	.90**	.90**	.97**	1.28**	1.42**	1.42**
2. 1.37			.59**	.82**	.82**	.89**	1.20**	1.34**	1.34**
3. 1.96			₩ ₩	.23	.23	.30**	.61**	. 7 5**	.7 5**
4. 2.19					.00	.07	.38**	.52**	.52**
5. 2.19					~~	.07	.38**	.52**	.52**
6. 2.26							.31*	.45**	.45**
7. 2.57								.14	.14
8. 2.71									.00
9. 2.71									

p < .05. Note: Mean weights are inversely related to priorities. Consequently, asterisked differences have significantly less priority.

^{**}p < .01.

options provided, the last being "other".

The options provided are listed below. They are ranked in order of the frequency with which they were selected. One-hundred five institutions were represented by these data but the total response indicated is only 206 as four respondents failed to avail themselves of the opportunity to select two options.

- 1. "Providing practical experience opportunities for the college/ university teacher education program" led with eighty-two selections.
- 2. "Educating the children enrolled" was selected seventy-eight times.
- 3. "Educational research, pure or of action quality," was identified by sixteen respondents.
- 4. There was a tie for the fourth position between "developing and testing curriculum materials" and "providing inservice opportunities for other schools and educators;" each was selected fourteen times.
- 5. Two respondents selected the option "other." One specified this choice with the comment "to provide an alternative educational model;" the other gave no explanation.

The following item was excluded from consideration during telephone follow-ups to the mail survey when, in early trials, it appeared that the investigator's affiliation with the National Association of Laboratory Schools may have had an effect on the objectivity of response.

28.	Do you feel that other public or private schools can be
	as effective as laboratory schools in facilitating prac-
	tical teacher education and research?
	Yes
	No

However, mail responses showed twenty-one positive replies, fiftytwo negative ones, and one that indicated that it varied according to the institutions involved.

<u>Accreditation and evaluation</u> The number of laboratory schools that held membership in various approval and accreditation agencies appears in Table 20.

Table 20. Approval and accreditation agency membership on the part of laboratory schools (N = 111)

Ageı 	ncies	Schools represented	Percent	
1.	State approval agencies	60	54.1	
2.	Middle States Association	11	9.9	
3.	New England Association	3	2.7	
4.	North Central Association	17	15.3	
5.	Northwest Association	2	1.8	
6.	Southern Association	23	20.7	
7.	Western Association	2	1.8	
8.	Other	7	6.3	
9.	No accreditation or approval agency membership	17	15.3	
10.	No data reported	5	4.5	

The total representation in Table 20 exceeded the number of laboratory schools in existence. This situation resulted from the dual membership held by many schools. Most often, multiple combinations involved state approval or accreditation agencies and membership in voluntary, regional accrediting organizations. Even so, membership in regional accrediting associations proved to be comparatively low. The probable reason for this was that many of the schools studied encompassed only the elementary grades and regional accreditation agencies did not offer membership to such institutions until very recently. In fact, the North Central Association did not extend membership privileges to elementary schools until 1975.

The most frequently mentioned affiliations listed under "other" were organizations for private schools, religious organizations, and special education approval agencies. Some respondents also mentioned affiliation with NCATE via host institution membership.

Sixty-seven, or 60.4 percent of the 111 laboratory school directors polled, indicated that they had undergone critical examinations that posed threats to the continuing existence of their institutions during the five-year period previous to this investigation. Of the remaining forty-four institutions, thirty-nine had undergone no such examinations during that period and no information was available for the other five.

The findings derived from reports supplied by the sixty-seven institutions that underwent critical examinations during the period mentioned are summarized in Table 21. The percentages cited were computed solely on the basis of the sixty-seven schools involved in critical

Table 21. Agencies involved in critical examinations of laboratory schools and the outcomes of those investigations

		igation teristics	Schools involved	Percent	
Α.		encies involved in examinations of boratory schools (N = 67):			
	1.	Committees or councils comprised of laboratory school personnel	4	6.0	
	2.	College/university faculty groups	19	28.4	
	3.	College/university administrators	27	40.3	
	4.	Higher boards (regents, trustees, etc.)	30	44.8	
	5.	State legislative committees	9	13.4	
	6.	Other	3	14.5	
В.	Out	comes of these investigations ($N = 67$):			
	1.	Few if any changes in laboratory school operations	27	40.3	
	2.	Program cutbacks	13	19.4	
	3.	Changes in program emphases	30	44.8	
	4.	Notice of termination	2	3.0	
	5.	Outcomes pending	4	6.0	
	Specific changes in program emphases $(N = 30)$; more attention is now given to:				
	1.	Educating the children enrolled	6	20.0	
	2.	Serving the teacher education needs of the host institution	15	50.0	
	3.	Developing and testing curriculum materials	7	23.3	
	4.	Providing inservice opportunities for other schools and educators	6	20.0	
	5.	Educational research	12	40.0	
	6.	Other	2	6.7	

examinations. The totals presented exceed the number of schools represented because of multiple factors that were applicable to the investigations in which reporting institutions were involved.

Two of the respondents who selected the "other" option in identifying examining agencies indicated that combination professional and lay
groups that included school patrons were responsible; the other one failed
to specify the agency involved. Of the two respondents that opted for
"other" in describing changed program emphases, one indicated that attention was being given to securing greater minority representation in its
student body; the other anticipated a change in school organizational
patterns.

Thirteen respondents indicated that the examinations to which they were subjected resulted in program cutbacks: two did not specify the nature of these cutbacks; two reported budgetary reductions; one experienced a reduction in staffing and program; and eight suffered reductions in enrollment quotas and/or the number of grade levels served. Unique in terms of enrollment reduction was the plan developed at the University of Wisconsin--Oshkosh. There the laboratory school no longer served a permanent student population; it utilized students brought in from local schools on temporary bases for purposes of carrying out its laboratory school functions.

Future outlook In reporting their perceptions of the future outlook for the laboratory schools they administered, thirty-four (30.6 percent) of the 107 laboratory school directors supplying this information indicated that the future appeared very bright for their

institutions, that they appeared to be established on solid bases and would continue to function and prosper. Forty-nine others (44.1 percent) were only slightly less optimistic; they indicated that their future outlooks appeared reasonably good, that there would be continuing challenges to be met, but their institutions should be able to surmount them.

To the contrary, eighteen laboratory school directors (16.2 percent) indicated that the outlook for their institutions was rather bleak, that there were ominous threats to their existence that may force their closure. Directors representing six laboratory schools reported that, barring reprieves, their institutions had only limited futures because notices of termination had been given. These schools were listed earlier in this report of Survey II under the heading Schools identified.

Product moment correlation coefficients were computed to investigate relationships between selected laboratory school characteristics and the future outlooks reported by the directors of those institutions. However, it would have been impractical to have tested hypotheses related to the significance of the observed relationships. The number of overlapping data comparisons involved would have generated an indeterminable level of Type I error that would have made it imprudent to consider the rejection of such hypotheses regardless of the significance levels achieved.

Table 22 shows the correlation coefficients obtained and the significance of their departure from zero correlation. The reader is cautioned against attaching too much significance to these findings. In no case

Table 22. Relationships between selected laboratory school characteristics and the future outlooks expressed by laboratory school directors

Cha	racteristic	s	Data pairs compared	r	Type I error prob.
1.	Grade span	s encompassed	105	18*	.03
2.	Enrollment		103	 28*	.02
3.	Basis of s	election for admission	104	.01	.46
4.	Mean stude	nt mental ability	104	23**	.01
5.	Proportion	of majority ethnic representat	ion 102	.06	.26
6.	Ranking of	financial sources:			
	a. colleg	e budgets	105	.32**	.00
	b. state	aid	105	.04	.34
	c. projec	t grants	105	.04	.33
	d. tuitio	n and fees	105	.16	.05+
	e. school	district payments	105	.04	.34
	f. other		105	.15	.07
7.	Weightings	assigned school functions:			
	a. observ	ation and demonstration	105	.10	.16
	b. partic	ipation/practical experiences	105	.09	.18
	c. studen	t teaching	105	.08	.22
	d. gradua	te practicum	105	.13	.09
	e. develo	ping curriculum materials	105	.10	.17
	f. pilot	testing curriculum materials	105	.16	.05+
	g. resear	eh	105	.11	.14
	h. inserv	ice activities	105	.04	.33
	i. profess *p < .05.	sional organization leadership	105	.21*	.01

^{**}p < .01.

did the coefficient of determination (r²) exceed .1022, and in one case it was as low as .0331. In other words, the proportion of the variance characteristic of the dependent variable (future outlook) that was explained by the apparently significant relationships ranged from .03 to .10. Therefore, virtually no practical significance was found for predictive purposes.

Ex Post Facto Analyses of 1969 Data

The data reported in Howd and Browne's National Survey of Campus

Laboratory Schools (36) were analyzed on an ex post facto basis to determine if any differences existed between the data reported at that time for laboratory schools that remain operational and those that either were closed or reduced in scope to the point that they no longer qualified for inclusion in this investigation (referred to hereafter as defunct laboratory schools). A total of sixty-nine schools were found to have been closed or reduced in scope since 1969; data were identified for eighty-six schools that remained operational in 1976. However, available data varied for different comparisons.

Three hypotheses related to grade spans and enrollments, functional emphases, and faculty publishing activities were tested. The first to be tested follows.

Hypothesis 3: No differences exist between operational and defunct laboratory schools on the basis of grade span and enrollment data reported in 1969.

Hypothesis 3 was tested via the Chi-square statistic. The data involved and outcomes of these tests are presented in Table 23.

Table 23. Comparisons of grade span and enrollment data reported in 1969 by laboratory schools that were operational in 1976 and those that were defunct

		Number of schools			
Cat	egories	Operational	Defunct		
Α.	Enrollments:				
	Less than 250	25	21		
	250 - 499	26	14		
	500 - 749	14	10		
	750 and over	10	5		
	None reported	18	19		
	Totals	93	69		
В.	Highest grade encompassed:				
	Through 6 and nongraded	38	31		
	7 - 9	25	21		
	Grade 12	30	17		
	Totals	93	69		
	x^2 at 7 df = 3.941				
	14.067 required for rejection				

Hypothesis 3 could not be rejected at the .05 level (p > .70). Significant differences were not found to exist between the enrollment and grade span data reported in 1969 by functioning laboratory schools and those that were closed or severely reduced in scope since that time.

The publishing activities reported for the five years preceding .

1969 by the two groups of laboratory schools under consideration are

shown in Table 24. Publications data were available for seventy-nine functional laboratory schools and for fifty defunct institutions.

Utilizing these data, the following hypothesis was tested via the Chi-square statistic.

Hypothesis 4: Faculty publishing activities reported in 1969 by laboratory schools show no differences between operational and defunct laboratory schools

Table 24. Faculty publishing activities reported for the five years preceding 1969 by currently functioning laboratory schools and those that had been rendered defunct since that time

			Numbe:	r reporte	<u>d</u>
Publicationsreported by		0	1-5	6-10	10+
A. R	esearch studies:				
1	. Functional laboratory schools	21	42	16	
2	. Defunct laboratory schools	13	20	17	
В. Ј	ournal articles:				
1.	. Functional laboratory schools	12	28	19	20
2.	. Defunct laboratory schools	6	19	13	12
	ooks, textbooks and other major nstructional works:				
1.	. Functional laboratory schools	43	25	11	
2.	. Defunct laboratory schools	25	20	5	
	x^2 at 9 df = 4.826				
	16.919 required for rejection				

The null hypothesis could not be rejected at the .05 level (p > .80). No difference was found to exist between functional and defunct laboratory schools on the basis of faculty publishing activities reported for the five years preceding 1969.

The last area examined for differences between currently operational laboratory schools and those that were closed or reduced in scope since 1969 was the priority assigned to various school functions. Table 25 shows the mean priorities assigned to these functions by the two groups under consideration.

Table 25. Comparisons of mean priorities assigned to typical laboratory school functions by operational laboratory schools and those that had been closed or severely reduced in scope since 1969

		Mean priori	ity assigned ⁸	Difference	
Functions		Open	Closed	(Open-closed)	t
1.	Observation and demon- stration	1.39	1.55	16	-1.55
2.	Participation	1.58	1.86	28	-2.19*
3.	Student teaching	2.43	2.48	05	-0.23
4.	Pilot testing curriculum materials	1.82	2.05	23	-1.46
5.	Experimentation with teacher learner activities	er- 1.84	2.08	24	-1.55
6.	Researchpure or of action quality	2.33	2.49	16	-1.01
7.	Leadership in professional organizations	2.25	2.43	18	-1.09

^aThe priorities assigned ranged from one to four with one being high.

p < .05.

Utilizing the data in Table 25, \underline{t} tests were used in testing the following hypothesis:

Hypothesis 5: No differences exist between operational and defunct laboratory schools that can be determined from the priorities the two groups assigned to the functions carried out by those institutions in 1969

Due to the multiple tests, the criterion for rejection was established at $\ll = .01$. At this level, the estimate of the probability of falsely rejecting the hypothesis on the basis of seven comparisons was estimated at .068. This estimate was obtained by the formula: experimentwise error = 1 - $(1 - \infty)^{c}$ where "c" is the number of comparisons.

On this basis, hypothesis number five could not be rejected (p > .01 for all comparisons). No significant differences were found to exist between functional and defunct laboratory schools on the basis of the priorities assigned to various school functions in 1969.

1969-1976 Data Comparisons

In order to ascertain whether significant changes had taken place in laboratory school characteristics and roles between 1969 and 1976, comparisons similar to those presented in the previous section were conducted utilizing data reported by laboratory school directors in the Howd and Browne survey (36) and in this investigation. Current data were compared with those reported by both the functional and defunct laboratory schools examined previously.

Enrollments and grade spans

Cursory examination of 1969 and 1976 data revealed the following:

(1) the number of functional laboratory schools encompassing at least three grade levels had declined from 177 in 1969 to 111 in 1976; (2) twenty-four of the 103 laboratory schools for which data were reported in both surveys had been reduced in scope by one or more grades.

The following hypothesis was tested on the basis of data previously reported in Tables 9, 10 and 23 on pages 112, 114 and 136 respectively.

Hypothesis 6: No differences exist between the grade span and enrollment data collected in this investigation and those reported by operational and defunct laboratory schools in 1969.

A Chi-square of 7.43 at twelve degrees of freedom (p > .70) was obtained in comparing grade span and enrollment data on the three groups of laboratory schools. A Chi-square of 21.03 was required for rejecting the null hypothesis at the .05 level.

Consequently, Hypothesis 6 could not be rejected. It was found that no differences existed between the grade spans encompassed and enrollments characteristic of laboratory schools in 1969 (either operational or closed since) and 1976.

In testing this hypothesis, institutions that had not reported enrollment and grade span data were excluded from analysis. The reason for this was the obvious disparity between the numbers of schools that failed to report such data in the two surveys. Whereas, mineteen defunct institutions and eighteen functional ones failed to report enrollments in 1969, these data were not available for only four institutions

included in the 1976 survey. If nonreporting institutions had been included in data analyses, the hypothesis in question may have been subject to rejection but, had it been rejected, no meaningful purpose would have been served.

Hypothesis 7: There are no differences between the faculty activities reported by the three laboratory school groups:
(1) those by functional laboratory schools in 1969; (2) those by defunct laboratory schools in 1969; (3) and those collected from institutions participating in this investigation.

The data appearing in Tables 14 and 24, pages 120 and 137, were analyzed in testing this hypothesis. A Chi-square of 19.94 at eighteen degrees of freedom was obtained (p > .30). A Chi-square of 28.87 was required for rejection.

Hypothesis 7 could not be rejected. No significant differences were found to exist in the publishing output of the three groups of laboratory schools considered.

Laboratory school functions

Due to the emphasis given to the future research functions of laboratory schools in the related literature examined in conjunction with this investigation and the undesirable features of techniques involving numerous multiple comparisons and/or unweighted means analyses, the foci in this area were confined to the examination of only two laboratory school functions: (1) "research--pure or of action quality;" and (2) "developing and testing new curriculum materials." Furthermore comparisons were limited to the data reported for currently functional laboratory schools in 1969 and 1976.

Hypothesis 8: The mean priority ranks assigned research and development activities by functional laboratory schools in 1969 were equal to or lower (higher numerically) than those assigned by the operational schools examined in 1976.

Two one-tailed \underline{t} tests were employed in testing Hypothesis 8--one in comparing mean research priorities and the other in comparing the priorities assigned to the development and testing of new curriculum materials. The criterion established for the rejection of the null hypothesis was the attainment of a significant, negative \underline{t} value in one or both of the comparisons involved; alpha was set at .025 so that experimentwise error could be maintained below the .05 level $(1 - [1 - \checkmark]^c = .0494)$.

The data compared and the outcomes of these tests appear in Table 26.

Table 26. Comparisons of priorities assigned research and development activities by functional laboratory schools in 1969 and 1976

	Mean priorit			
Functions	197 6	1969 ————	1976-1969	t
Researchpure or of action quality	2.57	2.33	. 24	1.74
Developing and testing new curriculum materials	2.19	1.82	.37	2.78**

^aPriorities were assigned on a basis of one to four with one being high.

^{**&}lt;sub>p</sub> < .01.

Although a highly significant <u>t</u> value (p < .005) was achieved in the case of curriculum development activities, it was positive rather than negative. Therefore, the null hypothesis could not be rejected. In fact, a significantly higher priority was assigned the pilot-testing of new curriculum materials in 1969 than was found to be the case in 1976; although an observable difference favoring the priority assigned research activities in 1969 was found to exist, it did not prove significant.

Survey III

Concurrent with the dissemination of Survey II, ranking teacher education administrators—education deans and department heads—were polled by Survey III regarding institutional provisions for the implementation of laboratory experiences and research plus their perceptions of the quality of the services provided. A sample of this survey appears in Appendix C.

Response

Survey III questionnaires were dispatched to the ranking teacher education administrator in each of the institutions believed to sponsor laboratory schools on the basis of responses to Survey I augmented by listings of such facilities in the NALS directory (56). These questionnaires were also sent to a like number of randomly selected teacher education administrators representing institutions that were not identified with laboratory school sponsorship.

Just as Survey II was used to poll 157 potential laboratory schools, representatives of like numbers of laboratory school-affiliated institutions and nonaffiliates were contacted by the first mailing of Survey III. Lesser numbers were involved in the second mailing as more reliable indications of qualifying, laboratory school-sponsoring institutions had been received in the meantime via early responses to Survey II and a smattering of late responses to Survey I.

Eventually, seventy-six responses representing the lll institutions involved in laboratory school sponsorship were received. Eleven of these were unusable--ten were filed by laboratory school directors despite instructions to the contrary and one was incomplete. The sixty-five usable responses represented 58.6 percent of the lll laboratory school-sponsoring institutions.

Eighty-one responses were received from the first 111 randomly-selected representatives of institutions that were not associated with laboratory schools. Four of these were unusable, three due to undetected printing errors in which pages were omitted and one was only partially completed. The net return was 69.4 percent.

The usuable returns from the representatives of laboratory schoolaffiliated institutions included five of a possible nineteen from privately-sponsored colleges and universities (26.3 percent) and sixty of
a possible ninety-two from publicly-sponsored institutions (65.2 percent).

In the random sample, eleven usable returns were received from private
institutions (57.9 percent) and sixty-six from publicly-sponsored colleges
and universities (69.6 percent).

The enrollments of the colleges and universities represented in this investigation ranged from a low of 460 to a high of 39,000. The mean enrollment was 8521.36 with a standard deviation of 7793.90.

All but two of the 142 institutions represented maintained working relationships with public and private schools for purposes of implementing practical teacher education experiences. One-hundred thirty respondents indicated that these relationships involved ten or more school facilities. Of the remaining ten institutions, three utilized the services of from six to ten schools and seven worked with from one to five schools. The nature of the agreements involved are shown in Table 27.

Table 27. The nature of collegiate relationships with public and private schools for meeting teacher education needs

Description	Number ^a	Percent
Agreements formalized with written contracts	66	47.1
No written contracts were involved	62	44.3
Payments were made to school districts or their faculties	73	52.1
Joint administrative arrangements were in effect	4	2.9
Joint staffing plans were involved	12	8.6

 $^{^{}a}N = 140$, but multiple responses were permitted.

The functions carried out in the schools with which teacher education institutions have working agreements are shown in Table 28.

Table 28. Teacher education functions carried out in public and private schools (N = 140)

Functions	Number	Percent
Observation and demonstration	136	97.1
Participation and other prestudent teaching practical experiences	137	97.9
Student teaching	140	100.0
Graduate practicum and internships	97	69.3
Developing and testing curriculum materials	53	37.9
Pilot-testing curriculum materials	42	30.0
Researchpure or of action quality	57	40.7
Others	4	2.9

An overwhelming number of the education deans and department heads were of the opinion that other public and private schools could be as effective as laboratory schools in facilitating teacher education needs—140 out of 142.

Findings

The characteristics of the institutions represented by the 142 usable responses from education deans and department heads are shown in

Table 29.

Table 29. Characteristics of institutions represented by Survey III responses (N = 142)

Characteristics		Number	Percent	
Α.	Sponsorship			
	 Public Private 	126 16	88.7 11.3	
В.	Status			
	 Liberal arts college Teachers college Multipurpose state college University 	15 1 49 77	10.6 0.7 34.5 54.2	
C.	Highest degree offered			
	 BA/BS MA/MS Specialist (six-year program) Doctorate 	24 49 29 40	16.9 34.5 20.4 28.2	
D.	Enrollment: mean = 8521.36			

Satisfaction with services provided by public, private, and laboratory schools The degrees of satisfaction expressed by education deans and department heads with the quality of the laboratory services and research facilities by laboratory schools and nonlaboratory schools are shown in Table 30. These data were used to test the two hypotheses that follow. Due to the fact that these data were to be used in making other comparisons, alpha was established at .01 to reduce the possibility of erroneous rejections.

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Table 30. Degrees of satisfaction expressed with laboratory services and provisions for research in laboratory and nonlaboratory schools

		Degr	ee of satis	sfaction wi	<u>th</u> :		
Nature of response			ratory ools	Oth	ner	Difference	t
		No.	%	No.	%%	1 - 2	
Α.	Ratings of provisions for practical teacher education experiences						
	1. Highly satisfactory	28	43.1	59	42.1		
	2. Good 3. Adequate	25	38.5 13.8	68	48.6 2.9		
	3. Adequate4. Improvement needed	9 2	3.1	4 9	6.4		
	5. Very unsatisfactory	1	1.5	ó	0.0		
	Totals	65	100.0	140 ^a	100.0		
	Mean ratings Error probability	1.82		1.74		.08	.6339 > .50
В.	Ratings of provisions for research and research output						
	1. Highly satisfactory	10	15.4	11	7.9		
	2. Good	20	30.8	40	28.6		
	3. Adequate	9	13.8	40	28.6		
	4. Improvement needed	21	32.3	38	27.1		
	5. Very unsatisfactory	5	$\frac{7.7}{100.0}$	<u>11</u> 140 ^a	$\frac{7.9}{100.1}$		
	Totals Mean ratings	65 2.86	100.0	2.99	100.1	13	7614
	Error probability	4.00		4.77		-,15	> .40

^aOne-hundred forty-two education deans and department heads participated in Survey III, but two laboratory school-sponsoring institutions had no other provisions for practical experiences and research. (Ratings ranged from one to five with one being high.)

Hypothesis 9: As determined from ratings assigned by education deans and department heads, laboratory schools and non-laboratory schools do not differ in the quality of practical teacher education experiences provided.

As shown in Table 30, a \underline{t} ratio of .6339 was obtained in comparing mean ratings for the two groups. Hypothesis 9 could not be rejected at the .01 level (p > .50). Although a difference in mean ratings favoring nonlaboratory schools was observed, no significant difference was found to exist between the ratings assigned to laboratory and nonlaboratory schools in respect to the quality of the practical teacher education experiences provided.

Hypothesis 10: No differences exist between laboratory and nonnonlaboratory schools in research implementation and output as determined by the evaluations of education deans and department heads.

Contrary to the situation that prevailed in the comparison of practical experience provisions, an observable difference favoring laboratory schools was found in comparing the research performance of the two groups of institutions. However, a \underline{t} ratio of only -.7614 (p > .40) was obtained thereby precluding the rejection of the null hypothesis. The difference between the research performance of laboratory and non-laboratory schools proved to be nonsignificant.

The variables examined in testing Hypotheses 9 and 10 also were analyzed on the basis of subgroup comparisons to determine if any differences were existent.

Hypothesis 11: No differences exist between the degrees of satisfaction expressed with the practical experience and research opportunities provided in laboratory and nonlaboratory schools that can be identified with the institutional status of survey respondents. The subgroup comparisons made included: (1) university vs. nonuniversity representatives; (2) representatives of large institutions (enrollment 5000+) vs. representatives of smaller institutions (5000-); and (3) representatives of laboratory school hosts vs. representatives of institutions that were not involved in laboratory school sponsorship.

The criterion for rejection of the null hypothesis was the attainment of one or more significant \underline{t} values ($\alpha = .01$).

None of the comparisons proved significant on the basis of the criterion established for rejecting the null hypothesis. Table 31 summarizes the findings related to these comparisons.

Factors contributing to performance ratings Twelve factors were identified as potential contributors to performance ratings related to provisions for practical teacher education experiences and research in laboratory and nonlaboratory schools. They appear in Table 32 along with a summarization of mean ratings and the findings of the \underline{t} tests to which these data were submitted.

The null hypothesis below was tested on the basis of the data presented in Table 32. The criterion for rejection of Hypothesis 12 was the attainment of one or more significant \underline{t} values. Type I error $(\ensuremath{\slashed})$ was established at .005 so that experimentwise error could be held in the vicinity of .05 (1 - $[1 - \ensuremath{\slashed}]^{12} = .0584$).

Hypothesis 12: There are no differences between laboratory and nonlaboratory schools that can be identified with the factors that contribute to teacher education performance.

Hypothesis 12 was rejected on the basis of the five highly significant differences found to exist between factors that may be potential

Table 31. Subgroup comparisons of ratings assigned to provisions for practical teacher education experiences and research performance

Subg	roup	com	parisons	Mean ra Grp. 1	Grp. 2	Difference 1 - 2	t	Error prob.
I.	Rat:	ings	of laboratory schools:	,				
	A.	Pro	visions for practical experiences					
		1. 2.	Colleges vs. universities Small institutions vs. large	1.81 1.81	1.82 1.82	01 01	03 03	.98 .98
	В.	Res	earch performance					
		1. 2.	Colleges vs. universities Small institutions vs. large	3.00 3.00	2.73 2.73	.27 .27	.88 .88	.38
II.	Rat	ings	s of nonlaboratory schools:					
	Α.	Pro	ovisions for practical experiences					
		1. 2. 3.		1.68 1.69 1.69	1.78 1.78 1.78	10 09 09	71 65 65	.48 .52 .52
	В.	Res	search performance					
		1. 2. 3.		3.14 2.98 2.98	2.86 2.99 2.99	.28 01 01	1.55 01 01	.12 .99 .99

^aRatings range from one to four; the lower the number the higher the rating.

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Table 32. Ratings^a of selected factors that are potential contributors to the performance of laboratory and nonlaboratory schools

Factors		Factor 1	others	Difference		Error
	~	schools		1 - 2	t	prob.
1.	Facility adequacysize, design condition	2.38	1.94	.44	3.25**	<. 005
2.	Facility accessibility in terms of locations	1.51	2.44	~.93	-6.33**	<. 005
3.	Administrator cooperation for teacher education	1.75	1.77	02	16	>.50
4.	Faculty cooperation in meeting teacher education needs	2.03	1.99	.04	.33	>.50
5.	Faculty expertisesuitability as models	2.14	2.39	25	-2.09 [*]	>.02
6.	Communications between schools and teacher education faculty	2.54	2.44	.10	.73	>.40
7.	Age/grade range of pupils enrolled	1.94	1.44	.50	4.01**	<.005
8.	Quality and variety of instructional programs	1.95	2.15	20	-1.61	>.10
9.	Curriculum/program flexibility for meeting teacher education needs	2.06	2.51	45	-3.46**	<.005
10.	Representativeness of student bodies reasonable cross section	2.20	1.70	.50	3.53**	<. 005
11.	Student attitudes toward teachers-in- training	1.80	1.94	14	-1.18	>.20
12.	School patron attitudes toward training programs and experimentation **Ratings range from one to five; the lower the training tr	1.90	2.16	26	-2.10*	>.02

contributors to teacher education performance. The significant differences identified were as follows:

- 1. Nonlaboratory schools were found to be superior in terms of facility adequacy as related to size, design and condition (t = 3.25, p < .005).
- 2. Laboratory schools had the advantage in facility accessibility in respect to location (t = -6.33, p < .005).
- 3. Nonlaboratory schools were rated superior on the basis of the ages and grade ranges of students they serve (t = 4.01, p < .005).
- 4. Laboratory schools were found to possess a significantly higher degree of curriculum and program flexibility as it relates to the facilitation of teacher education needs (t = -3.46, p < .005).
- 5. Nonlaboratory schools were rated superior in terms of the representativeness characteristic of their student bodies (t = 3.53, p < .005).

Only two other factors approached the rejection criteria, faculty expertise and school patron attitudes toward training programs and experimentation. In both instances, observed differences favored laboratory schools.

These data also were submitted to one subgroup comparison. In order to isolate and examine the ratings assigned by the sample element that had rated both comparison groups, the ratings of the teacher education administrators representing laboratory school hosts were subjected to further analysis.

The following null hypothesis was tested.

Hypothesis 13: Ratings of the factors that are potential contributors to teacher education performance by representatives of laboratory school-sponsoring institutions reveal no differences between laboratory and nonlaboratory schools.

The rejection criteria were the same as for the previous hypothesis.

Just as with the total sample, the findings with this subgroup permitted the rejection of the null hypothesis. The only difference between the findings with the total sample and those associated with representatives of laboratory school-sponsoring institutions was that "facility adequacy" (favoring nonlaboratory schools) was replaced by "school patron attitudes toward training programs and experimentation" with the advantage going to laboratory schools (t = -3.20, p < .005).

Relationships between contributing factors and performance ratings

In order to investigate the relative degrees of relationship between

contributing factors and performance ratings, product-moment correlation

coefficients were computed between each factor and the dependent variables:

ratings for practical teacher education experiences and for research

performance. The results are shown in Table 33.

Hypothesis 14: No relationships exist between teacher education and research performance ratings and evaluations of individual contributing factors.

The criterion established for rejection of Hypothesis 14 was the attainment of significant correlation coefficients between one or more contributing factors and one or both of the dependent variables, teacher education and research performance ($\alpha = .01$).

The null hypothesis was rejected on the basis of the numerous, highly significant correlation coefficients identified. Due largely to

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Table 33. Correlations between contributing factors and performance ratings for practical teacher education experiences and research

		Laboratory	<u>schools</u>	Others		
'ac t	ors	Tchr. ed.	Res.	Tchr. ed.	Res.	
		r	r	r	r	
1.	Facility adequacy	.39**	.31**	.33**	.28**	
2.	Facility accessibility	.47**	.21*	.08	.19*	
3.	Administrative cooperation	.50**	.33**	.42**	.38**	
4.	Faculty cooperation	.42**	.29**	.46**	.44**	
5.	Faculty expertise	.46**	.39**	.54**	.38**	
6.	Communications	.41**	.34**	.32**	.44**	
7.	Age/grade range of pupils	.29**	.08	.13	.01	
8.	Quality and variety of programs	.62**	.48 ^{**}	.43**	.32**	
9.	Curriculum/program flexibility	.45**	.38**	.42**	.53**	
10.	Representativeness of students	.20	.17	.20*	.06	
11.	Student attitudes toward trainees	.47**	.18	.25**	.30**	
12.	Patron attitudes toward teacher education	.58**	.38**	.33**	.40**	

^{*}greater than 0.00 (p < .05)

^{**} greater than 0.00 (p < .01).

the ample numbers represented by the data (65 and 140 respectively), facility accessibility, age/grade range of pupils, student representativeness, and student attitudes were the only factors that failed to achieve universal significance.

To determine if differences existed between contributing factor relationships with performance, the following hypothesis was formulated for testing:

Hypothesis 15: The strengths of corresponding factor-performance relationships do not differ for laboratory and nonlaboratory schools.

Hypothesis 15 was tested via Fisher's \underline{z} technique for examining the significance of differences between uncorrelated correlation coefficients. The correlation coefficients representing the relationships between given independent and dependent variables for laboratory schools were compared with the corresponding coefficients for nonlaboratory schools. The criterion for rejecting the null hypothesis was the attainment of one or more significant, two-tailed \underline{z} values in these comparisons ($\alpha = 0.005$).

The \underline{z} values obtained ranged from a low of .00 to a high of |2.81|. A \underline{z} of 2.93 was required for rejection. Consequently, the null hypothesis could not be rejected; no significant differences were found to exist between corresponding correlation coefficients representing laboratory and nonlaboratory schools.

Within group, factor-performance correlations also were examined via Hotellings <u>t</u> test to determine if the relationships between certain factors and the criterion variables, teacher education and research

performance, were more significant than others.

Analyses of all possible combinations would have involved sixtysix overlapping comparisons with each group, a situation that would have
resulted in an indeterminable, but prohibitive level of cumulative error.
Therefore, it was impractical to test any hypotheses in a meaningful
fashion and none were formulated. Only those correlation coefficients
exceeding .45 were compared with those of lesser strength as it was
arbitrarily determined that those which fell below this level would have
little utility for making observations about factor-performance relationships. Alpha was established at .005 in order to exert some control
over cumulative error.

Within the performance ratings for laboratory schools, seven factor-practical experience performance relationships and two factor-research performance correlation coefficients were examined. The only significant factor identified in the case of the former was "quality and variety of programs" (r = .62) which exceeded (p < .005), "age/grade range of pupils" (r = .29), and "representativeness of students" (r = .20). The only research performance factor, "quality and variety of programs" (r = .48), showed significantly greater strength of relationship than "age/grade range of pupils" (r = .08) and "student attitudes toward trainees" (r = .18).

The two nonlaboratory school factors that contribute to practical experience performance which met the r=.45 minimum, "faculty expertise" (r=.54) and "faculty cooperation" (r=.46), both demonstrated greater strength of relationship with the dependent variable (p < .005) than

the following:

- 1. student attitudes toward trainees (r = .25)
- 2. age/grade range of pupils (r = .13)
- 3. facility accessibility (r = .08)

Additionally, "faculty expertise" demonstrated greater strength of relationship than "facility adequacy" (r = .33), "patron attitudes toward teacher education" (r = .33), and "communications" (r = .32); "faculty expertise" exceeded "representativeness of students" (r = .20) in addition to those in the numerical listing above.

The lone nonlaboratory school factor contributing to research performance that was examined, "curriculum/program flexibility" (r = .53) showed greater strength of relationship statistically than the following factors:

- 1. quality and variety of programs (r = .32)
- 2. student attitudes toward trainees (r = .20)
- 3. facility adequacy (r = .28)
- 4. facility accessibility (r = .19)
- 5. representativeness of students (r = .06)
- 6. age/grade range of pupils (r = .01)

Summary

Data collection in this investigation was conducted via three mailed survey instruments directed toward education deans/department heads and the directors of college-controlled laboratory schools for the purposes of: (1) identifying operational and defunct laboratory

schools; (2) collecting descriptive data regarding existent laboratory schools; and (3) assessing the provisions made by teacher education institutions for meeting practical experience and research needs. Response rates for the education deans and department heads polled approximated sixty percent; 100 percent response was obtained from laboratory schools with telephone follow-ups to the mail survey.

The data collected were analyzed on the basis of various subsample comparisons and in reference to similar data collected in 1969. Extensive descriptive data were also compiled and presented. An itemized summary of the investigation's findings follows.

Laboratory school numbers

Responses from 797 of 1362 institutions indicated that 173 of them sponsored laboratory facilities. With the aid of NALS directory information, 111 laboratory schools were identified that met the investigation's minimum criteria: the inclusion of three grades and enrollment of fifty pupils. This number was down from the 177 which met these criteria in 1969.

Laboratory school termination

Respondents reported on the closure of 105 laboratory facilities of undertermined scope, ninety-seven since 1950. Twenty-four of those remaining had experienced grade span reductions since 1969. "Insufficient operating funds" was found to exceed all other factors in prompting these terminations with the possible exception of "ultimatums from higher authorities" which it did not exceed in importance to a significant degree.

Based on 1969 data, no differences were found between those that have persisted and those which have closed since.

Laboratory school functions

In 1976, the highest functional priorities were assigned to (1) prestudent teaching practical experiences (participation) and (2) observation and demonstration which exceeded all others in importance to a highly significant degree. The only statistically significant, observable trend since 1969 was found in the fact that the development and testing of new curriculum materials was given less priority in 1976 than in 1969.

Comparisons of laboratory and nonlaboratory schools

Although observable differences were found between laboratory and nonlaboratory schools on the basis of performance ratings related to the implementation of (1) teacher education experiences and (2) research—the former favored nonlaboratory schools and the latter laboratory schools—no significant differences were found. However, significant differences were found to exist between ratings that teacher education administrators assigned to various contributing factors: laboratory schools were rated higher on facility accessibility and curriculum/program flexibil—ity; nonlaboratory schools held the advantage in facility adequacy, age/grade range of pupils served, and student body representativeness. An overwhelming majority of the respondents were found to be of the opinion that the ability of nonlaboratory schools to facilitate teacher education experiences equaled that of laboratory schools.

Relationships of contributing factors and performance ratings

Significant correlations were found to exist between nearly all contributing factors and the dependent variables, performance ratings for the implementation of teacher education experiences and research. However, no differences were found to exist between the relative strengths of the corresponding relationships when laboratory and nonlaboratory schools were compared. Neither were any clear-cut advantages found for selected factor-performance correlations when within-group comparisons were made.

CHAPTER V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Purpose

The inclusion of practical experience components in formal teacher education curricula has a long and respected history--perhaps dating back as far as the early seventeenth century. Nearly fifty years ago, this long-established practice was institutionalized with the adoption of related standards by accrediting agencies. The presence of competency-based teacher education, teacher education centers, and microteaching in the 1970s attests to the continuing emphases placed on the provision of practical experience opportunities for teachers-in-training.

For many years, some teacher preparatory institutions accommodated their practical experience needs through the medium of laboratory schools maintained on their campuses. However, more recent years saw a greater share of this responsibility resting with other public and private schools. In more than a few instances, laboratory schools succumbed to pressures for their discontinuation seemingly growing out of competition for limited institutional operating funds and the feeling that the practical experience and research responsibilities that formerly were their almost exclusive domain could be accommodated otherwise.

Among the purposes of this investigation were: (1) the identification of existing laboratory schools in the United States; (2) an investigation of the number of laboratory schools that had been subject to closure in recent years and the factors that may have contributed to their demise; (3) the compilation of descriptive and functional data pertaining to those continuing operations; (4) the compilation of data regarding provisions representative of the efforts made by teacher education institutions in meeting their practical experience and research needs; and (5) the procural of authoritative estimates of the effectiveness with which the latter needs were being met and evaluations of possible contributing factors.

The intent was to analyze these data in a manner that would facilitate insights into: (1) the present status of college and university-controlled laboratory schools; (2) the closure phenomenon affecting these facilities and the factors that may have contributed to it; (3) any changes that may have occurred in the nature of these institutions, their functions, roles or responsibilities; (4) the degree of success with which teacher education needs were being met; and (5) the factors that contribute to or detract from the success with which these practical experience and research needs are accommodated.

Methods and procedures

Population and sampling Based on the objectives and assumptions underlying this endeavor, the population identified for study in this investigation included all of the four-year institutions of higher education in the fifty states comprising the United States that were involved in the training of teachers, irrespective of their status or sponsorship.

It was determined from current, reliable data supplied by the RITE Project

at Indiana University (68) that the population under consideration included 1362 colleges and universities--490 public and 872 private institutions.

Three different samples were identified as the objectives of three separate surveys that were implemented in the data collection phase of this investigation. They were: (1) Survey I--ranking teacher education administrators (education deans or department heads) in each of the 1362 colleges and universities involved in teacher education; (2) Survey II--chief administrators in each of the college or university-controlled lab-oratory schools known or found to be in existence; (3) Survey III--ranking teacher education administrators in each college or university known or found to be engaged in laboratory school sponsorship and a like number of randomly-selected teacher education administrators representing non-laboratory school-affiliated institutions. The latter were stratified on the basis of public or private sponsorship equated to that for laboratory school hosts--ninety-two public and nineteen private in the final analysis.

<u>Data collection</u> Corresponding with the three surveys included in this investigation, three questionnaires were designed for data collection purposes. Each of these instruments was distributed by mail and a follow-up mailing was made to nonrespondents on the first mailing.

1. Survey I was directed to the ranking teacher education administrators at each of the 1362 colleges and universities in the United

States that sponsor teacher education programs. It was designed to gather information about past, current and future sponsorship of

laboratory schools and to provide data for examining contributing factors in those instances where laboratory school operations had been discontinued.

- 2. Survey II was directed to chief administrators in each of the laboratory schools identified in Survey I and supplemented by NALS directory information (56). Survey II was designed to collect demographic data on operational laboratory schools and to secure information about roles, functions, faculty productivity and future outlook.
- 3. Concurrent with the dissemination of Survey II, ranking teacher education administrators were polled by Survey III regarding institutional provisions for the implementation of laboratory experiences and research, plus their perceptions about the quality of the services provided. It was dispatched to education deans or department chairmen at each of the institutions hosting laboratory schools and an equal number of randomly-selected teacher education administrators in colleges and universities without laboratory schools.

Samples of the three survey instruments and cover letters that accompanied them appear in Appendices A through D. Questionnaire mailings were conducted during January and February 1976. Telephone follow-ups were made to Survey II to ensure a complete listing of laboratory schools.

In addition to the data collected in this investigation, data compiled in 1969 in conjunction with Howd and Browne's <u>National Survey of Campus Laboratory Schools</u> (36) were analyzed on an <u>ex post facto</u> basis.

Results

This section has been organized according to the surveys in which respective data were collected and around the hypotheses tested. Also included are the findings of <u>ex post facto</u> comparisons of 1969 data and 1969-1976 data comparisons.

Survey I Seven hundred ninety-seven responses were received from Survey I, a return rate of 58.5 percent. One-hundred seventy-three respondents indicated that their institutions sponsored laboratory facilities of undetermined scope; 105 indicated that their institutions formerly sponsored such facilities, but no longer did so. Ninety-seven of these had been discontinued since 1950. The remaining 519 institutions had never been involved in laboratory school sponsorship. However, 115 of the latter institutions had considered the establishment of laboratory facilities in the previous five years; only ten reached positive decisions, and in at least four of these instances early childhood centers were contemplated.

Local college/university administrators were found to be the leading source of recommendations for laboratory school closures with more than a two to one advantage over "higher authorities."

Hypothesis 1: There are no differences in the importance attached to potentially contributing factors in past laboratory school closures as evidenced by the perceptions of education deans and department heads.

Analysis of variance was employed in testing this null hypothesis and it was rejected on the basis of a highly significant "F" ratio (p < .01). The data were subsequently submitted for a posteriori testing

with Duncan's New Multiple Range Statistic. On this basis, "insufficient operating funds" was found to exceed all other factors in importance as a contributing factor in laboratory school closures (p < .01) with the exception of "ultimatums from higher authorities" which ranked second.

Survey II Through a combination of Survey I responses, and mail and telephone responses to Survey II, 111 laboratory schools meeting the criteria for inclusion in this investigation were identified. These criteria were the inclusion of at least three grade levels and an enrollment of fifty or more pupils. Although the completeness of the data supplied varied, 100 percent response was achieved in Survey II, largely due to telephone follow-ups to the mail surveys.

Ninety-two of the institutions identified were publicly sponsored; the remaining nineteen were privately-sponsored. Appendix F provides a listing of these laboratory facilities; Appendix G includes demographic and functional data pertaining to each institution.

Among the group statistics compiled on the 111 schools included in this investigation were: (1) enrollments ranged from seventy-three to 1696, median = 294; (2) on the average, minority groups accounted for 20.8 percent of the students enrolled; (3) the mean mental ability of the students in eight schools was well above average, above average in fifty, and about average in forty-eight; (4) sixth grade was the highest level encompassed by forty-three schools, twenty-eight schools encompassed at least all numbered grades (1-12); (5) college budgets were the leading source of funding; (6) forty of the schools charged tuition; (7) school

administrators served as the policy-making group for 64.9 percent of the schools; (8) thirty-four indicated that their futures were very bright, forty-nine reasonably good, and eighteen rather bleak; and (9) six institutions had received termination notices.

Hypothesis 2: No differences exist in the priorities accorded various laboratory school functions by directors of these facilities.

Nine functions characteristic of laboratory schools were analyzed via analysis of variance. A highly significant "F" ratio (p < .01) was obtained and the null hypothesis was rejected. Duncan's New Multiple Range Statistic revealed that: (1) two functions, (a) participation and other prestudent teaching experiences and (b) observation and demonstration, exceeded the priorities assigned all other functions to a highly significant degree (p < .01); (2) inservice functions, the development of curriculum materials, and leadership in professional organizations ranked next and exceeded most of the remaining functions in importance to a highly significant degree—the only exception was the latter which failed to exceed student teaching at the .01 level established for acceptable significance.

Sixty-seven of the institutions reported having undergone critical examinations threatening to their existence in the previous five years.

College/university administrators (40.3 percent) and higher boards

(44.8 percent) were the most frequently-mentioned examiners. The most frequent outcomes of these examinations were "changes in program emphases" (44.8 percent) and "few if any changes in school operations" (40.3 percent).

Product-moment correlation coefficients were computed in examination of the relationships between the future outlooks respondents held for the schools and twenty descriptive variables. The coefficients derived ranged from .01 to .32; only two, mean student ability (r = -.23) and the rank of college budgets as a financial source (r = .32), were found to exceed zero at the .01 level.

Ex post facto analyses of 1969 data The 1969 data served as the basis for testing three hypotheses.

- Hypothesis 3: No differences exist between operational and defunct laboratory schools on the basis of grade span and enrollment data reported in 1969.
- Hypothesis 4: Faculty publishing activities reported in 1969 show no differences between operational and defunct laboratory schools.

Hypotheses 3 and 4 were tested via the Chi-square statistic. Neither could be rejected at the .05 level (p > .70 and p > .80 respectively).

Hypothesis 5: No differences exist between operational and defunct laboratory schools that can be determined from the priorities the two groups assigned to the functions carried out by those institutions in 1969.

The differences between the seven functions reported in Howd and Browne's survey (36) were subjected to \underline{t} tests. Due to the cumulative error probabilities characteristic of multiple comparisons, the critical region was set at the .01 level. Even though observable differences favored the functional group in every case, Hypothesis 5 could not be rejected (p > .01 for all comparisons).

1969-1976 data comparisons In order to ascertain whether significant changes had taken place in laboratory schools between 1969 and 1976, current data were compared with those reported by both the functional and defunct laboratory schools examined in the previous section.

Cursory examination revealed that: (1) the number of functional laboratory schools encompassing at least three grade levels had declined from 177 in 1969 to 111 in 1976; (2) twenty-four of the 103 institutions included in both surveys had been reduced in scope by one or more grades.

Chi-square tests were employed in testing the two hypotheses that follow.

Hypothesis 6: No differences exist between the grade span and and enrollment data collected in this investigation and those reported by operational and defunct laboratory schools in 1969.

Hypothesis 7: There are no differences in the faculty publishing activities reported by the three laboratory school groups:
(1) those by functional laboratory schools in 1969; (2) those by defunct laboratory schools in 1969; and (3) those collected from institutions participating in this investigation.

Neither of the preceding null hypotheses could be rejected at the .05 level (p > .70 and p > .30).

Due to the emphasis given to the future research functions of laboratory schools in the related literature examined in conjunction with this investigation, the lack of power associated with unweighted means analysis, and the cumulative error that mounts with each additional multiple comparison, function comparisons were limited to (1) "research--pure or of action quality;" and (2) developing and testing new curriculum materials."

Furthermore, only the data reported by currently functional laboratory

schools in 1969 and 1976 were considered. Two one-tailed \underline{t} tests were employed in testing the following hypothesis:

Hypothesis 8: The mean priority ranks assigned research and development activities by functional laboratory schools in 1969 were equal to or lower (higher numerically) than those assigned by the operational schools examined in 1976.

The criterion established for the rejection of the null hypothesis was the attainment of a significant, negative \underline{t} value in one or both of the comparisons involved ($\alpha = .025$). Although a highly significant \underline{t} value (p < .005) was achieved in the case of curriculum development activities, it was positive rather than negative. Therefore, the null hypothesis could not be rejected. The other comparison, "research--pure or of action quality," also showed an advantage for the 1969 group, but it was not statistically significant.

Survey III Although the gross return was higher, usuable responses from laboratory school-affiliated institutions numbered sixty-five and seventy-seven were received from nonlaboratory school affiliates, a combined response rate of 64.0 percent from the 222 potential respondents. Sixteen of these were from representatives of private institutions and 126 from public colleges and universities. Sixty-four represented universities and seventy-seven represented other colleges.

The enrollments of the institutions represented ranged from 460 to 39,000; the mean enrollment was 8521.36. Sixty-five maintained laboratory schools and all but two of the institutions had working agreements with nonlaboratory schools for the implementation of teacher education needs. These arrangements in 130 instances involved ten or more distinct

school facilities -- elementary schools, junior highs and high schools.

The hypotheses tested with the data supplied by these groups of respondents follow.

Hypothesis 9: As determined from ratings assigned by education deans and department heads, laboratory schools and nonlaboratory schools do not differ in the quality of practical teacher education experiences provided.

In testing Hypothesis 9, a \underline{t} value of .6339 was obtained in comparing mean ratings for the two groups. The null hypothesis could not be rejected at the .01 level (p > .50).

Hypothesis 10: No differences exist between laboratory and nonlaboratory schools in research implementation and output as determined by the evaluations of education deans and department heads.

Hypothesis 10 was also tested via the \underline{t} statistic. A \underline{t} value of only -.7614 was obtained and the null hypothessis could not be rejected (p > .40).

Hypothesis 11: No differences exist between the degrees of satisfaction expressed with the practical experience and research opportunities provided in laboratory and nonlaboratory schools that can be identified with the institutional status of survey respondents.

In testing Hypothesis 11, ten comparisons involving t tests were carried out. The subgroupings involved were: (1) university vs. nonuniversity representatives; (2) representatives of large institutions (enrollment of 5000+) vs. those from smaller institutions (5000-); and (3) representatives of laboratory school hosts vs. representatives of institutions that were not involved in laboratory school sponsorship. The null hypothesis could not be rejected when none of the comparisons was found significant at the .01 level. Error probabilities ranged from .12 to .99.

Hypothesis 12: There are no differences between laboratory and nonlaboratory schools that can be identified with the factors that contribute to teacher education performance.

Twelve factor comparisons were made utilizing \underline{t} tests; the rejection criterion was the attainment of one or more significant \underline{t} values ($\mathbf{d} = .005$). The null hypothesis was rejected on the basis of five significant findings. They were:

- 1. Laboratory schools were found to excel in facility accessibility (t = -6.33, p < .005) and curriculum/program flexibility (t = -3.46, p < .005).
- 2. Nonlaboratory schools held the advantage in facility adequacy (t = 3.25, p < .005), age/grade range of pupils served (t 4.01, p < .05), and student body representativeness (t = 3.53, p < .005).
 - Hypothesis 13: Ratings of the factors that are potential contributors to teacher education performance by representatives of laboratory school-sponsoring institutions reveal no differences between laboratory and nonlaboratory schools.

The same comparisons as made in testing Hypothesis 12 were included in testing this hypothesis; in this instance, however, only the data reported by representatives of laboratory school affiliates were examined. Hypothesis 13 was also rejected on the basis of five significant findings. The only difference between the findings was that "facility adequacy" (formerly favoring nonlaboratory schools) was replaced by "patron attitudes towards training programs and experimentation" with the advantage going to laboratory schools.

Hypothesis 14: No relationships exist between teacher education and research performance ratings and evaluations of individual contributing factors.

Product-correlation coefficients between the variables mentioned were computed in testing this hypothesis. The null hypothesis was rejected on the basis of the achievement of no less than eight of twelve significant coefficients (p < .01) in each of the four groupings tested.

Hypothesis 15: The strengths of corresponding factor-performance relationships do not differ for laboratory and nonlaboratory schools.

Hypothesis 15 was tested via Fisher's \underline{z} technique for testing the significance of differences between uncorrelated correlation coefficients. The null hypothesis could not be rejected when no differences were found to exceed the criterion for rejection ($\alpha = .005$).

Within-group degrees of relationship were evaluated via Hotelling's test for correlated correlation coefficients but no hypotheses were formulated because the high error potential of the numerous comparisons necessary would have precluded meaningful interpretations. Suffice it to say, that no clear-cut advantages were found for any contributing factors.

Finally, the participants in this survey were asked to indicate whether they were of the opinion that nonlaboratory schools could be as effective as laboratory schools in meeting teacher education needs. An overwhelming majority replied affirmatively--140 out of 142.

Limitations

This investigation was limited to the solicitation and analyses of the reports of ranking administrators of teacher education programs and laboratory schools sponsored by United States colleges and universities. These reports were based on the opinions and perceptions of the individuals who responded to the survey instruments utilized in conducting this investigation.

Such being the case, references to or inferences about the institutions represented are by implication only as the accuracy of these reports were totally dependent upon the objectivity of the respondents.

Furthermore, the data collected in the final two phases of this investigation, Surveys II and III, must be interpreted in light of the restrictions imposed on the eligibility of participants considered for inclusion in the investigation. In order to qualify, it was necessary that laboratory school administrators represent facilities encompassing a minimum of three grades and enrolling fifty or more pupils. Teacher education administrators were required to meet one of two criteria: (1) that they be employed by institutions sponsoring laboratory schools meeting the preceding specifications; or (2) that they be selected randomly from the population of comparable teacher education administrators according to the stratification scheme determined by the public/private sponsorship ratio of the laboratory schools identified for study. samples of education deans and department heads that the data compiled in Survey III represent drew 82.9 percent of their membership from public colleges and universities and the remaining 17.1 percent from private institutions. The corresponding percentages in the population of teacher education institutions were 36.0 and 64.0 percent respectively.

As a result, the data reported herein and conclusions drawn have a strong bias favoring publicly-supported teacher education institutions

and the elementary and secondary laboratory facilities they sponsor.

These facts, should be kept in mind in any inferences made from the data reported.

Finally, the significance of the findings reported herein are not absolute; they must be interpreted in respect to the error probabilities the statistical procedures employed permit. Every effort was made to control cumulative error in nonoverlapping data comparisons, but its possible effects in those analyses involving overlapping comparisons should be recognized.

Conclusions and Discussion

1. The number of college and university-controlled laboratory
schools declined dramatically between 1969 and 1976 and it
appears that this trend will continue, at least for a time.

The literature surveyed and the findings of this investigation lend strong support to this conclusion. Survey I elicited information regarding the termination of 105 laboratory facilities and 1969-1976 data comparisons revealed that the number of laboratory schools encompassing at least three grades declined from 177 to 111 during that period of time. Lending credence to the belief that this trend will continue were the findings that: (1) six institutions had received notices of impending closure; (2) the laboratory facilities on eight of the State University College of New York campuses are under extreme duress and were spared only by the retraction of a closure order in 1976; (3) sixty-seven of the 111 institutions studied had been subject to threatening examinations

in the five years preceding 1976; and (4) eighteen respondents indicated that there were ominous threats to the existence of the laboratory schools they administered.

2. Often, laboratory schools that survived closure threats were subject to program reductions or experienced changed emphases.

Comparisons of 1969 and 1976 data revealed that twenty-three of the institutions included in the two surveys had suffered the loss of one or more grades. Similarly, thirteen respondents to Survey II reported program cut-backs as having been one of the outcomes of the critical examinations their institutions had undergone; thirty respondents reported changed emphases were the result of such examinations.

3. Financial pressures appeared to be the major factor prompting laboratory school closures and program reductions.

Data collected in Survey I related to contributing factors in the demise of eighty-nine laboratory facilities revealed that "insufficient operating funds" exceeded all other factors listed in importance as a contributing factor in laboratory school closures to a highly significant degree except the one ranked second, "ultimatums from higher authorities."

Lending tacit support to this conclusion was the fact that no significant differences were found to exist between the functions and activities of operational and defunct laboratory schools on the basis of data reported in 1969.

4. Whether or not a laboratory was able to survive financial pressures, more than likely, depended upon the degree to which its services were valued by the host institution.

Local college and university administrators were found to outrank the second leading source of initial recommendations for termination by a margin of over two to one, 55.2 percent vs. 25.3 percent for higher authorities (regents, trustees, legislative groups, etc.). Seemingly, this was indicative of a lack of support on local campuses.

5. Other than decreased numbers, few changes took place in laboratory schools as a group between 1969 and 1976.

Statistical tests administered in comparisons of 1969 and 1976 data failed to reveal any significant differences in grade spans encompassed, enrollments, and faculty publishing activities.

6. Contrary to what has been advocated in the professional

literature and emphasized repeatedly in the future predictions

made by most studies of laboratory school functions over the

past twenty or so years, laboratory schools as a group have

not moved in the direction of increased research activity.

In fact, there appeared to be good reason to suspect that the

group norm was the deemphasis of research and development

activities.

When data from 1969 and 1976 were compared on the basis of (1) "research--pure or of action quality" and (2) "developing and testing new curriculum materials" ("pilot-testing new curriculum materials" in 1969) those data reported in 1969 held observable advantages in both instances. The null hypothesis tested by one-tailed \underline{t} tests could not be rejected even though a highly significant difference (p < .005) was found between curriculum development means due to the fact that the direction of the

difference ran counter to that required for rejection. The emphasis given curriculum development activities in 1969 exceeded the priority accorded these activities in 1976 (p < .005).

Furthermore, when asked to identify the two major objectives or missions of the laboratory schools they represented, only 16 respondents (15.2 percent) identified research as one of their top two objectives; curriculum development and testing garnered 13.3 percent support.

7. The major functions of laboratory schools as a group were educating the children enrolled, providing opportunities for participation and other prestudent teaching experiences, and observation and demonstration.

When nine possible functions were evaluated (exclusive of educating the children enrolled) via analysis of variance and Duncan's New Multiple Range Statistic (1) participation and (2) observation and demonstration exceeded all other factors in priority ratings to a highly significant degree (p < .01). The reader is cautioned that potential cumulative error for these comparisons was estimated at .077.

In the definition of the two major objectives or missions of laboratory schools, 78.1 percent of the respondents opted for "providing practical experience opportunities for teacher education" and 74.3 percent selected "educating the children enrolled."

8. Generally, teacher education administrators in institutions

whose characteristics approximated those of laboratory school

sponsors were reasonably well-satisfied with provisions for

practical teacher education experiences, but not necessarily

with research opportunities.

Eighty-one and six-tenths percent of those deans evaluating laboratory schools on practical experience implementation ranked them good or highly satisfactory; 90.7 percent of the total sample rated nonlaboratory schools accordingly. Only 46.2 and 36.5 percent, respectively, rated research performance in a like manner.

9. Although laboratory schools and nonlaboratory schools as

groups differed in some respects, they were about equal in

their abilities to accommodate teacher education and research

needs according to the deans and department heads polled.

One-hundred forty out of 142 deans and department heads indicated same when asked directly if nonlaboratory schools could be as effective as laboratory schools in facilitating teacher education and research needs. Furthermore, data analyses with subgroups and the total sample failed to identify any significant differences between the performances of the two types of schools.

Differences were found between some of the contributing factors; with the total sample:

- Laboratory schools were found to excel in facility accessibility and curriculum/program flexibility.
- Nonlaboratory schools held the advantage in facility adequacy, age/grade range of pupils served, and student body representativeness.

When the ratings of teacher education administrators representing laboratory school affiliates alone were compared, "facility adequacy"

(formerly favoring nonlaboratory schools) was replaced by "patron attitudes towards training programs and experimentation with the advantage going to laboratory schools.

10. It appeared that, unless laboratory schools (in group terms)

could identify valuable, unique functions or roles in service

of their host institutions or other supportive groups, they

would continue to face problems of survival.

The bulk of the findings of this investigation lent support to the latter conclusion. The rather static nature found to be characteristic of the functional data reported, the continuing threats to their existence, and the apparent equality of nonlaboratory schools in meeting teacher education needs did not speak well for the future of laboratory schools.

Recommendations for Further Research

This investigation generated some other possible avenues of research.

The most obvious one was the replication, full or partial, of this investigation after an appropriate time interval to update the findings and to ascertain whether the conditions and trends identified persist.

Others follow:

A similar investigation of those teacher education facilities which did not qualify for inclusion in this investigation would seem appropriate. Preschools, early child centers, and limited, special education facilities seem to abound, but few data are available regarding their operations or the commonalities of their concerns.

A number of aspects that were either ignored or only touched upon

in this investigation also would be worthy of further study. Among them are: (1) special education practices in laboratory schools; (2) the financial bases upon which laboratory schools operate; (3) faculty characteristics and activities; (4) innovative teacher education programs in laboratory and nonlaboratory schools; (5) financial considerations in facilitating teacher education experiences in nonlaboratory schools; and (6) the effects of adjustment periods that follow laboratory school closures.

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. . . and to Ron and Bill who went without supper.

APPENDIX A. SURVEY I QUESTIONNAIRE

1976 NALS LABORATORY SCHOOL CENSUS QUESTIONNAIRE

192

<u>University and College-Controlled Laboratory Schools</u>: those schools, known by whatever name, that draw financial support from and are administered and staffed by teacher education institutions. Generally, they enroll children of preschool, elementary and/or secondary school age and were established to assist the host institution in the implementation of one or more of the following: laboratory experiences, consultant services, inservice programs, educational research, curriculum development. They have general teacher education responsibilities as opposed to those characteristic of preschool facilities maintained in the interest of a single subject area such as home economics.

College/University
Title
Name
Person completing this questionnaire:

It was negative; a laboratory school will not be established. It was positive; it is intended that a laboratory school will be established in (year).
No decision has been reached; deliberation continues.
If yes, what was the outcome of this consideration?
Tes No.
your campus in the past five years? Yes.
If you marked response 'd' to question 1, has the establishment of a laboratory school been considered on
by a higher authority (regents, trustees, legislature) please identify:
by the local college/university administration.
by laboratory school personnel. by a local college/university faculty body (senate, etc.).
If you marked either response 'b' or 'c' to question 1, at what level was the closure decision first recommende
legislature).
 0 1 2 3 4 5 Intra-institutional competition for funds. 0 1 2 3 4 5 Ultimatum from a higher authority (college/university administration, regents, trustees,
0 1 2 3 4 5 Insufficient operating funds.
0 1 2 3 4 5 Inability to accommodate growing and changing needs.
0 1 2 3 4 5 Lack of meaningful contributions to teacher education.
Importance: Low High 0 1 2 3 4 5 Facility inadequacy (physical plant).
importance of each factor by circling a number; "O" means it was not a factor.)
If you marked either response 'b' or 'c' to question 1, what factors contributed to its closure? (Please rate th
City State Zip
College University
Address (if different from respondent's)
School's name
Title
school: Administrator's name
. If you marked either response 'a' or 'b' to question 1, please provide the following data about the laboratory
d. No. It never has.
c No. It did, but it was phased out in (year).

completed.

APPENDIX B. SURVEY II QUESTIONNAIRE

1976 NALS LABORATORY SCHOOL CENSUS

QUESTIONNAIRE

194

Form II — To be completed by the ranking administrators of operational laboratory schools in the United States.

Directions: Please respond to each of the items in this questionnaire to the best of your ability and return it in the enclosed envelope at your earliest convenience. On multiple choice items you may make your selections by placing an "X" in the blank preceding the response of your choice. On those items asking for ratings, you may indicate your choice by circling the appropriate number. Please keep your responses to open-ended items as brief as possible.

VERTICAL ORGANIZATION

University and College-Controlled Laboratory Schools: those schools, known by whatever name, that draw financial support from and are administered and staffed by teacher education institutions. Generally, they enroll children of preschool, elementary and/or secondary school age and were established to assist the host institution in the implementation of one or more of the following: laboratory experiences, consultant services, in-service programs, educational research, and curriculum development. They have general teacher education responsibilities as opposed to those characteristic of preschool facilities maintained in the interest of a single subject area such as home economics.

Does your institution sponsor a laboratory

school as defined above?

	a. Yes b. Yes, but it is slated to be phased out in (year).	4.	What grades or grade equivalents are encompassed in the above-named laboratory facility? (Mark all that apply but do not make overlapping selections.)
2.	c. No. It did, but it was phased out in (year). d. No. It never has. If you marked either response "c" or "d" to question 1, please complete item 2 and return the questionnaire. (If you marked "a" or "b", you may omit this item and continue with the questionnaire.) Respondent's Name		Preschool (below kindergarten) Special education (Levels: primary, intermediate, secondary) Educable retarded—level(s): Trainable retarded—level(s) Other—level(s):
3.	Title College/University City State Zip Laboratory school director's names		Kindergarten Primary grades (1-3) Intermediate grades (4-6) Middle school (6-8)
.	Title Laboratory school name College/University		Junior high (7-8) Junior high (7-9) High school (9-12) High school (10-12) Other (Please identify):
	Street address (if any) City State Zip	5.	How is the school organized? In conventional grades In multi-age or multi-grade units

	In combinations of the above		14.	Is the construction of a new building being considered?
	Other (Please explain):			Yes No
		195	ADI	MINISTRATIVE ORGANIZATION
EN	ROLLMENT AND ADMISSION		15.	How is the laboratory school administered?
6.	The total enrollment of the school is			As a separate unit independent of other college/university departments
7.	Please indicate the enrollments for the various divisions of the school and identify the ages, grades or grade equivalents included in each division.			As a unit within a given college, university department. Other (Please explain):
	Preschool ; Ages included			·
	Spec. education; Ages included		16.	Who holds the major responsibility for determining laboratory school policy? (Please limit
	Elementary; Grades included			your choice to one group) A college/university-wide committee/
	Junior high or middle school; Grades included	i		council
	High school; Grades included			A college of education committee/
8.	How are students selected for admission?			A laboratory school committee/
	The school serves an attendance district			Administrators—laboratory school, college, university—singularly or col-
	On the basis of applications			lectively
	A combination of the above			Ad hoc groups of laboratory school faculty
•	Other (Please Identify):			No established group or designated individuals
9.	Which category best describes the student body enrolled in the laboratory school in terms of overall mental ability? Well above average (mean IQ above		17.	What are the responsibilities of the laboratory school director? They are confined exclusively to the administration of the laboratory school
	115)			He/she has other administrative du-
	Above average (mean IQ 105-115) About average (mean IQ 95-105)			ties, namely:
	Below average (mean IQ below 95)			He/she has other instructional duties,
10.	What is the racial/ethnic composition of the laboratory school student body? (Please approximate the percent of the student body that represents each racial/ethnic group.		FAC	ULTY DATA
	Black		18.	What is the total number of faculty employed in the laboratory school (Include administra-
	Spanish American			tors, full-time and part-time professional employees)?
	White		19.	How many of these faculty members fit in each
	Other (Am. Indian, Oriental, etc.)		13.	of the following categories? (Place the number in the blank to the left of each description.)
HIS	TORY AND CONSTRUCTION			Full-time professionals assigned exclusively to the laboratory school
11.	The school was established or chartered in (year).			Full-time professionals dividing their time between the laboratory school
12.	The present building was originally constructed in (year).			and other college/university departments or divisions.
13.	The last major addition was made to the building in (year).			Part-time professionals whose responsibilities are centered exclusively in the laboratory school

SONE CONTRACTOR CONTRA

	Part-time faculty whose professional responsibilities are divided between the laboratory school and other college/university departments or divisions	196	24.		Are or i	ot n a	ddit	fees charged of students exclusive of ion to tuition? YesNo
	Graduate assistants recognized as faculty members as opposed to				24.	1	Mai	es, on what basis are they charged? 'k those that apply)
	graduate students gaining supervised practical experience							Book rental Equipment rental (musical instru-
20.	What is the full-time equivalency of the faculty (for example, 20 full-time and 3 half-time fac-			•				ments, etc.) Service fees (towels, lockers, etc.)
	ulty would be equal to 21.5)?			•				Instructional materials fees (labora-
21.	To what degree are laboratory school faculty afforded college/university faculty status?							tory fees, art fees, etc.) Other
	They are eligible for full faculty status including all of the privileges afforded other college/university faculty (tenure, rank, fringe benefits, voting privileges, etc.)		25.	ti fi P	ne nar lace 2"	am ncia e a by	oun I s "1 the	the following sources according to to fmoney they contribute to the upport of the laboratory school." by the most important source, a second in importance, etc. Use a
	They enjoy some college/university faculty privileges; please describe limitations:			"	6‴	to	der ized _ B u	note each of those sources that is
	The majority of laboratory school faculty are not eligible for college/			_				tate aid such as is allocated to all ublic schools in your state
22.	university faculty status During the past five years, to what extent have			_				roject grants from governmental nd private agencies
~~.	laboratory school faculty been involved in:			_				uition and other fees paid by
	22.1 Publishing research studies? None have been published			_				ayments from other school dis-
	1-5 have been published						_	icts
	6-10 have been published			_			_	ther
	More than 10 have been published							IONS AND ROLES
	22.2 Publishing articles in professional journals? None have been published		26.	fu yo th	inct our lat	ion lal is n	is ar bora nost	ate the importance of the following and activities as they are perceived in actory school. (Circle the number appropriate; "0" means it is not a
	1-5 have been published			In	npo	rta	nce	your school.)
	6-10 have been published						igh 3	Observation and demonstration (live and electronically)
	More than 10 have been published 22.3 Publishing books, textbooks, workbooks,			0	1	2	3	Participation and other pre-stu- dent teaching practical experiences
	tests or other major instructional works?			0	1	2	3	Student teaching
	None have been published			0	1	2	3	Graduate level practicum and internships
	1-5 have been published 6-10 have been published			0	1	2	3	
	More than 10 have been published							riculum materials
sou	RCES OF FINANCIAL SUPPORT			0	1	2	3	Pilot testing curriculum materials developed by other agencies
23.	Is tuition charged of laboratory school patrons?			0	1	2	3	Research—pure or of action quality
	YesNo			0	1	2	3	Providing demonstrations, consultant services and inservice activities for other schools and educators
	If yes, what is the annual tuition rate charged of a student?			0	1	2	3	Providing leadership in professional and subject area organizations

27.	missions	you consider the major objectives or of your laboratory school? (Limit ices to two of the following.)	107		Other (Please identify):		
		Educating the children enrolled	197	00.0 15			
		Providing practical experience oppor- tunities for the college/university teacher education program			yes, what was the outcome of this ex- ination? It prompted few, if any, changes in		
		Developing and testing curriculum materials			laboratory school operations It resulted in program cutbacks,		
		Educational research — pure or of action quality		√	namely:		
	· · · · · · · · · · · · · · · · · · ·	Providing inservice opportunities for other schools and educators			It prompted changes in program emphases; more attention is now given to:		
		Other (Please identify):			Educating the children enrolled		
28.	can be as	eel that other public or private schools effective as laboratory schools in facilactical teacher education experiences rch?			Serving the college/univer- sities teacher education program		
		Yes			Developing and testing curriculum materials		
		No They are about equal in this respect			Providing inservice opportunities for other schools and educators		
EVAI	LUATION	AND ACCREDITATION			Educational research		
29.	By what	agencies is the laboratory school or accredited? (Mark all that apply)			Other		
		A state accrediting or approval agency			It resulted in a termination notice. Phasing out will be completed in (year).		
		Middle States Association			· · ·		
		New England Association	FUT	URE OUT	LOOK		
		North Central Association	31.		Id you rate the future outlook for the y school at your institution?		
		Northwest Association Southern Association			Very bright; it appears that it is on a solid basis and will continue to func-		
		Western Association			tion and prosper		
		None			Reasonably good; although there will be continuing challenges to be met, it should be able to surmount them		
		Other (Please identify):			Dankar blank share are arrigans		
20	Las tha le	aboratory school undergone a critical			Rather bleak; there are ominous threats to its existence which may force its closure		
	examinati	on in the past five years that posed o its existence?			Barring a reprieve, it has only a limited future because notice of termina-		
		YesNo			tion has been given		
	30.1 If	yes, by what agency or agencies?					
		A committee/council comprised of laboratory school personnel		Check h	ere if you are not an NALS		
		A committee/council comprised of college/university faculty		final repo	but would like a copy of the ort of this investigation.		
		College/university administrators					
		A higher board (regents, trustees, etc.)			THANK YOU Jerry Duea		
		A state legislature committee			NALS Secretary-Treasurer		

APPENDIX C. SURVEY III QUESTIONNAIRE

1976 NALS SURVEY OF EDUCATION DEANS/DEPARTMENT HEADS

Form III — To be completed by ranking teacher education administrators in 330 colleges and universities.

<u>Directions:</u> Please respond to each of the items in this questionnaire to the best of your ability and return it in the enclosed envelope at your earliest convenience. On multiple choice items you may make your selections by placing an "X" in the blank preceding the response of your choice. On those items asking for ratings, you may indicate your choice by circling the appropriate number. Please keep your responses to open-ended items as brief as possible.

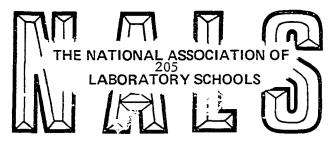
	choice by circling the appropriate number. Please keep your responses to open-end items as brief as possible.
ij.	Person responding to this questionnaire:
	Name
	Title
	College/University
	CityZip
INS	STITUTIONAL DATA
2.	What is the status of the institution you represent?
	Liberal arts college
	Teachers' college
	Multi-purpose state college
	University
	Other (Please identify):
	
3.	What is the nature of the sponsorship of the institution?
	Public — it is supported by the state.
	Public — it is supported by a city or other nonstate governmental agency
	Private — it is sponsored by a church or religious denomination
	Private — it is sponsored by a nonreligious agency
	Other (Please describe):

4.	What is the highest degree that can be earned at the institution?	200	7.	Does your institution sponsor a labora tory school as defined above?	
	BA/BS			YesNo	
	MA/MS			YOU ANSWERED "YES" TO ITEM 7	
	Specialist (six-year program)			NTINUE FROM HERE. IF YOU AN ERED "NO", YOU MAY SKIP TO ITEN	
	Doctorate		8.	How would you rate your institution's	
5.	What was the total enrollment of your institution during the fall term in 1975? (or the most recent term for which figures are available exclusive of summer)	-	-		laboratory school in terms of its ability to provide practical teacher education experiences and the quality of these services? (Mark only one)
	•			Highly satisfactory	
6.	How many persons were graduated by your institution during the 1974-75 academic year and the following summer who earned education degrees or were			Good	
				Adequate	
	eligible for teacher certification in the following degree categories?			Improvement is needed	
	BA/BS			Very unsatisfactory	
	MA/MS		9.	How would you rate your institution's	
	Specialist			laboratory school in terms of its ability to facilitate educational research and its research output?	
	Doctorate			Highly satisfactory	
	VISIONS FOR LABORATORY			Good	
	ERIENCES AND RESEARCH				
	the following definition of laboratory ols in mind as your respond to the re-			Adequate	
main	ing items in this questionnaire.			Improvement is needed	
University School	ersity and College-Controlled Laboratory ols: those schools, known by whatever			Very unsatisfactory	
name are educa child secon to ass tation labor inservice curric teach to th	that draw financial support from and administered and staffed by teacher ation institutions. Generally, they enroll ren of preschool, elementary and/or adary school age and were established sist the host institution in the implementary of one or more of the following: atory experiences, consultant services, rice programs, educational research, and culum development. They have general er education responsibilities as opposed ose characteristic of preschool facilities		10.	Please rate the following factors characteristic of the laboratory school according to their appropriateness for the facilitation of positive working relationships between that facility and the college/university teacher education program. (Rate each factor or characteristic by circling the appropriate number — please do not omit any.) Low High 1 2 3 4 5 Facility adequacy in terms of size, design and condition	
	tained in the interest of a single subject uch as home economics.			1 2 3 4 5 Facility accessibility in terms of location	

Lo	w High		201		YOU ANSWERED "YES" TO ITEM 12, EASE CONTINUE. IF YOU ANSWERED
1 :	2 3 4 5	Administrative cooperation in meeting teacher education needs		"NO	O", YOU MAY STOP HERE AND RE- RN THE QUESTIONNAIRE. (Be sure to ck the box at the end of the questionnaire
1 :	2345	Faculty cooperation in meeting teacher education needs		if y	ou want a copy of the report.) If your institution does have working
1 2	2345	Faculty expertise and suitability as models for teacher-in-training			agreements with other public/private schools for the implementation of teacher education needs, what is the nature of
1 2	2 3 4 5	Communications between the laboratory school and teacher education faculty			these agreements? (Mark all that apply) They are formalized with written
		·			contracts.
7 2	2345	The age/grade range of pupils served by the school			No written contracts are involved; they are in the form of verbal
1 2	2 3 4 5	The quality and variety of instructional programs			"gentlemen's agreements" These agreements provide for the
1 2	2345	Curriculum/program flexibility for the accommodation of teacher education needs			institution to make payment to these schools or their faculties for services rendered
1 2	3 4 5	Representativeness of student body (Is it a reasonable cross section of the population at large?)			Provisions are made for the college/university to participate in the administration of these schools
1 2	3 4 5	Student attitudes toward teachers-in-training			These agreements provide for the joint staffing of these schools; their faculties have both college
1 2	3 4 5	School patron attitudes toward training programs and experi-			and district personnel occupying teaching roles
	_	mentation		14.	How many separate school facilities (ele-
71.	schools schools	refeel that other public or private can be as effective as laboratory in facilitating practical teacher on experiences and research?			mentary, junior high, and high schools) does your institution cooperate with in the implementation of teacher education experiences and research?
		_ Yes			1-5
		_ No			6-10
		They are about equal in this respect			More than 10
12.	agreeme	your institution have working ents with public and/or private	•	15.	Please identify the activities that your institution carries out in these schools. (Mark all that apply)
	control	other than a university/college- led laboratory school for the ion of teacher education needs? YesNo			Observation and demonstration (live and electronically)
					•

	Participation and other prestudent teaching practical experiences Student teaching Graduate level practicum and internships	202-203 	ir ir ir ti	cte isti ig ig on cte	ris itu to th pris	tic tio th e o rog tic	n l nei col gra by	the following factors char- f the schools with which your has working agreements accord- r appropriateness for facilitat- lege/university teacher educa- m. (Rate each factor or char- y circling the appropriate num- e do not omit any.)		
	Developing and testing new		1	OM	,	Hi	ah			
	curriculum materials							General adequacy of facilities in terms of size, design and		
	Pilot testing curriculum materials							condition		
	Research—pure or of action quality		1	2	3	4	5	Overall facility accessibility in terms of locations		
	Other (Please identify):		1	2	3	4	5	Administrative cooperation in meeting teacher education needs		
16.	How would you rate your institution's		1	2	3	4	5	Faculty cooperation in meeting teacher education needs		
	relationships with public and/or private schools in terms of their ability to pro- vide practical teacher education exper- iences and the quality of these services? (Mark only one)		1	2	3	4	5	Faculty expertise and suitability as models for teachers -in-training		
	Highly satisfactory		1	2	3	4	5	Communications between these schools and the teacher education faculty		
	Good			_	^		_	The conformal and a formula		
	Adequate		i	2	3	4	כ	The age/grade range of pupils served by the schools		
	Improvement is needed		1	2	3	4	5	The quality and variety of instructional programs		
	Very unsatisfactory		1	2	2	A	_	Comingles /program flowibil		
17.	How would you rate your institution's relationships with these schools in terms		1	2	3	4	5	Curriculum/program flexibility for the accommodation of teacher education needs		
	of their ability to facilitate educational research and their performance in this respect?		1.	2	3	4	5	Representativeness of stu- dent bodies (Do they provide a reasonable cross section of		
	Highly satisfactory							the population at large?)		
	Good		1	2	3	4	5	Student attitudes toward teachers-in-training		
	Adequate		4	^	2	A	_	-		
	Improvement is needed		í	2	3	4		School patron attitudes to- ward training programs and experimentation		
	Very unsatisfactory							- specimentalism		
	Check here if you would like a copy	Check here if you would like a copy of the final report of this investigation.								
	THANK YOU!									

APPENDIX D. COVER LETTERS



DEDICATED TO SERVICE, RESEARCH AND EDUCATIONAL EXCELLENCE

January 1976

Dear Teacher Educator:

The National Association of Laboratory Schools (NALS) is a professional organization whose membership is comprised of administrators and faculty representing the nearly 170 university and college-controlled laboratory schools in the United States. Periodically, the organization undertakes a census of these institutions so that an up-to-date directory can be maintained. That is the purpose of this correspondence.

In order to obtain an accurate indication of the number and locations of operational laboratory schools in the nation, ranking teacher education administrators in the 1375 colleges and universities which participate in teacher training are being included in this survey. Your prompt cooperation in this endeavor would be very much appreciated.

Please complete the brief questionnaire on the enclosed, postage-paid mailer and return it by January 20, 1976.

If you would like a copy of the NALS laboratory school directory when it is completed, mark the appropriate box on the questionnaire.

Thank you very much.

Sincerely,

Jerry Duea

NALS Secretary-Treasurer Department of Teaching University of Northern Iowa Cedar Falls, Iowa 50613



DEDICATED TO SERVICE, RESEARCH AND EDUCATIONAL EXCELLENCE

January 1976

Dear Teacher Educator:

This is the second request for information regarding university and college-controlled laboratory schools in the 1976 census of these institutions being conducted by the National Association of Laboratory Schools (NALS). If you have already responded to the original request within the past two weeks, you may ignore this request and accept my apologies for troubling you again. If you were unable to comply with the original request, your prompt cooperation at this time would be appreciated.

NALS is a professional organization whose membership is comprised of administrators and faculty representing the nearly 170 university and college-controlled laboratory schools in the United States. Among the interests of the organization is the maintenance of a current directory of laboratory schools in the nation. In order to update this information, ranking teacher education administrators in the 1375 colleges and universities which participate in teacher training are being included in this survey. Without your response, the census data collected will be less than complete.

Please complete the brief questionnaire on the enclosed, postage-paid mailer and return it by February 3, 1976.

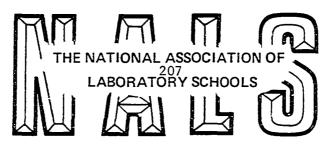
If you would like a copy of the NALS laboratory school directory when it is completed, mark the appropriate box on the questionnaire.

Thank you very much.

Sincerely,

Jerry Duea

NALS Secretary-Treasurer Department of Teaching University of Northern Iowa Cedar Falls, Iowa 50613



DED!CATED TO SERVICE, RESEARCH AND EDUCATIONAL EXCELLENCE

January 1976

Dear Laboratory School Administrator:

The National Association of Laboratory Schools is in the process of conducting an investigation of provisions for laboratory services and research in public, private and laboratory schools. The major purposes of the study are to: (1) conduct a laboratory school census and compile data on their characteristics, functions and goals; (2) develop a current directory of laboratory schools; (3) secure evaluations of current provisions for laboratory experiences and research from representative sample of education deans and department heads; (4) investigate the importance of various factors relative to the perceived quality of these services; (5) identify critical factors which may facilitate efforts to improve laboratory services and research opportunities.

Reports of this investigation will be disseminated via the <u>NALS Journal</u> and other publications. These reports will be made available to institutions participating in the investigation irrespective of their status regarding NALS membership. If you are not an NALS member but would like a report of the study's findings, mark the appropriate that on the questionnaire.

The enclosed questionnaire has been sent to the directors of all laboratory schools known to be in existence in the United States. Your prompt cooperation in this endeavor would be very much appreciated.

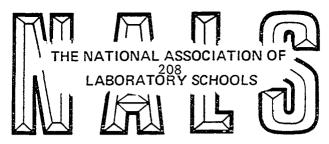
Please complete the questionnaire and return it in the enclosed, postage-paid envelope by January 30, 1976.

Thank you very much.

Sincerely,

Jerry Duea

NALS Secretary-Treasurer Department of Teaching University of Northern Iowa Cedar Falis, Iowa 50613



DEDICATED TO SERVICE, RESEARCH AND EDUCATIONAL EXCELLENCE

February 1976

Dear Laboratory School Administrator:

This is the second request for information necessary to the National Association of Laboratory Schools' investigation of provisions for laboratory experiences and research in public, private and laboratory schools. If you have already responded to the original request within the past two weeks, you may ignore this request and accept my apologies for troubling you again. If you were unable to comply with the original request, your prompt cooperation at this time would be appreciated.

The major purposes of the study are to: (1) conduct a laboratory school census and compile data on their characteristics, functions and goals; (2) develop a current directory of laboratory schools; (3) secure evaluations of current provisions for laboratory experiences and research from representative samples of education deans and department heads; (4) investigate the importance of various factors relative to the perceived quality of these services; (5) identify critical factors which may facilitate efforts to improve laboratory services and research opportunities.

Reports of this investigation will be disseminated via the <u>NALS Journal</u> and other cublications. These reports will be made available to institutions participating in the investigation irrespective of their status regarding NALS membership. If you are not a NALS member but would like a report of the study's findings, mark the appropriate box on the questionnaire.

Please complete the questionnaire and return it in the enclosed, postage-paid envelope by February 17, 1976.

Thank you very much,

Sincerely,

Jerry Duea

NALS Secretary-Treasurer Department of Teaching University of Northern Iowa Cedar Falls, Iowa 50613 Deadline extended 12th.



DEDICATED TO SERVICE, RESEARCH AND EDUCATIONAL EXCELLENCE

January 1976

Dear Teacher Educator:

Recently, you received a brief questionnaire from the National Association of Laboratory Schools regarding your institution's status in respect to laboratory school sponsorship. This communication is concerned with the concluding phase of a NALS investigation of provisions for laboratory experiences and research in public, private and laboratory schools.

The purposes of this investigation which may be of interest to teacher education administrators include: (1) the evaluation of the current of status of laboratory services and research in teacher education institutions; (2) the investigation of the importance of various factors relative to the perceived quality of these services; (3) the identification of critical factors in the establishment and/or improvement of provisions for practical experiences and research in teacher education.

The enclosed questionnaire has been mailed to teacher education administrators like yourself in equal, representative samples of institutions which do and do not sponsor laboratory schools. Once data have been collected and analyzed, findings will be reported in the <u>NALS Journal</u> and other publications. Reports will be made available to persons participating in this investigation irrespective of their status regarding NALS membership.

Considering the nature of the information requested, confidentiality in the handling of responses is of utmost importance. I assure you that no one other than myself will have access to these data and all reports will involve group statistics that in no way will be traceable to individual respondents.

Please complete the questionnaire and return it in the enclosed, postage-paid envelope by February 13, 1976. Do not refer the questionnaire to your laboratory school director for completion, if you have one, as he/she has received a similar questionnaire for getting that perspective.

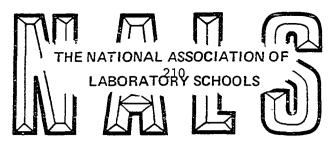
If you would like a copy of a report of the findings of this investigation, mark the appropriate box on the questionnaire.

Thank you very much,

Sincerely.

Jerry Duea

NALS Secretary-Treasurer Department of Teaching University of Northern Iowa Cedar Falls, Iowa 50613



DEDICATED TO SERVICE, RESEARCH AND EDUCATIONAL EXCELLENCE

February 1976

Dear Teacher Educator:

This is the second request for information necessary to the National Association of Laboratory Schools' investigation of provisions for laboratory experiences and research in public, private and laboratory schools. If you have already responded to the original request within the past two weeks, you may ignore this request and accept my apologies for troubling you again. If you were unable to comply with the original request, your prompt cooperation at this time would be appreciated.

In reiteration, the major purposes of the study are: (1) the evaluation of the current status of laboratory services and research in teacher education institutions; (2) the investigation of the importance of various factors relative to perceived quality of these services; (3) the identification of critical factors in the establishment and/or improvement of provisions for practical experiences and research in teacher education.

The enclosed questionnaire has been mailed to teacher education administrators like yourself in equal, representative samples of institutions which do and do not sponsor laboratory schools. Considering the nature of the information requested, confidentiality in the handling of responses is of utmost importance. I assure you that no one other than myself will have access to these data and all reports will involve group statistics that in no way will be traceable to individual respondents.

Please complete the questionnaire and return it in the enclosed, postage-paid envelope by February 25, 1976. Do not refer the questionnaire to your laboratory school director for completion, if you have one, as he/she has received a similar questionnaire for getting that perspective.

Deadline extended 12th.

If you would like a copy of a report of the findings of this investigation, mark the appropriate box on the questionnaire.

Thank you very much.

Sincerely,

Jerry Duea

NALS Secretary-Treasurer Department of Teaching University of Northern Iowa Cedar Falls, Iowa 50613

APPENDIX E. PHONE INQUIRY FORM

Lab. S	Schoo	1: _														
Item 4	4: G	rade	s i	ncl	uded											
Item 5	5: 1	2	3	4					Item	25:	а.				d.	
Item 6	5 : _										b.				e.	
Item 8	8: 1	2	3	4							c.				f.	
Item 9): 1	2	3	4				:	Item	26:		0 1 0 1				
Item 1	10: 1										c.	0 1 0 1	. 2	3		
	2										e.	0 1	. 2	3		
	3											0 1				
	4			_							i.	0 1	. 2	3		
Item 1	L 5: 1	2	3					:	Item	27:	1	2	3	4	5	6
Item 1	16: 1	2	3	4	5 6	5	7	;	Item	28:	1	2				
Item 1	L7: 1	2	3					:	Item	29:	1 :	2 3	4 5	6	7	8 9
Item 1	L8: _							:	Item	30:	1	2				
Item 2	20: _							:	Item	30.1:	: :	L 2	3 4	5	6	
Item 2	21: 1	2	3					:	Item	30.2:	: :	L 2	. 3	•	4	
Item 2	22.1:	1	2	3	4											
Item 2	22.2:	1	2	3	4								С	• .		
Item 2	22.3:	1	2	3	4								е	• .		
Item 2	23:	1	2					<u>-</u>	Item	31:	1 2	2 3		•		
					_			·								

Item 24: 1 2

APPENDIX F. LABORATORY SCHOOLS IN THE UNITED STATES ENCOMPASSING THREE OR MORE GRADES AND ENROLLING MORE THAN FIFTY PUPILS

ALABAMA

Jacksonville Elem. Lab. School Jacksonville State U. 36265

Oakwood Academy Oakwood College Huntsville 35806

The Kilby School Univ. of North Alabama Florence 35630

ARIZONA

Univ. Elem. School Northern Arizona University Flagstaff 86001

ARKANSAS

Harding Academy & Train. School Harding College Searcy 72143

CALIFORNIA

La Sierra Academy Loma Linda University Riverside 92505

Children's Programs Pacific Oaks College Pasadena 91105

Univ. Elem School Grad School of Education Univ. Of California-Los Angeles 405 Hilgard Ave. Los Angeles 90024

COLORADO

U. N. C. Lab. School Univ. of Northern Colorado Greeley 80639

CONNECTICUT

Stanley School Central Connecticut State College New Britain 06050

F. R. Noble School Eastern Conn. State College Willimantic 06226

DISTRICT OF COLUMBIA

Kendall Demonstration Elem. School Gallaudet College 7th & Florida Ave., NE Washington, D.C. 20002

FLORIDA

Univ. High School Florida A & M Univ. Tallahassee 32307

A. D. Henderson Univ. School Florida Atlantic Univ. 500 NW 20th St. Boca Raton 33432

Developmental Res. School Florida State Univ. Tallahassee 32306

University School Nova University 7600 SW 36th St. Fort Lauderdale 33314

P. K. Yonge Lab. School Univ. of Florida Gainesville 32601

GEORGIA

Marvin Pittman Lab. School Georgia Southern College Statesboro 30458

HAWAII

University Lab. School Univ. of Hawaii 1776 Univ. Ave. Honolulu 96822

ILLINOTS

Metcalf Lab. School Illinois State Univ. Normal 61761

Demonstration School National College of Ed. 2840 Sheridan Road Evanston 60201

The Laboratory Schools University of Chicago 1362 E. 58th St. Chicago 60637

University High School Univ. of Illinois 1212 W. Springfield Ave. Urbana 61801

University School
Western Illinois Univ.
Macomb 61455

INDIANA

Burris School
Ball State Univ.
2000 University Ave.
Muncie 47306

Laboratory School Indiana State Univ. Terre Haute 47809

AWOI

Malcolm Price Lab. School University of Northern Iowa Cedar Falls 50613

KANSAS

Butcher Children's School Emporia Kans. State College Emporia 66801

KENTUCKY

Model Lab. School Eastern Kentucky Univ. Richmond 40475

Rosenwald Lab. School Kentucky State Univ. Frankfort 40601

Breckinridge School Morehead State College Morehead 40351

Murray Univ. School Murray State Univ. Murray 42071

Jones-Jagger Lab. School Western Kentucky Univ. Bowling Green 42101

LOUISIANA

College Laboratory School Grambling State Univ. Grambling 71245

Univ. Lab. School Louisiana State Univ. Baton Rouge 70803

Phillips Lab. School Louisiana Tech Univ. Ruston 71207

Northwestern Lab. School Northwestern State Univ. Natchitoches 71457

Southeastern Lab. School Southeastern Louisiana Univ. Box 832 Univ. Station Hammond 70401 Southern Univ. School Southern University Baton Rouge 70813

Hamilton Lab. School Univ. of Southwest Louisiana Lafayette 70501

MAINE

Campus School Univ. of Maine--Machias Machias 04654

MARYLAND

Lida Lee Tall Lrng. Res. Ctr. Towson State College Towson 21204

MASSACHUSETTS

Martha M. Burnell School Bridgewater State College Bridgewater 02324

McKay Campus School Fitchburg State College Fitchburg 01420

Lesley-Ellis School Lesley College Cambridge 02138

Mark Hopkins Campus School North Adams State College Church Street North Adams 01247

Horace Mann Lab. School Salem State College Salem 01971

Smith College Campus Schools Smith College Northampton 01060

Marks Meadow School Univ. of Massachusetts Amherst 01002 Juniper Park Lab. School Westfield State College Westfield 01085

MICHIGAN

Univ. Lab. School Andrews University Berrien Springs 49104

MINNESOTA

Wilson Campus School Mankato State Univ. Mankato 56301

St. Joseph Lab. School St. Benedict College St. Joseph 56374

Gray Campus Lab. School St. Cloud State Univ. St. Cloud 56301

MISSISSIPPI

Demonstration School Miss. State Univ. for Women Columbus 39701

MISSOURI

Central Elem. School Central Missouri State Univ. Warrensburg 64093

Lincoln Univ. School Lincoln University Jefferson City 65101

Horace Mann Lrng. Ctr. Northwest Missouri St. Univ. Maryville 64468

University School Southeast Missouri St. Univ. Cape Girardeau 63701 Greenwood Lab. School Southwest Missouri St. Univ. Springfield 65802

Univ. Elem. School University of Missouri Columbia 65201

The College School Webster College St. Louis 63119

MONTANA

Eastern Mont. Campus School Eastern Mont. College Billings 59101

NEW HAMPSHIRE

Wheelock School Keene State College Keene 03431

NEW JERSEY

A. Harry Moore Lb. School Jersey City St. College 2078 Kennedy Blvd. Jersey City 07305

NEW YORK

Bank Street School for Children Bank Street College of E. New York 12550

Hunter College Campus Schools Hunter College 466 Lexington New York 10017

Bishop Dunn Mem. School Mount St. Marys Coll. Gidney Ave. Newburgh 12550

Center for Innovation in Ed. State Univ. College Brockport 14420 College Learning Lab. State Univ. College Buffalo 14222

Inst. for Exp. in Teacher Ed. State Univ. College Cortland 13045

Holcomb Center State Univ. College Geneseo 14454

Campus Learning Center State Univ. College New Paltz 12561

Swetman Ctr. for Tchg. & Lrng. State Univ. College Oswego 13126

Sibley Sch. for Ed. Res. & Demon. State Univ. College Plattsburgh 12901

Res. Demon. Center State Univ. College Potsdam 13676

The Milne School State Univ. of N. Y. at Albany Albany 12203

NORTH DAKOTA

Campus Laboratory School Minot State College Minot 58701

OHIO

Kent State Univ. School Kent State Univ. Kent 44242

McGuffy Lab. School Miami University 100 S. Campus St. Oxford 45056

OREGON

Ackerman Lab. School Eastern Oregon College La Grande 97851

Campus Elem. School Oregon College of Ed. Monmouth 97361

Lincoln Elem. School Southern Oregon College Ashland 97520

PENNSYLVANIA

Noss Laboratory School California State College California 14519

Carlow College Campus Sch. Carlow College Pittsburgh 15213

Flexible All-Year School Clarion State College Clarion 16214

Miller Res. Lrng. Ctr. Edinboro State College Edinboro 16412

Univ. Lab. School Indiana Univ. of Penn. Indiana 15701

Rickenbach Res. Lrng. Ctr. Kutztown State College Kutztown 19530

Akeley School Lock Haven State College Lock Haven 17745

Elizabeth Jenkins School Millersville State College Millersville 17551 Rowland School Shippensburg State College Shippensburg 17267

Falk School Univ. of Pittsburgh Pittsburgh 15261

E. O. Ball Lrng. Res. Ctr. West Chester State College West Chester 19308

RHODE ISLAND

Henry Barnard School Rhode Island College 600 Mt. Pleasant Ave. Providence 02908

SOUTH CAROLINA

Bob Jones Academy
Bob Jones University
Greenville 29614

Felton Lab. School Box 1537 South Carolina St. College Orangeburg 29115

TENNESSEE

University School East Tennessee State Univ. Johnson City 37601

M.S.U. Campus School Memphis State Univ. Memphis 38111

Campus School Middle Tenn. State Univ. Murfreesboro 37130

Tech Campus School Tennessee Technological Univ. Cookeville 38501

UTAH

Edith Bowan School Utah State Univ. Logan 84321

VIRGINIA

Hampton Non-graded Lab. School Hampton Institute Hampton 23668

John P. Wynne Campus School Longwood College Farmville 23901

Anthony-Seeger Campus School Madison College Harrisonburg 22801

Matoaca Lab. School Virginia State College Petersburg 23803

WASHINGTON

Campus Lab. School Eastern Wash. State College Cheney 99004

WISCONSIN

Alverno Elem. School Alverno College 3401 South 39th St. Milwaukee 53215

Rose C. Swart Ed. Ctr. U. of Wisconsin-Oshkosh Oskosh 54901

J. H. Ames Lab. School U. of Wisconsin-River Falls River Falls 54022

WYOMING

University School University of Wymoning Laramie 82071 APPENDIX G. CHARACTERISTICS OF LABORATORY SCHOOLS IN THE UNITED STATES

Table G.1. Characteristics of laboratory schools in the United States

	(2)					nan	. r		urce Lo]	Hi	gh-	-1	2	rio 3- unc	-Lo	W		·
State host institution	Public (1) private	Grades included	Enrollment	Faculty	College budget	State aid	Project grants	Tuitionfees	Pay - other dist.	Other	Obs. & Demon.	Participation	Student tchg.	Grad. practicum	Curric. devel.	Pilot-testing mat. for others	Research	Inservice	Prof. leadership	Major object. ^a
ALABAMA:					_				_	_								_		
1) Jacksonville St. Univ.	1	1-6	772	40.0	6	1	2	6	6	6	1 2	1	1 2	1 4	1 2	3 2	3	2	1	1-2
2) Oakwood College	2	1-12	263	15.5	2	6	6	1	6	3		2	2		3		3 3	2	3	1-2
3) Univ. of N. Alabama	1	P-6	197	9.5	2	1	6	3	6	6	1	2	1	4	3	4	3	2.	2	1-2
ARIZONA:		n (161	0.0		1	_	_	_	,	,	1	1	2	1.	1.	1.	1.	1.	1-2
4) Northern Arizona Univ. ARKANSAS:	1	P-6	164	9.0	2	1	6	6	6	6	T	1	1	3	4	4	4	4	4	1-2
5) Harding College	2	1-12	410	26.0	6	6	6	1	6	2	1	1	1	4	3	2	3	3	1	1-2
CALIFORNIA:	4	1-12	410	20.0	U	U	U	r	U	2	1.			4	,	L	3	.,	7	1. – 2.
6) Loma Linda Univ.	2	K-12	1000	30.0	3	6	6	1	6	2	1	1	2	3	2	3	3	2	4	1-3
7) Pacific Oaks College	2	P-3	180	23.0	1	6	6	2	6	2 6	î	1	2 1	3 1 2	3	3	1	1	1	1-2
8) Univ. of CalL. A.	1	P-6	525	25.0	1	6	6	2	6	3	2	2	2	2	1	2	ĩ	1	ī	4-5
COLORADO:	-	- 0	545		_	·	Ū	_	Ŭ	Ŭ	_	_			_	_	_	_	_	
9) Univ. of N. Colorado	1	P-12	675	45.0	1	6	3	2	6	6	1	1	3	3	2	3	4	2	2	1-2
CONNECTICUT:	-		-,-		_	,	_		-	-			-			-				
10) Cent. Conn. St. Coll.	1	P-6	300	21.0	1	6	6	6	6	6	1	1	1	1	1	1	3	1	1	1-2
11) East. Conn. St. Coll.	1	K-6	321	27.0	1	6	6	6	6	6										
DISTRICT OF COLUMBIA:																				
12) Gallaudet College	2	P-8	161	57.0	1	6	6	6	6	2	3	1	1	2	1	2	2	1	1	1-2

FLORIDA:																				
13) Florida A & M Univ.	1	K-12	492	30.0	3	1	2.	4	6	6	1	1	3	4	3	2	1	4	2	1-4
14) Florida Atlantic Univ.	1	K-8	310	21.5		1	2	4	-	6			3		1	3	2	2	3	3-4
15) Florida St. Univ.	1	P-12	866	58.4		1			6		2	3	3		î	1	1		2	3-4
16) Nova University	2	P-12	700	56.0		4	6	1	6				1		ì	2	1	-	3	1-4
17) Univ. of Florida	1	K-12	900		1	6	2	3	6	6	3	3	3	3	1	4	1	1	3	3-4
GEORGIA:			•		-	•	_	•	Ů	υ.	9	,	3	,	•	-+			3	3-4
18) Georgia S. College	1	K-9	520	29.0	1	2	3	6	6	6	2	1	/.	3	3	3	3	2	3	1-2
HAWAII:					-	_	•	•	v	•		~	7	,	,	J	٠,	4	3	1-2
19) Univ. of Hawaii	1	K-12	340																	
ELLINOIS:																				
20) Ill. St. Univ.	1	P-12 ^b	850	96.0	1	6	3	6	2	6	2	2	4	4	2	3	1	2	3	1-4
21) Nat. Coll. of Educ.	2	P-8	171	18.8	2	6	6	ĺ	6				1		3	2	3	1	2	
22) Univ. of Chicago	2	P-12	-	157.5	6	6	6	î	6		2			2	1	2			2	1-2
23) Univ. of Illinois	1	7-12	140	28.0	1	6	3	2		6	2	3	3	2	1	3	1	_		
24) West. Illinois Univ.	1	P-6 ^b	250	17.5	î	2	5	4	3	6	1	1	3	3	2	J 2	3	3 1	2	3-4
INDIANA:			220	-1.5	-		,	7	,	U	1	Ţ	J	3	2	3	3	ı	2	1-2
25) Ball State Univ.	1	K-12.	750	50.8	1	2	6	3	6	6	2	1	/.	2	1	3	/.	1	2	9 /
26) Indiana St. Univ.	1	P-12b	767	54.5	ī	2 6	3	3 6	2	6 6	2 1	1	4 3	2	1 2	3	2	3	1	2-4 2-4
IOWA:				05	-	•	,	v	4	U	_	_	J	4	2.	3	2	3	T	2-4
27) Univ. of Northern Ia.	1	P-12 ^b	744	75.0	1	2	3	4	6	6	1	1	3	2	1	3	1	1	1	0 0
KANSAS:	_			,,,,	~		,	7	U	U	Τ.	r	3	2	T	3	T	T	1	2-3
28) Emporia Kans. St. Coll.	1	P-6	185	9.8	1	6	3	2	6	6	1	1	1	2	2	2	2	2	7	1-2
KENTUCKY:		· -		2.0	-	•	•		J	٠	-	-	T	4	2.	4	2.	2	Т	1-2
29) Eastern Kentucky U.	1	P-12	76 0	42.5	1	3	4	2	6	6	1	1	1	2	2	2	3	2	2	1-2
30) Kentucky St. Univ.	1	1-8		7.5	1	6	3	2			1			4	2					1-2
31) Morehead St. Coll.	1	K-12	620	40.0	1	6		6		6	2	î	3	2	2	3	2	1	2	1-2
32) Murray St. Univ.	1	K-6	168	10.5	1	6	6		6	6	ī	ĩ	1	2	3	4	3	3		1-2
33) West. Kentucky U.	1	K-6 ^b	183	11.0	1	6	6	2	6	6	2	2	3	3	3	4	3	3	2	4-5
LOUISIANA:						-	•	_	•	•		-	,	3	J	7	,	J	2.	4-3
34) Grambling St. Univ.		K-12	750	40.0	2	6	6	6	1	6	1	1	1	3	3	3	3	2	1	1-2
35) Louisiana St. Univ.	1	1-12	550	30.5		1	3	6	6	6	2	3	ĩ	3	3	4	3		2	
36) Louisiana Tech Univ.	1	K-8 ^b	259	14.5	2	1	3	4	6	6	ī	1	3	3	3 3	2	2	2	1	1-2
0									-	-	_	_	_	_	_	-		_	~	

aMajor objectives: 1) educating children enrolled; 2) teacher education; 3) curriculum development; 4) research; 5) inservice; 6) other.

bAlso special education.

Table G.1 (Continued)

	(2)						1. <u>1</u>		i ourc 5L			H:	i gh•	1	2	orio 3.	-Lo	w	3	
State host institution	Public (1) private	Grades included	Enrollment	Faculty	College budget	State aid	Project grants	Tuitionfees	Pay - other		Obs. & Demon.	Participation	Student tchg.	Grad. practicum	Curric. devel.	ot-testing.	רוובו פ	Inservice	Prof. leadership	Major object.
37) Northwestern St. Univ. 38) Southeastern La. Univ.	1	K-8 P-8b	502 275	23.0 17.5	2	6	3	6	6	1	1	1	4	2	1	1	1	2	1	1-2
39) Southern Univ.	1	P-12	623	33.0	2	1	3	6	6	6	1	1	3	4	2	3	3	2	2	1-2
40) Univ. of S. W. La.	1	к-8Б	233	15.1	2 2	1 1	4	3	6	6	1	2	1	3	3	3	4	3	3	1-2
MAINE:		K-0	233	13.1	4	T	3	6	6	6	1	1	1	4	4	4	4	1	2	1-2
41) Univ. of MaineMachias MARYLAND:	1	K-6	135	7.0	1	6	6	6	1	6	1	1	2	4	3	3	4	1	2	1-2
42) Towson St. College MASSACHUSETTS:	1	P-6 ^b	220	25.0	1	3	6	2	6	6	1	2	3	3	2	2	1	1	2	1-5
43) Bridgewater St. Coll.	1	K-4	350	14.0	2	6	6	6	1	6	1	1	1	3	1	1	2	2	2	2 5
44) Fitchburg St. Coll.	1	K-9	900	40.0	2	6	3	6	1	6	3	1	1	1	1	2	2	1	2 1	3-5 1-3
45) Lesley College	2	P-9 ^c	208		2	6	3	1	6	6	2	1	3	1	2	3	2	3	2	1-3
46) N. Adams St. Coll.	1	K-5	216	22.0	1	6	3	6	2	6	1	1	2	4	3	3	4	2	3	1-2
47) Salem St. College	1	K-8	756		1	6	6	2	6	6	î	1	2	2	2	2	2	3	1	1-2
48) Smith College	2	P-6	220	19.2	1	6	6	2	6	6	1	1	1	1	4	4	4	4	4	1-2
49) Univ. of Mass.	1	K-6	330	17.0	3	2	6	6	6	1	1	1	1	2	2	3	3	1	2	1-2
50) Westfield St. Coll.	1	K-5 ^b	670	30.0	1	6	3	6	2	6	1	1	1	2	3	4	4	2	2	1-2
MICHIGAN:					_	•	_	•	-	٠	_	-	_	4	5	-	4	122	4	1-7
51) Andrews Univ.	2	K-12	850	42.0	6	6	6	1	6	2	1	1	1	3	2	2	3	4	2	1-2

MINNESOTA:																				
52) Mankato St. Univ.	1	P-12	500	41.0	1	6	6	6	2	6	3	1	2	2	2	3	3	1	1	3-5
53) St. Benedict Coll.	2	K-6.	277	15.5	2	3	6	4	6			1	3	4	2		4	2	2	1-2
54) St. Cloud St. Univ.	1	K-6 ^b	275	18.5	1	6	6	6	2	6	2	2	4	4	1	3	3	1	4	1-5
MISSISSIPPI:																				
55) Mississippi U.																				
for Women	1	K-6	133	8.0	1	2	6	6	6	6	2	1	4	2	4	4	4	3	2	1-2
56) Central Mo. St. Univ.	1	P-12 ^d	391	26.0	1	6	6	2	3	6	1	1	3	3	2	3	3	3	3	1-2
57) Lincoln University	1	K-6	73	8.0	1	2	4	3	6	6	1	2	1	3	4	4	3	3	4	1-2
58) N. W. Mo. St. Univ.	1	P-6	200	8.0	1	6	6	2	6	6	2	1	3	2	2	3	3	2	2	1-2
59) S. E. Mo. St. Univ.	1	P-12	352		1	6	6	2	3	6	1	1	3	4	3	3	4	3	2	1-2
60) S. W. Mo. St. Univ.	1	K-12	390	22.0	1	6	6	2	6	6	1	_	1	2	2	3	2	2	2	1-2
61) Univ. of Missouri	1	P-6	200	12.0	1	6	2	6	6	6	1	1	3	2	3	2	2	3	3	2-5
62) Webster College	2	P-6	160	13.5	2	6	6	1	6	3	1	1	1	3	2	4	3	3	3	1-2
MONTANA:		,																		
63) Eastern Mont. College	1	P-6 ^b	216	11.0	6	1	6	6	6	6	1	1	4. 	2	2	1	3	1	3	1-2
NEW HAMPSHIRE:		•																		
64) Keene St. College	1	K-6 ^b	300	16.5	2	6	3	6	1	6	1	1	3	3	3	2	3	3	2	1-2
NEW JERSEY:																				
65) Jersey City St. Coll.	1	P-12 ^c	225	43.5	1	2	4	6	6	3	1	1	1	1	1	3	1	1	3	1-2
NEW YORK:																				
66) Bank St. Coll. of Ed.	2	P-8	420	40.0	2	6	6	1	6	6	1	4	4	1	1	3	2	2	3	1-2
67) Hunter College	1	P-12 ^e	1500	99.5	2	1	6	6	6	6	1 1	1	1	3	2	2	2	1	2	1-3
68) Mount St. Mary Coll.	2	P-8	287	13.0	3	6	6	1	6	2	1	3	1	4	3	2	4	1	2	1-2
69) St. Un iv . College -																				
Brockport	1	K-6	200	24.0	1	6	2	3	6	6	2	2	3	3	1	2	1	1	1	4-5
70) St. Univ. College -		L																		
Buffalo	1	P-8b	450	41.0	1	6	2	6	6	6	1	1	3	3	2	2	2	1	1.	1-2
71) St. Univ. College -																				
Cortland	1	P-6b	294	28.0	1	6	2	6	6	6	3	3	3	3	1	2	1	1	3	4-5
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -																				

cprimarily special education.

dSecondary school phased out in 1976.

eAlso gifted programs.

Table G.1 (Continued)

	(20					nan	. r		urc iL			Hi	gh-	-1	2	rio 3-	-Lo	W	u.	
State host institution	Public (1) private	Grades included	Enrollment	Faculty	College budget	State aid	Project grants	Tuitionfees	Pay - other dist.	Other	Obs. & Demon.	Participation	Student tchg.	Grad. practicum	Curric. devel.	Pilot-testing mat. for others	Research	Inservice	Prof. leadership	Major object.
72) St. Univ. College -	_	P-6 ^b			•		•	_				•		•	•	•	•		•	
Geneseo 73) St. Univ. College -	1	P-6~	404	30.5	1	6	2	6	6	б	ı	T	2	1	2	2	2	1	3	2-5
New Paltz 74) St. Univ. College -	1	P-8	360	32.5	1.	6	2	6	6	3	1	1	1	3	3	4	3	1.	3	2-5
Oswego	1	K-8	435	27.5	1	6	6	2	6	6	2	1	4	3	1	2	2	2	2	2-4
75) St. Univ. College - Platteburg	1	P-8	273	17.0	1	6	2	3	6	6	2	1	1	3	1	4	1	2	3	2-4
76) St. Univ. College - Potsdam	1	P-8b	300	27.0	1	6	2	3	6	6	1	1	3	4	1	2	2	1	2	2-5
77) St. Univ. of N. Y Albany	1	10-12	152	20.0	1	6	6	2	6	3	2	1	2	3	2	2	3	3	2	1-2
NORTH DAKOTA: 78) Minot St. College	1	K-6	201	11.8	1	2	3	4	6	5	2	1	3	3	2	3	1	2	2	2-3
OHIO: 79) Kent St. Univ.	1	P-9.	219	15.7	1	6	6	2	6	6	1	1	3	3	3	3	2	4	4	1-4
80) Miami University OREGON:	1	K-8 ^b	270		1	6	3			6	1	1	3	1	1	1	1	1	1	2-3
81) Eastern Oregon Coll.	1	P-6	205	16.5	2	6	6	6	1	6	2	1	3	4	3	4	3	3	4	2-6
82) Oregon Coll. of Ed.	1	K-6	340		2	3	6	4	1	6	1	1	1	3	2	2	2	1	1	1-2

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r

	Southern Oregon Coll.	1																				
	Calif. St. College	1																				
	Carlow College	2	P-6	200	15.0	3	6	4	1	6	2	1	1	1	4	2	4	3	3	2	1-2	
	Clarion St. Coll.	1	P-12	220	14.5	1	6	6	6	6	6	1	1	3	3	1	2	3	2	2	3-6	
87)	Edinboro St. Coll.	1	P-4	100	5.0	1	6	6	6	6	6	1	1	4	4	4	4	4	3	4	1-2	
•	Indiana U. of Penn.	1	K-6	166	10.0	1	6	2	6	6	6	3	1	3	2	2	1	2	1	2	2-4	
•	Kutztown St. Coll.	1	P-5	166	11.5	1	6	6	2	6	6	1	1	1		1	2	3	1	2	1-2	
•	Lock Haven St. Coll.	1	P-6 ^b	160	7.0	1	2	6	6	6	6	1	1	2	4	4	4	3	2	4	1-2	
•	Millersville St. Coll.	1	P-5	163																		
•	Shippensburg St. Coll.	1	P-4	115	6.5	1	2	3	6	6	6	J .	1	4	1	2	2	3	2	1	1-2	
	Univ. of Pittsburgh	1	P-8	282	19.5	2	6	6	1.	6	6	1	1	1	2	3	1	3	2	2	1-2	
	W. Chester St. Coll.	1	P-6	135	7.2	1	2.	6	3	6	6	2	2	4	4	4	4	3	3	4	1-2	
RHODE	ISLAND:																					•
95)	Rhode Island Coll.	1	P-6	400	32.0	1	6	6	2	3	6	1	1	3	3	1	2	1	1	1	1-2	
SOUTH	CAROLINA:																					
96)	Bob Jones University	2	9-12	500	33.5	2	6	6	1	6	3	1	2	1	2	3	4	4	3	1	1-2	
97)	S. Carolina St. Coll.	1	K-8	379	27.5	2	1	4	3	6	3 6	2	1	1	3	2	4	2	2	2	1-2	2
TENNE	SSEE																					224
98)	East Tenn. St. Univ.	1	1-12	620	28.0	1	6	6	2	6	3	3	1	2	2	3	3	3	2	1	1-2	
99)	Memphis St. Univ.	1	P-6	515	23.0	1	3	6	6	2	6	1	1	1	2	3	1.	3	4	4	1-2	
100)	Middle Tenn. St. Univ.	1	K-6	386	18.0	1	2	6	6	6	6	1	1	4	4	2	1	2	1	1	1-2	
101)	Tenn. Technol. Univ.	1	K-6	335	16.0	2	1	3	6	6	6	1	1	3	3	3	3	3	3	3	1-2	
UTAH:			•																			
102)	Utah St. Univ.	1	K-6 ^b	175	10.5	1	2	6	6	6	6	1	1	1	3	2	1	2	1	2	1-2	
VIRGI	NIA:																					
103)	Hampton Institute	2	1-6	146	6.0	2	3	6	1	6	6	1	1	2	4	3	3	4	2	2	1-2	
	Longwood College	1	P-7.	200		1		3	2	6	6	1	1	4	4	4	4	4	1		1-2	
	Madison College	1	P-6 ^b	206	13.5			6	6	2	6	1	1.	3	3	2	3	2	2	3	1-2	
	Virginia St. College	1	K-6	100	8.0	1	6	2	3	6	6	1	1	3	2	2	3	3	3	3	1-2	
	NGTON:												•									
107)	Eastern Wash. St. Coll.	1	P-6	190	10.2	1	6	2	6	6	6	1	1	4	2	2	2	3	2	2	2-3	

Table G.1 (Continued)

	te (2)					nan		eso	urc L			Ηi	gh-	-1	2	rio 3-	-Lo	W		
State host institution	Public (1) private	Grades included	Enrollment	Faculty	College budget	State aid	Project grants	.2	Pay - other dist.	Other	Obs. & Demon.	Participation	Student tchg.	Grad. practicum	Curric. devel.	Pilot-testing mat. for others	Research	Inservice	Prof. leadership	Major object.
WISCONSIN: 108) Alverno College	2	K-8	300	16.0	6	6	6	1	6	2	2	1	3	4	2	3	3	2	3	1-5
109) Univ. of Wisconsin- Oshkosh 110) Univ. of Wisconsin -	1	P-8			1	6	6	6	6	6	3	1	3	3	4	4	4	2	2	1-2
River Falls	1	P-6	150	10.5	1	6	6	2	6	3	1	1	3	2	2	3	3	1	4	1-2
WYOMING: 111) University of Wyoming	1	P-6 ^b	300	23.8	1	6	6	2	6	6	2	1	4	1	1	2	2	1	1	2-5